Aon Hewitt Investment Consulting

Appendix

A. AHIC Form ADV, Part 2A and 2B

Empower Results®

Form ADV, Part 2A
Firm Brochure

Aon Hewitt Investment Consulting, Inc.

200 E. Randolph St., Suite 1500

Chicago, IL 60601

Phone: 312.381.1200

www.aonhewitt.com/investmentconsulting

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This brochure provides information about the qualifications and business practices of Aon Hewitt Investment Consulting, Inc. (“AHIC”). If you have any questions about the contents of this brochure, please contact the AHIC Compliance Department at 312-381-1200. The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission (“SEC”), the Commodity Futures Trade Commission (“CFTC”), the National Futures Association (“NFA”) or by any state securities authority.

Additional information about Aon Hewitt Investment Consulting, Inc. also is available on the SEC’s website at www.adviserinfo.sec.gov.

Please note that registration as an investment adviser with the SEC, a commodity pool operator and commodity trading advisor with the CFTC, or being a member of the NFA does not imply any certain level of skill, training or ability with respect to the provision of investment advisory services.

Item 2: Material Changes

This section of Aon Hewitt Investment Consulting, Inc.'s Brochure ("Brochure") is intended to discuss and identify material changes that are made to the Brochure since our last update on June 9, 2017.

We will deliver to our clients, a free annual updated Brochure that includes a summary of any material changes that are made to this and subsequent Brochures within 120 days of the close of our fiscal year. If you would like to request a copy of the most recent Brochure at any time, please contact Aon Hewitt Investment Consulting, Inc. at 312-381-1200.

Item 10 – Other Financial Industry Activities and Affiliations: Added The Townsend Group ("Townsend") as a new advisory affiliate of AHIC. Also included a discussion on conflict of interests related to advisory affiliate service referrals and advisory affiliates acting as a sub-adviser to AHIC.

Item 3: Table of Contents

Item 4: Advisory Business

Aon Hewitt Investment Consulting, Inc. ("AHIC") is a registered investment adviser with the U.S. Securities and Exchange Commission ("SEC"); a Commodity Pool Operator ("CPO") and a Commodity Trading Advisor ("CTA") registered with the Commodity Futures Trade Commission ("CFTC"); and is a member of the National Futures Association ("NFA") with its principal place of business located in Chicago, Illinois.

AHIC provides professional investment advisory and consulting services to public pension funds, endowments, foundations, not-for-profit organizations, corporate pension funds, defined contribution plans, insurance companies and registered investment advisers/wealth managers. In 2010, subsequent to the merger of Ennis Knupp & Associates, Inc., Hewitt Investment Group, LLC and Aon Investment Consulting, Inc., the business began operating under the name of Hewitt EnnisKnupp, Inc. In January 2015, Hewitt EnnisKnupp, Inc. changed its legal business name to Aon Hewitt Investment Consulting, Inc. AHIC is wholly owned by Aon Consulting, Inc., an indirect subsidiary of its ultimate parent Aon plc. Aon plc shares are listed on the New York Stock Exchange (symbol: AON). In 2018, AHIC also began operating under the umbrella brand name Aon.

AHIC provides both non-discretionary investment advice, discretionary investment solutions (including Outsourced Chief Investment Officer ("OCIO")) and actuarial services to clients on many matters related to their investment programs and operations, including:

- Investment Policy Planning and Asset Allocation;
- Manager Structure and Selection;
- Performance Review and Manager Monitoring;
- Fiduciary Services;
- Alternative Asset Advisory Services;
- Delegated Investment Solutions and Pension Risk Management;
- Annuities Placement Solutions;
- Ad Hoc Projects; and
- Bespoke Services.

More information on each of the above services is provided below. As an extension of the services listed above, AHIC offers related services including defined contribution services, master trustee/custodian evaluation, and asset transition services. In addition to discretionary asset management for defined benefit and defined contribution pension plans, AHIC also has considerable experience in formulating spending and investment policies for foundations and endowments.

Investment Policy Planning and Asset Allocation

We help clients to:

- Define and control risk for their specific requirements;
- Diversify their investment portfolio;
- Develop investment objectives and a statement of investment policy;
- Meet cash flow needs; and
- Conduct scenario analysis on their portfolio(s) as well as alternatives portfolios.

Our **Investment Policy Services Team (the "IPS Team")** and **Global Asset Allocation Team (the "GAA Team", and together with the IPS Team, collectively referred to herein as, the "Teams")** are composed of investment professionals with backgrounds in investment management, economics, and actuarial science. These Teams are responsible for maintaining AHIC's "house" investment views and capital market assumptions.

These Teams also provide timely, proactive advice and research to our investment consultants regarding the potential investment implications of changes in capital markets. Additional responsibilities include coordinating with AHIC investment consultants to provide AHIC clients with top-down, strategic investment advice; researching new investment strategies; and monitoring portfolio positions from an asset allocation perspective.

Certain plan sponsors hire us to construct a dynamic “de-risking” glide path to help bring the plans to a fully funded status, while reducing uncompensated risks, with the goal of reducing the economic cost of plan benefits. The dynamic “de-risking” glide path is directly incorporated into the client’s investment policy to formalize the strategy, permit execution, and seek to ensure the highest levels of governance.

The **Institutional Advisory Services Team (“IAS Team”)** provides non-discretionary model portfolios (“Model Portfolios”), strategic asset allocation advice, and related advisory services to certain institutional and retail non-affiliated advisory firms, including certain open-end mutual fund companies and wrap-program sponsors in connection with third-party wrap-fee programs.

We do not sponsor any “wrap-fee” programs, but we may participate as a non-discretionary sub-adviser in wrap-fee programs. Under these arrangements, we provide Model Portfolios containing our current investment recommendations based on our clients’ investment policy statement and strategy goals or other parameters as agreed to between AHIC and our client. Although we provide recommendations, we do not have the authority to implement those recommendations. Ultimately, the decision making and discretionary responsibility for the asset allocation and securities selection remains with the plan sponsor or fiduciary to the plan. Our client also maintains responsibility for effecting all security transactions in connection with such determinations, which means our client’s portfolio may materially diverge from the Model Portfolio created for such client. There may be differences between the Model Portfolio and the portfolios managed by our client and its other clients. We receive a fee from our client as an investment adviser for the services provided in these programs.

The IAS Team is also responsible for managing risk in general, including: performing asset-liability analyses; designing custom interest rate risk management portfolios utilizing derivatives; and monitoring portfolio positions from an asset-liability perspective.

Manager Structure and Selection

Our **Global Investment Management Team (“GIM Team”)** consists of individuals dedicated to researching and evaluating non-affiliated investment managers worldwide. Our GIM Team monitors and rates such investment managers’ strategies. The GIM Team includes a number of former fund managers, which we believe provides further insight for understanding managers.

The GIM Team identifies investment managers and strategies across equities, fixed income, real estate equity and debt, private equity and debt, and alternative asset classes for our clients, and conducts qualitative on-going periodic due diligence on buy-rated and qualified managers. GIM also will conduct periodic quantitative screens on its manager universe which would include investment managers not currently classified as buy-rated or qualified-rated managers.

The GIM Team works with the AHIC investment consultants to periodically review the number and types of managers, funds, and separate account strategies used by clients paying careful attention to efficiency, costs, and management oversight. Further, the GIM Team’s due diligence process is leveraged by its discretionary and non-discretionary advisory teams to include screening, interviewing, and selecting manager candidates that meet each client’s needs. Observations from this research are summarized within written manager guidelines and performance objectives reports.

In certain circumstances, a client may delegate its authority to AHIC, including the authority to allocate assets and hire or fire investment managers. Please see the section on our delegated services below.

Performance Review and Manager Monitoring

Our manager research efforts are driven by several factors, including efforts to identify new investment strategies or approaches, monitor investment strategies to which we have assigned a rating, or monitor strategies in which our clients invest. We conduct both qualitative and quantitative research and screening on investment strategies. Qualitative research includes ongoing discussions and periodic on-site due diligence meetings with investment managers in order to assess investment strategies offered by that firm. Qualitative research is performed on all strategies in which we assign a "buy" recommendation. Qualitative research may also be performed on selected "qualified" or "sell" rated strategies, depending on client requirements or the research team's interest in that strategy or firm. For those strategies that are rated by our quantitative process, the quantitative assessment is updated quarterly, which serves as a monitoring tool and information source for our researchers, consultants, and/or clients that may utilize the strategy in their portfolio. Assessments, whether qualitative or quantitative, focus on business/organization, staffing, investment process, risk management, operational considerations, performance, and terms and conditions. When evaluating investment strategies for a client, the research team also considers the investment in the context of the client's objectives and guidelines. We inform our clients of important developments and, when appropriate, recommend changing investment managers or the asset allocation to such investment managers.

Fiduciary Services

Our **Fiduciary Services Team** works with clients and provides fiduciary oversight reviews to help them meet their fiduciary responsibilities. These services are provided to both public- and private-sector pension plans and committees. In most cases, these services are a separate retainer-based solution distinct from other AHIC investment consulting practices. Our fiduciary services include:

- Strategic planning;
- Fiduciary audits and operational reviews;
- Client and fiduciary training;
- Board/Committee governance and self-assessment; and
- Ad hoc projects.

Strategic Planning

We assist in the design of strategic plans and development of mission statements and core values as well as reasonable and achievable goals and objectives. We also assist in the implementation of the plans and the evaluation of their success.

Fiduciary Audits and Operational Reviews
We review the client's policies and procedures to assess their effectiveness and appropriateness and provide recommendations for improvement. These reviews may include:

- Investment portfolio objectives, asset allocation, and policy;
- Investment operations and processes;
- Board oversight, policies, and principals; and
- Organization, staffing structure, and policies.

Upon completing our review, we create a report of findings and recommendations for delivery to the client's governing body and assist the client in selecting trustees and recordkeepers for fiduciary accounts.

Client and Fiduciary Training
Our educational offerings include:

- Written reports that provide background information, alternatives and recommendations (along with the rationale for the recommendations made as a result of the Fiduciary Audits or Operational Reviews) on a given issue;
- Research or educational materials on topics to discuss with a client's staff or committees;
- A client conference that covers a variety of investment-related topics.

Board/Committee Governance
We assist clients to develop governance manuals, policies, procedures, and monitoring methods appropriate to their oversight responsibilities and reporting structure. We also provide services to support our clients' administration of their fiduciary requirements, such as maintaining meeting minutes and compliance calendars, and assist with board/committee self-assessment.

Alternative Asset Advisory Services

Our **Global Hedge Funds, Private Equity** and **Real Estate Teams (collectively the "Global Alternatives Team")** are a sub-part of the GIM Team discussed above. The Global Alternatives Team is responsible for maintaining qualitative assessments on alternative asset manager strategies and keeping abreast of the conditions in these markets.

We provide both non-discretionary and discretionary investment advisory services on partnership interests in private equity, real estate, venture capital arrangements, hedge funds, leveraged buyout funds, and distressed securities funds.

With the exceptions of mutual funds, exchange traded funds, and non-public securities, we do not typically provide advice or recommendations on specific securities investments. In designing a client's investment policy, we will typically consider many types of investments, unless instructed by the client to limit our advice to particular sectors or industries. Our investment recommendations are not limited to any specific product or service offered by any particular broker-dealer or insurance company.

Because some types of alternative investments involve an additional degree of risk, alternative investment strategies will only be recommended when consistent with the client's stated investment objectives, tolerance for risk, liquidity, and suitability.

Hedge Fund Advisory Services

We develop, expand and monitor our clients' asset allocation structures in opportunistic strategies (e.g., real and absolute return, global tactical asset allocation, long/short equity including market neutral and 130/30 style funds, commodities, convertible arbitrage, and funds-of-funds). We seek to integrate our understanding of each of our client's goals, risk tolerances, and risk qualities of existing portfolio with our extensive manager research and monitoring capabilities. Our approach is to take a broad perspective on this opportunity set, covering not only a wide variety of hedge funds, but also those strategies that use "hedge fund like" approaches to investing. We conduct both on-site and telephonic manager meetings annually with a due diligence process that includes a robust examination of investment strategy, fund leadership, and operational due diligence.

We also provide institutional investors with a hedge fund investment risk monitoring and implementation platform that allows for hedge fund investing with increased transparency through the VISION platform. This service is designed to allow us to provide holdings-level transparency, IMA guideline monitoring, risk oversight and integrated risk reporting, as well as collectively to negotiate management fees for our clients.

Private Equity Advisory Services

We review and develop a client's private equity investment policy, asset allocation, and portfolio design. We conduct global private equity fund selection and due diligence reviews within each sub-sector. In addition, we coordinate the engagement of outside counsel for our clients so that limited partnership agreements are reviewed by legal professionals. Then, we negotiate terms and conditions on behalf of each client. We provide clients with performance reporting, portfolio analysis, and comprehensive portfolio company review. In no circumstances does this service provide our clients with legal advice. Clients have the responsibility to obtain their own legal and tax advice. We are able to educate clients on secondary sale processes and evaluate their portfolio construction decisions. We provide private equity education and market analysis, including commentary on current issues. We recommend commingled private equity investment funds as well as separate accounts that are structured and classified to meet client needs.

Real Estate Advisory Services

We consult with our clients to develop their real estate portfolio investment objectives, programs, and policies. Our real estate investment strategic planning and implementation services include:

- Investment pacing, size, and strategy diversification;
- Investment vehicle analysis and planning;
- Property and portfolio leverage planning;
- Manager search, selection, and monitoring;
- Performance measurement and attribution analysis;
- Topical real estate research and market analysis; and
- Transition structure and terms modeling, analysis, and fee negotiations.

Discretionary Investment Solutions and Pension Risk Management

Through our **Discretionary Advisory Team ("Delegated" or "delegated services")**, we design and manage certain institutional clients' investment portfolios. For these client relationships, we are delegated the authority to hire investment managers, terminate investment managers, select investment funds, and rebalance portfolio assets, subject to the client's investment policy statement and other terms outlined in the investment consulting agreement. Please see Item 16 for more information about our delegated services.

Certain plan sponsors hire us to construct a dynamic "de-risking" glide path to help bring the plans to a fully funded status, while reducing uncompensated risks, with the goal of reducing the economic cost of plan benefits. The dynamic "de-risking" glide path is directly incorporated into the client's investment policy statement to formalize the strategy, permit execution, and seek to ensure the highest levels of governance. In setting the glide path, we use a customized liability measure reflecting the client's desired objectives:

- *Potential Reduction in Economic Cost*: In many cases, the dynamic “de-risking” glide path, daily monitoring, and swift execution of the preapproved glide path may reduce the plans’ economic costs over time by reducing uncompensated risks and volatility.

- *Improve Probability of Reaching 100% Funded While Decreasing Risk*: The goal of the glide path is to seek to improve the probability of reaching 100% funded while protecting the downside risk.

- *Executing “Real-time”*: AHIC’s daily monitoring capabilities are key to implementing a dynamic “de-risking” glide path. We take discretion for the selection, implementation, and replacement of investment managers to execute a client’s dynamic policies. This results in a reduction in decision cycle times and a disciplined execution of plan strategies, which seeks to improve benefit security to plan participants and, in many cases, delivers lower economic cost and volatility to plan sponsors.

Our **Delegated Investment Team** is dedicated to the development, implementation and execution of our best thinking for our clients. This solution also utilizes “Buy Rated” investment manager strategies, which are researched by the GIM Team, as referenced above. The Delegated Investment Team utilizes a variety of tools and providers that seek to pursue the highest quality strategies available in the market.

Our **Delegated Portfolio Management Team** leverages the expertise of dedicated individuals with backgrounds in investment management and actuarial science. The team is responsible for managing risk in general, including: performing asset-liability analyses; designing custom interest rate risk management portfolios utilizing derivatives; and monitoring portfolio positions from an asset-liability perspective.

Certain AHIC clients that receive non-discretionary investment advisory services may also have a portion of their portfolio managed by the Delegated Investment Team, or provided in connection with AHIC’s Delegated Investment Solutions (“DIS”). AHIC provides non-discretionary (3(21) ERISA) advisory services with respect to certain AHIC clients, and also exercises discretionary management authority (3(38) ERISA) delegated services with respect to a portion of these client’s portfolios.AHIC qualifies as a “qualified professional asset manager” under the DOL’s Prohibited Transaction Class Exemption 84-14.

As part of our discretionary management services, we may invest our clients in AHIC-affiliated private funds and/or collective funds. While the investment in AHIC private funds or collective funds is not a requirement of our discretionary services, AHIC believes that it has the ability to offer scaled pricing to its clients by investing into affiliated private funds or collective funds, which may not otherwise be available to clients separately through the use of separate accounts or other unaffiliated commingled vehicles. Typically, AHIC will charge for its advisory services separately from an investment in an AHIC-affiliated fund, except for clientsinvested in ATC’s collective investment trust who may choose to pay AHIC’s investment advisory fee directly from CIT assets.

AHIC’s non-discretionary investment advisory services will not include evaluations or recommendations on DIS when clients make the determination to delegate a portion of their portfolio to DIS. Furthermore, the GIM Team will not perform monitoring or due diligence of the discretionary portfolio management or private funds managed by DIS, as these activities are performed on at least a quarterly-basis by a team managed by Delegated’s US Chief Risk Officer. The non-discretionary and discretionary solutions are performed by separate and distinct teams within AHIC. The non-discretionary team will remain responsible for performing fiduciary oversight of the client’s entire portfolio, and will make independent recommendations to their client on the services performed by DIS.

<u>Annuities Placement Solutions</u>

Our **Annuities Placement Solutions Team** leverages the expertise of dedicated individuals with backgrounds in insurance, risk management, actuarial science and finance. The team has extensive experience assisting clients in selecting annuity providers using the protocol established by the Department of Labor in its Interpretive Bulletin No. 95-1 dealing with the selection of the “Safest Available Annuity Provider.”

The team specializes in implementing annuity arrangements for terminating defined benefit plans as well as partial settlements for ongoing plans. We evaluate the need for guaranteed interest contracts and assist clients in evaluating and understanding these pension investment alternatives. Guaranteed interest contracts are agreements issued by an insurance company that provide interest over a specified, agreed-upon time period. They are commonly considered by plan fiduciaries in defined benefit plans as an alternative to fixed income or in defined contribution plans as an investment for participants seeking principal preservation.

Ad Hoc Projects

We provide some of the services described above (for example, policy consulting, manager selection, and governance) on a project basis. We also provide the following services on a project basis:

- Investment Program Review
- Defined Contribution Services (e.g., Vendor Evaluation and Fee Benchmarking)
- Vendor Fee Reviews
- Manager Agreement Review
- Asset Transfer Oversight (at client direction)
- Asset Liability Studies
- Recordkeeper Selection

Bespoke Services

We allow clients to customize their investment portfolio to their needs and goals, such as by imposing reasonable investment restrictions on certain securities, industries, or sectors; managing a portfolio to a tax-efficient mandate; or by providing us with written instructions when opening an account or at any time thereafter.

Amount of Managed Assets

As of December 31, 2017, we had approximately $107 billion of assets under management on a discretionary basis and $2 billion in assets on a non-discretionary basis.

Item 5: Fees and Compensation

AHIC does not have a standardized fee or uniform fee schedule. Fees for our asset management services may be charged as a percentage of assets in the client’s account. Consulting services may be charged as an hourly fee or as a flat fee. The nature of our proposed relationship with our client is considered in determining the fee structure for our client’s account. Fees may vary between clients due to various factors, including, but not limited to, the type and size of the client’s account, the range of additional services provided to the client, and the total amount of assets managed for a single client. We believe our fees are competitive and reasonable. However, there may be instances where similar services to those provided by us may be available for similar or lower fees from other asset managers. All fees are negotiated in advance with the client and will vary depending on a number of factors, including but not limited to:

- Complexity of assignment;
- Scope of work;
- Number of plans;
- Number of investment managers; and

- Nature and frequency of meetings and reports.

The fees charged for the investment advisory services are specified in the written agreement between AHIC and each client. AHIC's fees do not include trustee fees, custody fees, sub-advisory fees, brokerage commissions, transaction costs, mutual fund expenses, or other fees a client may incur.

Asset-Based Fees

Asset-based fees typically range from 0.01% to 0.25% of assets we advise on a non-discretionary basis. Asset-based fees typically range up to 0.60% of assets we manage on a delegated/discretionary basis. These fees are typically billed quarterly, in arrears, calculated on the value of assets in the account at the end of each calendar quarter and invoiced to the client.

Hourly Fees

Hourly fees typically range from $200 - $900 per hour depending on the service rendered and are billed monthly, in arrears, based on actual hours rendered to a client account and invoiced directly to the client.

Retainer Fees

Retainer fees typically range from $75,000 to $500,000, and are either billed quarterly, in arrears, or in installments negotiated with the client for the duration of a particular project. These fees are negotiated on a client-by-client basis dependent upon the services requested.

GENERAL INFORMATION ON FEES

Negotiability of Fees: Although we have established the fee ranges reflected above, we retain the right to negotiate or waive fees on a client-by-client basis in the future.

Fee Calculation: The fee charged is calculated as described above and is not charged on the basis of a share of capital gains upon or capital appreciation of the funds or any portion of the funds of an advisory client (Section 205(a) (1) of the Investment Advisers Act of 1940, as amended).

Termination of Advisory Relationship: Typically, a client may terminate its advisory relationship at any time upon no more than 30 days prior notice. Upon termination of any account, any prepaid, unearned fees will be promptly refunded to the client, and any earned, unpaid fees will be due and payable. Such fees are prorated based on the number of days left in the billing period.

Pooled Fund Investment Vehicles: We serve as the investment adviser to Aon Hewitt Group Trust ("AHGT"), Aon Hewitt Offshore Fund of Hedge Funds, Ltd. ("AHFoHF"), Aon Hewitt Institutional Funds ("AHIF"), and Aon Private Credit Opportunities Fund ("APCOF"). The fees relating to the funds are described in each respective Private Offering Memoranda and Supplement(s).

Collective Investment Trusts: We serve as the investment adviser to the Aon Hewitt Collective Investment Trust ("AHCIT"). The advisory fees we receive from AHCIT relating to the funds are described in the trust's Offering Statement. Certain clients may prefer to pay AHIC's advisory fees directly from the CIT, which is further described in the trust's Offering Statement. In its discretionary capacity, AHIC has the ability to hire and terminate investment advisory relationships on behalf of the CIT and negotiate investment advisory fees related to such sub-advisers. At this time, AHIC has agreed to pay certain operating expenses of the CIT. The amount of the reimbursement may change at any time without notice to fund investors.

Investment Advisory Fees and Expenses: AHIC's investment advisory fees, both for consulting and discretionary asset management, are separate and distinct from fees and expenses charged by our client's investment managers (mutual funds, collective investment trusts, separate account managers, as well as the sub-advisers we choose or recommend to manage assets on behalf of the AHGT, AHFoHF, AHIF, APCOF, or AHCIT). Generally, AHIC does not collect an investment management fee from its pooled vehicles except for when a client elects to pay AHIC's investment advisory fees as part of the AHCIT.

The fees and expenses related to the investment management firms unrelated to AHIC are described in each fund's prospectus, in the case of mutual funds, or other disclosure materials, in the case of the other types of managers. Investment management fees charged by investment managers (sub-advisers) within Aon Hewitt's funds are reflected in each respective AH fund's offering memorandum and are reflected in the expense ratios of the funds.

Custody and Brokerage Fees and Expenses: Clients should note that our investment advisory fees are separate from custody and brokerage charges that may be assessed by third parties, including Bank of New York Mellon (when investing in the AHGT, AHFoHF, and AHIF). Please see *Item 12 – Brokerage Practices* and *Item 15 – Custody* for more information.

Limited Prepayment of Fees: Clients may prepay our fees in advance. However, under no circumstances do we require or solicit payment of fees in excess of $1,200 more than six months in advance of services rendered. See Termination of Advisory Relationship above regarding return of any unearned advisory fees.

Affiliated Sales Activity: A limited number of AHIC employees are also affiliated with Aon Securities, Inc. ("ASI"), which is a registered broker-dealer and our affiliate. Their affiliation with ASI relates solely to their services with respect to distribution of interests in the AHGT, AHFoHF, APCOF, and AHIF. Although affiliated with ASI, our representatives receive no compensation from ASI or from clients for these services.

Additionally, AHIC employees also offer interests in the Aon Hewitt Collective Investment Trust ("AHCIT"), which is collective investment vehicle of Aon Trust Company ("ATC") and an affiliate of AHIC.

Mutual Funds: The investment advisory fees that we receive for services provided by our IAS Team as a non-discretionary sub-adviser to unaffiliated mutual funds, which are registered under the Advisers Act, are described in the registration statements and/or financial filings of such mutual funds, including such funds' prospectuses.

Global Investment Manager Database: Investment advisers do not pay a fee to AHIC (or otherwise compensate AHIC or its affiliates) to be included in AHIC's Global Investment Manager ("GIM") database. Neither AHIC nor any of its affiliates charge any investment adviser to be reviewed, evaluated, recommended, or selected by AHIC for any of its clients.

Occasionally, AHIC provides investment consulting services to an investment management firm specific to its employee retirement plan. AHIC may be compensated for these services by those investment managers consistent with the advisory fees described within this section. Further discussion related to these services can be found under *Item 10 – Other Financial Industry Activities and Affiliations.*

Item 6: Performance-Based Fees and Side-By-Side Management

Currently, AHIC does not charge performance-based fees. However, there may be certain of AHIC's affiliated funds whose underlying third-party funds or sub-advisers charge performance-based fees. AHIC may also invest client assets directly in third-party investment vehicles and/or third-party funds that may charge a performance-based fee.

“Side-by-Side management” refers to the simultaneous management of multiple types of client accounts/investment products. AHIC and its sub-advisers manage many accounts with a variety of strategies, which may present conflicts of interest. AHIC utilizes a customized investment advice platform where individual recommendations are provided to each client and are not applied holistically across all clients. In advising other clients, we may give advice and make recommendations to such clients, which may be the same, similar to, or different from those provided to other clients due to different client investment objectives and strategies. Clients should be aware that AHIC’s sub-advisers do at times sell or hold short positions in securities for one or more client accounts while purchasing or holding long positions in the same or substantially similar securities for other client accounts. AHIC conducts due diligence on its sub-advisers’ policies and procedures to ensure that appropriate trade allocation and execution policies are established.

Item 7: Types of Clients

AHIC provides investment advisory services to banking or thrift institutions, pooled investment vehicles, pension and profit sharing plans, not-for-profit, charitable organizations, corporations, government entities, investment companies, collective investment trusts, and endowments and foundations. We also serve hospital systems, Taft-Hartleys, family offices, insurance companies, and other public and private entities.

Item 8: Methods of Analysis, Investment Strategies and Risk of Loss

Methods of Analysis

We advise clients on broad investment objectives and the selection and monitoring of advisers and/or investment managers. Clients should refer to the disclosure documents of recommended advisers and investment managers for information on their methods of analysis, sources of information, and investment strategies.

AHIC’s GIM Team focuses the majority of its research on qualitative assessment, striving to thoroughly understand the organizations and teams that are responsible for investment performance.

The focus of the qualitative criteria includes:

- Special emphasis placed on understanding the incentive structure and team dynamic to determine the likelihood of team stability and long-term performance;
- Skill level, interpersonal skills, and attitudes of the general partners;
- The quality of the group’s deal flow with respect to intrinsic quality and competition for the opportunities;
- The due diligence and decision-making process employed by the group when it makes investments in companies, among others.

In addition, the GIM Team focuses on obtaining a thorough understanding of the research and investment process. In doing so, it is our belief that we are able to effectively evaluate periods of relative performance deviations thereby allowing for valuable proactive consulting for clients rather than a chasing performance mentality that plagues many investors. To truly understand investment management firms, it is the our belief that time must be spent face-to-face with the people at these organizations to determine their talent and commitment to client results.

Our researchers also spend a lot of time quantitatively analyzing managers. The quantitative analysis is not performance screening to find hot managers; instead, the team utilizes a variety of proprietary and third-party databases to measure risk and performance to better understand *how* a product performs and if it is in line with the style of management it pursues. The team runs portfolio attribution at the holdings level in an attempt to better understand drivers of results and challenge portfolio managers on their research and portfolio positioning.

The GIM Team's manager evaluation process assesses each manager's:

- Perceived skill;
- Fund size/competing accounts;
- Cost;
- Team;
- Performance evaluation;
- Product fit;
- Attractiveness of targeted stage;
- Strategy;
- Ownership and sharing of carried interest;
- Stability of team;
- Quality and depth of management;
- Culture; and
- Quality of service.

The quantitative criteria that are calculated and evaluated include internal rates of return, cash flow multiples, and distributions, which are benchmarked across a number of variables including fund type.

By evaluating these quantitative measures, the team gains a better understanding of how a manager may perform in a certain environment or how well a manager should fit within a portfolio context. Furthermore, an ongoing evaluation of qualitative and quantitative characteristics helps to evaluate if a manager continues to fit the role for which it was originally hired.

This dual evaluation allows the GIM Team to give clients a clear and accurate picture of our opinion on the investment managers and their strategies. Five areas of focus are extensively probed: organization, investment teams, investment process, risk considerations, and performance. This is accomplished via an on-site interview process conducted by multiple researchers.

<u>Investment Strategies</u>

To meet the wide variety of investment requirements of our clients, we offer customized investment solutions that implement our best thinking by investing client assets in affiliated commingled funds and/or funds or separate accounts managed by unaffiliated sub-advisers.

For our IAS solution, we build model portfolios based on our best thinking and analyses in accordance with clients' investment policy guidelines. With this solution, our clients are responsible for all portfolio trading, monitoring and operational aspects of implementing the model portfolios.

Our clients should not assume that portfolio investments will be profitable. The results for individual client portfolios will vary depending on market conditions and the portfolio's overall composition. Our clients' portfolios invest in securities; all investments carry a certain degree of risk, including the possible loss of principal that clients should be prepared to bear. There is no assurance that a client's portfolio will achieve its investment objective or that any investment will provide positive performance over any period of time.

We also sponsor several private funds. AHIC's private funds are available to certain sophisticated investors.

Risks

Please refer to the offering memorandum and supplement documents of the private funds offered by AHIC for the list of risk factors specific to each of the funds. There are a variety of risk factors each client must take into consideration, including, but not limited to, the risk factors listed herein.

A client's portfolio is subject to normal market fluctuations and other risks inherent in investing in securities, commodities, and other financial instruments. These risks may include or relate to, among other things, equity market, bond market, foreign exchange, interest rate, credit, commodities, market volatility, political risks, and any combination of these and other risks. The value of investments and the income from them, and therefore the value of and income of the third-party strategies, can go down as well as up, and an investor may not get back the amount invested. Changes in exchange rates between currencies or the conversion from one currency to another may also cause the value of the investments to diminish or increase. An investment in a third-party strategy should not constitute a substantial proportion of an investment portfolio and may not be appropriate for all investors.

Risks may occur simultaneously and/or may compound each other resulting in an unpredictable effect on the value of the third-party strategies. No assurance can be given as to the effect that any combination of risks may have on the value of the third-party strategies.

General Risk Factors

Risks Related to Investment in Equity Markets.

The third-party strategies, to the extent invested in the equity markets, are subject to a variety of market and financial risks. Common stocks, the most familiar type of equity security, represent an equity (ownership) interest in a corporation. Although common stocks and other equity securities have a history of long-term growth in value, their prices may fluctuate dramatically in the short term in response to changes in market conditions; interest rates; and other company, political, and economic developments. The value of the third-party strategies, to the extent invested in the equity markets, will fluctuate and the holders of these investments should be able to tolerate declines, sometimes sudden or substantial, in the value of their investment.

Risks of Investing in Equity Securities of Non-U.S. Companies and Smaller Companies.

Investments in non-U.S. securities, including emerging markets equities, and in small capitalization and mid-capitalization equity securities, involve special risks. For instance, smaller companies may be impacted by economic conditions more quickly and severely than larger companies. Risks of investing in foreign securities include those relating to political or economic conditions in foreign countries, potentially less stringent investor protection, disclosure standards and settlement procedures of foreign markets, potentially less liquidity of foreign markets, potential applicability of withholding or other taxes imposed by these countries, and currency exchange fluctuations.

Interest Rate Risk Applicable to Investment in Fixed-Income Securities.

Fixed-income securities are subject to the risks associated with investing in such instruments. Fixed-income securities, such as bonds, are issued to evidence loans that investors make to corporations and governments, either foreign or domestic. If prevailing interest rates fall, the market value of fixed-income securities that trade on a yield basis tends to rise. On the other hand, if prevailing interest rates rise, the market value of these fixed-income securities generally will fall. In general, the shorter the maturity, the lower the yield, but the greater the price stability. These factors may have an effect on the value of the third-party strategies. A change in the level of interest rates will tend to cause the net asset value of the third-party strategies to change. If these interest rate changes are sustained over time, the yield of the third-party strategies will fluctuate accordingly.

Credit Risk Applicable to Investment in Fixed-Income Securities, Including those of Lower Credit Quality.

Fixed-income securities, including corporate bonds, are subject to credit risk. When a security is purchased, its anticipated yield is dependent on the timely payment by the borrower of each interest and principal installment. Credit analysis and bond ratings take into account the relative likelihood that such timely payment will result. Bonds with a lower credit rating tend to have higher yields than bonds of similar maturity with a better credit rating. However, to the extent the third-party strategies invest in securities with medium or lower credit quality, they are subject to a higher level of credit risk than investments in investment-grade securities. In addition, the credit quality of non-investment grade securities is considered speculative by recognized ratings agencies with respect to the issuer's continuing ability to pay interest and principal. Lower-grade securities may have less liquidity and a higher incidence of default than higher-grade securities. Furthermore, as economic, political and business developments unfold, lower-quality bonds, which possess lower levels of protection with respect to timely payment, usually exhibit more price fluctuation than do higher-quality bonds of like maturity, and the value of the third-party strategies invested therein will reflect this volatility.

Risks Associated with Commodity Investments and Derivatives.

Certain third-party strategies may use exchange–traded or over-the-counter ("OTC") futures, forwards, warrants, options, swaps, and other derivative instruments to hedge or protect the portfolio from adverse movements in underlying prices and interest rates or as an investment strategy to help attain the third-party strategy's investment objective. Certain third-party strategies may also use a variety of currency hedging techniques, including foreign currency contracts, to attempt to hedge exchange rate risk or to gain exposure to a particular currency. The third-party strategies' use of derivatives could reduce returns, may not be liquid, and may not correlate precisely to the underlying securities or index. Derivative securities are subject to market risk, which could be significant for those derivatives that have a leveraging effect that could increase the volatility of such third-party strategies. Derivatives are also subject to the risk of material and prolonged deviations between the theoretical and realizable value of a derivative (e.g., due to non-conformance to anticipated or historical correlation patterns). Derivatives are also subject to credit risks related to the counterparty's ability to perform, and any deterioration in the counterparty's creditworthiness could adversely affect the instrument. A risk of using derivatives for hedging purposes is that a third-party strategy's manager might imperfectly judge the market's direction, which could render a hedging strategy ineffective or have an adverse effect on the value of the derivative. Furthermore, many derivatives, particularly those that are not traded in transparent markets, may be subject to significant price risk. Prices in these markets are privately negotiated and there is a risk that the negotiated price may deviate materially from fair value. This deviation may be particularly acute where there is no active market available from which to derive benchmark prices. The price of a given derivative may demonstrate material differences over time between its theoretical value and the value that may actually be realized by a third-party strategy (e.g., due to non-conformance to anticipated or historical correlation patterns). Many OTC derivatives are priced by the dealer; however, the price at which a dealer values a particular derivative may not comport with the price at which the third-party strategy seeks to buy or sell the position. In many instances, a third-party strategy will have little ability to contest the dealer's valuation. Derivatives, particularly to the extent they are transacted on an OTC or bilateral basis or are highly customized, may also be highly illiquid, making it difficult, or in some cases impossible, for a third-party strategy to exit a position at what the third-party strategy's manager considers a reasonable price.

To the extent that a third-party strategy enters into a derivative on an OTC or "bilateral" basis, which means that the third-party strategy's ultimate counterparty in a transaction is not a regulated clearing house (a well-capitalized and regulated party that becomes the counterparty to each trade on both sides of a specific market upon acceptance for clearing), then the third-party strategy will be subject to the risk that the counterparty to the third-party strategy will not be able to perform its obligations under the transaction. Any deterioration in the counterparty's creditworthiness could result in a devaluation of the transaction and result in losses to the third-party strategy. There are a small number of major financial institutions globally that act as counterparties in the majority of OTC derivatives transactions and represent the vast majority of liquidity available in these markets. These institutions have historically been highly leveraged and largely unregulated and have had substantial financial exposure to each other, increasing the risk that a failure of one financial institution could lead to a "domino" effect of further failures of major financial institutions. Many of these financial institutions received substantial government-directed financial support or were "bailed out" during the financial crisis of 2008-2010. The failure of Lehman Brothers in September 2008 had a significantly adverse impact on those traders that transacted with Lehman Brothers in the OTC markets. There can be no guarantee that similar failures will not occur in the future.

There has been substantial disruption in the OTC derivatives markets related to the market turmoil and failure of certain financial institutions in 2008 and 2009. The vast government intervention during this period also led to considerable uncertainty among market participants. Although the OTC derivatives markets have since stabilized somewhat, there can be no assurance that the turmoil in the markets will not recur. This disruption and uncertainty could cause substantial losses to a third-party strategy if its OTC derivatives are prematurely terminated, especially due to the default of a third-party strategy counterparty, where payment may be delayed or completely lost.

Risks of Trading Futures on Foreign Exchanges.
Certain third-party strategies may trade futures on non-U.S. exchanges. These exchanges are not regulated by any U.S. governmental agency. Such third-party strategies could incur substantial losses trading on foreign exchanges to which they would not have been subject when trading on U.S. markets. In addition, the profits and losses derived from trading foreign futures and options will generally be denominated in foreign currencies; consequently, such third-party strategies will be subject to a certain degree of exchange rate risk in trading such contracts. Exchange rate risk is the risk that a security's value will be affected by changes in exchange rates relative to the U.S. dollar.

Substantial New Regulation of OTC Derivatives Markets
The Dodd-Frank Act includes provisions that seek to comprehensively regulate the U.S. OTC derivatives markets for the first time. As a result of the Dodd-Frank Act, the SEC and the CFTC may also require a substantial portion of derivative transactions that are currently executed on a bilateral basis in the OTC markets to be executed through regulated securities, futures, or swap exchanges or execution facilities and submitted for clearing to regulated clearing houses. OTC trades submitted for clearing will be subject to minimum initial and variation margin requirements set by the relevant clearing house, as well as possible margin requirements, mandated by U.S. securities and futures regulators. The regulators also have broad discretion to impose margin requirements on non-cleared OTC derivatives. Although the Dodd-Frank Act includes limited exemptions from the clearing and margin requirements for so-called "end users," the third-party strategies will not be able to rely on such exemptions. OTC derivatives dealers also will be required to post margin to the clearing houses through which they clear their customers' trades instead of using such margin in their operations, as they currently are allowed to do. This will further increase the dealers' costs, and these increases are expected to be passed through to other market participants in the form of higher fees and less favorable pricing. New requirements resulting from the Dodd-Frank Act may make it more difficult and costly for the third-party strategies to enter into customized transactions. They may also render certain strategies in which the third-party strategies might otherwise engage impossible or so costly that they will no longer be economical to implement.

OTC derivatives dealers and major OTC derivatives market participants will also be required to register with the SEC and/or the CFTC. The third-party strategies or third-party Managers may be required to register as major participants in the OTC derivatives markets. Dealers and major participants will be subject to minimum capital and margin requirements. These requirements may apply irrespective of whether the OTC derivatives in question are exchange-traded or cleared. OTC derivatives dealers will also be subject to new business conduct standards, disclosure requirements, reporting and recordkeeping requirements, transparency requirements, position limits, limitations on conflicts of interest, and other regulatory obligations. These requirements may increase the overall costs for OTC derivatives dealers, which are likely to be passed along, at least in part, to market participants in the form of higher fees or less favorable pricing. The overall impact of the Dodd-Frank Act on the third-party strategies is as yet uncertain and it is unclear how the OTC derivatives markets will adapt to this new regulatory regime.

Risks Associated with U.S. Government Obligations.
Obligations of the U.S. government and the agencies and instrumentalities thereof are referred to herein as "U.S. Government Obligations." Not all U.S. Government Obligations are backed by the full faith and credit of the United States. For example, securities issued by the Federal Farm Credit Bank or by the Federal National Mortgage Association are supported by the agency's right to borrow money from the U.S. Department of the Treasury under certain circumstances, and securities issued by the Federal Home Loan Banks are supported only by the credit of the issuing agency. There is no guarantee that the U.S. government will support these

securities, and, therefore, they involve more risk than U.S. Government Obligations that are supported by the full faith and credit of the United States.

Further, one nationally recognized U.S. statistical rating organization, in August 2011, downgraded the credit rating of long-term U.S. government securities to AA+ from AAA, and other nationally recognized statistical rating organizations have placed U.S. government securities on negative “watch.” These events and circumstances could result in further market disruptions that could adversely affect the market for U.S. Government Obligations, as well as other financial markets, on a global basis.

Redemption Risk.
A third-party strategy may need to sell its holdings in order to meet redemption requests of participating trusts holding investments in a fund. Such third-party strategy could experience a loss when selling securities to meet redemption requests if the redemption requests are unusually large or frequent, occur in times of overall market turmoil or declining prices for the securities sold, or when the securities the third-party strategy wishes to or is required to sell are illiquid. The third-party strategy may be unable to sell illiquid securities at its desired time or price. Illiquidity can be caused by a drop in overall market trading volume, an inability to find a ready buyer, or legal restrictions on the securities’ resale. Certain securities that were liquid when purchased may later become illiquid, particularly in times of overall economic distress.

***Risk of Reliance on Industry Research*.**
Certain third-party strategies and their Managers are dependent to a significant extent on information and data obtained from a wide variety of sources to assess the quality of the securities in which they propose to invest, such as financial publications that monitor markets and investments, industry research materials, ratings issued by one or more nationally recognized credit rating agencies to assess the credit quality of securities in which they propose to invest, and other materials prepared by third parties. There may be limitations on the quality of such information, data, publications, research, and ratings, and generally neither AHIC nor the third-party strategies’ managers independently verifies any of the same. For instance, certain asset-backed securities, such as sub-prime collateralized mortgage obligations and securities backed by bond insurance that initially received relatively high credit ratings were, in connection with the credit markets turbulence that began in 2007, subsequently significantly downgraded as the investment community came to realize that there may have been previously unanticipated risks associated with these securities. There is a risk of loss associated with securities even if initially determined to be of relatively low risk, such as in the case of collateralized debt obligations and other structured-finance investments that often are highly complex.

Legal and Regulatory Changes Could Adversely Affect the Third-party Strategy.
Regulation of investment vehicles such as the third-party strategies, and of many of the investments a third-party strategy manager is permitted to make on behalf of the third-party strategy(ies) advised by it, is still evolving and therefore subject to change. In addition, many governmental agencies, self-regulatory organizations, and exchanges are authorized to take extraordinary actions in the event of market emergencies. The effect of any future legal or regulatory change on a third-party strategy is impossible to predict, but could be substantial and adverse.

Risks of Securities Lending Undertaken by the Third-party Strategy.
The third-party strategies, to the extent they are engaged in securities lending, may be subject to the risks associated with the lending of securities, including the risks associated with defaults by the borrowers of securities subject to the securities lending program and the credit, liquidity, and other risks arising out of the investment of cash collateral received from the borrowers.

Restrictions on Redemptions and Payment of Redemption Proceeds.
Investors should note that there may be restrictions in connection with the subscription, holding, redemption of, and trading in the third-party strategies units. Such restrictions may have the effect of preventing the investor from freely subscribing, holding, trading, and/or redeeming a third-party strategy unit. For additional information, please refer to each fund’s confidential offering memorandum.

Market Disruption Events and Settlement Disruption Events.
A determination of a market disruption event or a settlement disruption event may have an effect on the value of the third-party strategies and/or may delay settlement in respect of a third-party strategy unit. The third-party

strategies may incur losses from disrupted markets, and other extraordinary events may affect markets in a way that is not consistent with historical pricing relationships. The risk of loss from a disconnect from historical prices is compounded by the fact that in disrupted markets many positions become illiquid, making it difficult or impossible to close out positions against which the markets are moving.

In addition, market disruptions caused by unexpected political, military, and terrorist events may, from time to time, cause losses for an investment portfolio, and such events can result in otherwise historically low-risk strategies performing with unprecedented volatility and risk. A financial exchange may, from time to time, suspend or limit trading. Such a suspension could render it difficult or impossible for a third-party strategy to liquidate affected positions and thereby expose it to losses.

Other Risks and Conflicts

Because of the wide range of services offered by AHIC and its affiliates, it is possible that conflicts may arise. As discussed in *Item 6 – Performance Based Fees and Side-by-Side Management*, certain conflicts of interest also arise from the fact that AHIC and each sub-adviser may provide consultation or investment management services to other clients, pooled investment vehicles, or separately managed accounts, some of which may have similar or different investment objectives to those of the strategies available in the strategies and funds managed by AHIC. As AHIC manages our client relationships on a customized basis, there may be conflicting investment objectives and risk tolerances among AHIC clients invested in similar investment vehicles.

Investors should be aware their investment is not guaranteed and understand that there is a risk of loss of value in their investment.

Item 9: Disciplinary Information

We are required to disclose any legal or disciplinary events that are material to a client's or prospective client's evaluation of our advisory business or the integrity of our management.

AHIC and its management personnel have no reportable disciplinary events to disclose; however, Aon plc and its business units and affiliates do business throughout the country and, like all businesses in the United States, are subject to a certain number of lawsuits pending in the ordinary course of its business on a worldwide basis. Details of litigation filed against Aon are available in Aon plc’s annual Form 10 K filing (Note 16) and Aon plc’s quarterly Form 10 Q filing (Note 14). Excerpts of the 10 K and 10 Q filings containing, respectively, Note 16 and Note 14, are available on Aon’s website (www.aon.com). Although the ultimate outcome of all such matters cannot be ascertained, it is the position of Aon plc that the disposition or ultimate determination of such claims will not have a material effect on the financial position of Aon plc or any of its business units nor impacts its ability to perform services for the benefit of its clients.

Item 10: Other Financial Industry Activities and Affiliations

AHIC shares office space and other resources with its parent company, Aon plc, a publically traded UK based corporation. **Aon plc (“Aon”)** is a global provider of risk management, insurance and reinsurance brokerage, and human resources solutions and outsourcing services. These services are provided through direct and indirect subsidiaries. As discussed above in *Item 5 – Fees and Compensation*, we offer a number of OCIO solutions to our clients, in conjunction with some services which are offered through various Aon affiliated companies. AHIC’s arrangements with these affiliates may or may not be material to its advisory business at any one particular time. AHIC and its affiliates may refer clients and introduce investment opportunities to each other.

As a result of some of these solutions, certain employees of ours hold securities licenses with **Aon Securities, Inc. (“ASI”)**, a FINRA registered broker-dealer and an SEC registered investment adviser, and an indirect subsidiary of our ultimate parent, Aon plc. Interests in the AHGT, AHFoHF, and AHIF are also offered through ASI, which is not remunerated for this service. ASI often plays several roles when engaging with its clients, including structuring and distribution of securities. On the structuring side, ASI advises on the details of a proposed transaction, including the duration, pricing, and terms and conditions of securities. Once structured, ASI also sells or distributes the securities to a wide variety of investors (i.e., acts as a placement agent). As part of ASI's sale or distribution of securities, ASI may come into contact with AHIC clients as potential investors in securities being distributed by ASI. Only properly FINRA licensed registered representatives can directly engage in the sales or distributions of AH funds offered by ASI acting as placement agent. AHIC does not receive any commission for any sales of ASI distributed securities. AHIC's compensation is derived from asset-based advisory fees based on the AUM of the client's portfolio for its discretionary services regardless of the use of AH private funds or unaffiliated products/services. AHIC's advisory fees are the direct compensation paid by the client to AHIC as disclosed under the terms of a discretionary investment management agreement.

Aon Retirement Plan Advisors, LLC ("ARPA") is a registered investment adviser, and like us, is a wholly owned subsidiary of Aon Consulting, Inc. ARPA provides investment consulting services primarily to smaller retirement plans (typically under $75 million in plan assets) and to companies providing certain executive benefits to their employees.

Aon Trust Company ("ATC") is an Illinois non-depository, state-chartered bank. AHIC serves as investment adviser with limited discretionary authority to the Aon Hewitt Collective Investment Trust, of which ATC is Trustee. AHIC offers the AHCIT to certain delegated defined contribution clients. Additional information on AHCIT, its structure and the fees paid to AHIC are available within AHCIT's private offering statement.

Townsend Holdings LLC ("The Townsend Group" or "TTG") is an SEC Registered Investment Adviser and serves as a provider of global investment management and advisory services primarily focused on real estate and real assets.TTG also has a UK affiliate, Townsend Group Europe Limited, that is based in the UK and is authorized and regulated by the UK Financial Conduct Authority.

<u>Participating Affiliates</u>

Aon Hewitt Limited ("AHL") is a UK registered company that has been regulated by the UK's Financial Conduct Authority to provide regulated products and services since September 2011. AHL's main focus is on advising UK pension schemes, Trustees, and scheme sponsors on managing pension risks, setting investment strategies, improving member engagement, and providing member administration services. In addition, AHL provides HR and outsourcing services to clients.

Aon Hewitt, Inc., is a wholly owned subsidiary of Aon Canada and part of the Aon plc group of companies. Aon Hewitt Inc., offers a range of sophisticated advisory and consulting services in risk control and risk management, reinsurance, and human capital. The Canada Retirement & Investment Consulting organization consists of retirement consultants and actuaries who advise and support organizations in actively managing the risks of their retirement benefit programs.

<u>Other Activities</u>
In addition to the above affiliations, a number of investment management firms we review and may recommend to our clients are AHIC clients themselves and/or clients of Aon or firms with which Aon may have vendor or other business relationships. We maintain processes to avoid any perceived conflicts of interest associated with our recommendations of firms that may do business with Aon in any capacity. These processes include a core ethical culture emphasizing our fiduciary responsibilities, the diligence and awareness of our senior management team, a review of all client engagements by senior management, and compliance review of personal trading.

AHIC may, in its discretion, delegate all or a portion of its advisory or other functions (including asset allocation decisions on behalf of clients), consistent with client agreements and applicable laws, to any affiliate that is registered with the SEC as an investment adviser or to a Participating Affiliate. To the extent that AHIC delegates its advisory or other functions to any affiliate that are registered as investment advisers with the SEC, a copy of the brochure of each such affiliate is available on the SEC's website at www.adviserinfo.sec.gov and will be provided to clients or prospective clients upon request. Further, AHIC affiliates may serve from time to time as general partners to limited partnerships or co-invest in investments in which advisory clients may also invest.

AHIC and its investment advisory affiliates may refer clients and introduce investment opportunities to each other. AHIC also may contract services for its affiliated Aon companies that is not investment advice-related. Common services that are provided by affiliates may fulfill non-investment advisory services such as actuarial services, pension benefit administration, or insurance brokerage. AHIC may share its clients' confidential information with its affiliates to facilitate the delivery of such contracted services.

Entities affiliated with Aon, AHIC's ultimate parent company, may from time to time serve as general partners of limited partnership or co-invest in funds in which AHIC advisory clients may also invest. These partnerships typically invest in assets in the real estate and real asset markets.

AHIC has entered into intercompany agreements with its investment advisory affiliate, The Townsend Group, to perform administrative services necessary for the operation of its products in the real estate, infrastructure, and private credit.

Unaffiliated Third-Party Investment Management Firms

We also provide investment consulting services to investment management firms specific to the employee retirement plans of those firms. AHIC provides these services subject to a competitive bid and pricing process consistent with AHIC's sales practices. AHIC does not provide any investment consulting or management services to unaffiliated, third-party investment management firms in relation to the product or services those firms offer to their clients. Specific information regarding AHIC's advisory fees is provided in *Item 5 – Fees and Compensation*.

We conduct periodic reviews of our investment management research database to ensure that recommendations of any investment management firm that also happens to be a client of Aon are not disproportionate to other similar firms.

Commodity Pool Operator and Commodity Trading Advisor

AHIC is registered as a CPO and CTA with the CFTC and is a member of the NFA.

Pooled Investment Vehicles

AHIC serves as the investment adviser to the Aon Hewitt Group Trust and the Aon Hewitt Collective Investment Trust, which are available to eligible qualified retirement plans and government plans that meet certain requirements.

AHIC also serves as the investment adviser to Aon Hewitt Offshore Fund of Hedge Funds, Aon Hewitt Institutional Funds, and Aon Private Credit Opportunities Fund.

Expense Sharing Arrangements

We pay Aon for all expenses incurred by us that relate to the operation of our business, including: costs associated with total employee compensation; supervised persons licenses; rent and utilities; furniture and equipment; computers; and telephones. All such expenses, and allocation methodologies thereof, are governed by an expense sharing agreement between us and various affiliates within Aon Hewitt. Some of our non-consulting executive officers and directors are also employed in various corporate capacities by Aon or Aon Hewitt affiliates, in those entities' capacity as leading providers of a variety of human resource management consulting services, including actuarial and benefit plan consulting services, insurance, communications and management consulting, and benefit plan administration.

Client Investment Committees
AHIC may serve as a member of a client's Investment Committee with voting rights. However, AHIC abstains from voting on any issues involving retaining or terminating it as a client's investment manager or investment adviser.

Item 11: Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

We have adopted a Code of Ethics expressing our commitment to ethical conduct. Our Code of Ethics describes the firm's fiduciary duties and responsibilities to clients and sets forth our procedures related to personal securities transactions of our supervised persons with access to client information. Our officers, directors, and employees may buy or sell securities for their personal accounts identical to or different than those held by our clients. It is our policy that no supervised person shall prefer his or her own interest to that of an advisory client or make personal investment decisions based on the investment decisions of advisory clients. Further, we also may recommend to clients the purchase of shares in mutual funds, exchange traded funds, and AHIC's pooled investment vehicles when consistent with the client's investment guidelines and objectives in which Aon or one or more of its employees or affiliates have a financial interest.

To supervise compliance with our Code of Ethics, we require that all Covered Persons, as that term is defined in AHIC's Code of Ethics, provide annual securities holdings reports and quarterly transaction reports to the firm's Chief Compliance Officer. All of our Covered Persons must acknowledge the Code of Ethics terms at least annually. We require these Covered Persons also to obtain approval from the Chief Compliance Officer prior to investing in any IPOs or private placements.

We require all individuals to act in accordance with all applicable federal and state regulations governing registered investment advisory practices. Our Code of Ethics further includes the firm's policy prohibiting the misuse of material non-public information. Any individual not in observance of the above may be subject to discipline.

We will provide a complete copy of our Code of Ethics to any client or prospective client upon request to Aon Hewitt Investment Consulting, Inc., Attn: AHIC Compliance, 200 E. Randolph Street, Suite 1500, Chicago, IL 60601.

Item 12: Brokerage Practices

As a result of AHIC's business model, we generally delegate all of the trading activity on behalf of our clients to our sub-advisers. We allow the sub-advisers to determine the broker-dealers through which they transact securities. Trade aggregation occurs when the broker is permitted to aggregate a customer's trades with those of other customers. These efficiencies may result in lower trade costs for the customers but may influence the timing of a transaction. The investment managers we select in connection with our discretionary investment consulting services are allowed to aggregate customer trades subject to our review of their trading and brokerage practices and subject to them following applicable rules and regulations regarding these practices. We periodically review their adherence to these practices.

From time to time, we will recommend broker-dealers to investment advisory clients, typically retirement plan clients whose portfolios are managed by a separate investment adviser that is not affiliated with AHIC. There are typically two different scenarios in which we are hired by a pension client to recommend a broker-dealer: (1) to assist pension clients with the transition between investment managers; or (2) to assist pension clients with the funding of new portfolio positions. We will solicit and review bids from independent third-party broker-dealers. The specific brokerage needs can vary between each pension client, but the primary factors considered in making final recommendations are typically: (1) the competitiveness of execution rates; (2) the quality of previous executions provided; and/or (3) how efficiently the broker-dealer transitions the portfolios with minimal market impact. Our fees for this service are fully disclosed. We do not receive direct or indirect compensation from any recommended broker-dealers.

Soft-dollar arrangements are those in which brokerage commissions are utilized to pay for services or other benefits that the adviser would have to pay for itself (for example, investment research). AHIC does not have any soft-dollar arrangements and does not receive any soft-dollar benefits.

Item 13: Review of Accounts

For our investment advisory clients, we will negotiate the nature and frequency of client reporting and account reviews with each client. Most commonly, reporting is provided quarterly, but the client may request reports more frequently (monthly) or less frequently, but no less frequently than annually. Additional reviews may be triggered by material market, economic, or political events, or by changes in the client's circumstances. All accounts are reviewed by one of our consultants.

On at least an annual basis, senior management performs reviews of a sample of accounts to evaluate for appropriate investment allocations and other safeguards.

For our delegated clients, we review client accounts on a regular basis to confirm that allocations are within target ranges and are in adherence with the client's investment guidelines. In addition to monitoring client accounts, we monitor our sub-advisers adherence to their stated investment guidelines and objectives. We also review any internal research notices issued on the sub-advisers contained in our client accounts to remain cognizant of the sub-advisers' portfolio management and operational activities.

For our model portfolios delivered through IAS, we provide updates to the model portfolios as indicated in our investment agreement with the client.

Item 14: Client Referrals and Other Compensation

From time to time we may receive a client referral from certain of our affiliates, such as Aon Risk Services, Aon Consulting Inc., Aon Securities Inc., or The Townsend Group, all of which are subsidiaries of Aon. In these situations, we may compensate the referring consultant for the referral. Actual payment is dictated by the role of the referring consultant and internal Aon organizational compensation policies.

Similarly, AHIC employees may receive internal compensation for referring prospective or current clients to affiliated Aon businesses. In these situations, referral compensation is paid by AHIC's affiliates out of their own assets, and is not paid directly by the client. Clients will be charged additional fees beyond AHIC's fees for the services provided by AHIC's affiliates. There may be an inherent conflict of interest with such arrangement as AHIC employees may receive referral compensation for making the referral for an affiliate's services. While such arrangements raise a conflict of interest consideration for AHIC, compensation policies are structured with the goal to mitigate such conflicts and to comply with applicable law, including regulations and guidance applicable to client portfolios subject to the Employee Retirement Income Security Act of 1974 ("ERISA").

AHIC Delegated Investment Solutions may be an appropriate consideration for AHIC's clients. AHIC may have an incentive to recommend that an investment advisory client select Delegated Investment Solutions as a discretionary asset manager or OCIO due to additional fees that we may receive based on the asset-based fee structure associated with the discretionary assets managed by AHIC. Further, AHIC may introduce The Townsend Group's services to its clients. To mitigate this potential conflict of interest, AHIC's investment consulting practice will not evaluate or recommend that its clients use AHIC's Delegated Investment Solution or The Townsend Group for a discretionary asset management service or investment advice. However, a client may independently choose to these solutions in their fiduciary capacity.

We have engaged a non-affiliated, third party to provide background research and initial introductions for some of our solutions. Any payments made are paid solely by AHIC and are not dependent on final client engagement. No client funds are used to pay for this referral assistance.

Certain AHIC Covered Persons are associated with ASI, an affiliated broker-dealer of AHIC, and in that capacity may engage in marketing or selling activities with respect to the placement of AHIC's private funds. AHIC directly compensates its Covered Persons for successful marketing or selling activities.

Item 15: Custody

Generally, each AHIC client appoints a third-party qualified custodian for the client's funds and securities. However, pursuant to SEC custody rules, we are deemed to have custody in limited circumstances involving certain pooled investment vehicle clients for whom AHIC serves in a capacity as general partner, managing member, or a role of similar capacity. In these circumstances, all assets of each such client are held by a qualified custodian, and account statements are delivered at least quarterly directly from the qualified custodian to the independent representative designated by the client to receive such statements on behalf of the client. Underlying investors of the pooled investment vehicle clients also will receive statements from AHIC on a monthly basis. AHIC arranges for its pooled investment vehicles to be audited on an annual basis and for the audited financial statements to be delivered to all investors.

In limited circumstances, AHIC is deemed to have custody of certain client accounts because AHIC directs the payment of fees and expenses from such accounts. For these accounts, AHIC arranges for an independent public accountant to conduct a surprise asset verification of the assets annually.

Clients should receive at least quarterly statements from the broker-dealer, bank, or a qualified custodian that holds and maintains the client's investment assets. We strongly urge our clients to compare the account statements or reports we provide with those official statements from the client's custodian records.

Item 16: Discretionary Investing

We manage accounts on a discretionary or non-discretionary basis.

When we manage accounts on a non-discretionary basis, we perform our duties in accordance with the investment contract. We generally provide non-discretionary advice through our model portfolios or with our investment consulting clients such as endowments, foundations and public funds.

Generally, when managing accounts on a discretionary basis, we provide a service to certain institutional clients' investment portfolios, where we are delegated the authority to hire investment managers, terminate investment managers, and rebalance portfolio assets, subject to the client's investment policy statement and other terms outlined in the investment consulting agreement. We select, approve, and monitor these investment managers' strategies pursuant to the client's investment guidelines which, in many cases, are developed with our assistance. We exercise our investment discretion consistent with a client's investment policy, as well as with any investment guidelines or restrictions.

As the delegated portfolio manager, we execute and deliver any and all agreements necessary for the investment, and we direct the client-appointed custodian to acquire, hold, sell, transfer, exchange, and dispose of the investments, as applicable. We provide our delegated service offering to both defined benefit and defined contribution plans, as well as select other clients.

For certain other delegated clients, we may enter into agreements with investment managers outside of AHIC's private funds. The primary reasons why a delegated client may not be recommended to invest through the funds are that they don't have sufficient assets to qualify as investors or that the investment alternatives available through the funds do not meet the investing needs of the client.

We also provide a service whereby we have been delegated the authority to oversee the investment management of a portfolio structured to perform similarly to a target date maturity fund. These funds are common in defined contribution (including 401(k)) retirement plans. These funds are designed to reduce risk over time as the investor gets closer to retirement age. These funds are typically named after the "target" retirement year of the plan participant or investor (i.e., the "2025 Fund"). Rather than rely upon one investment manager's investment funds, clients who hire us for this service look for us to assist them in using many of the other funds available for investment in the plan to build a "customized" target date portfolio. We will assist the plan's fiduciary committee with developing the "glide path" or the planned investment strategy of the portfolio and are given discretionary authority to adjust the asset allocation of the portfolio to meet the ranges dictated by the glide path.

We also assist some of our delegated clients by being given the delegated authority over private equity investments made by these plan clients. This delegated authority is limited to the percent allocation to the private equity class that is dictated in the client's investment policy statements, which allows us to determine which securities and the amounts of securities that are bought or sold in a client's account.

Clients delegate to us the investment authority when they sign a discretionary agreement with our firm, and may limit this authority by giving us written instructions. Clients may also change/amend such limitations by providing us with written instructions.

Item 17: Voting Client Securities

Where clients provide proxy voting authority to AHIC, and in the discretionary management of its client portfolios, AHIC allocates assets to various sub-advisers who are directly responsible for voting proxies on behalf of AHIC's clients consistent with the respective sub-adviser's proxy voting policies and procedures. Each sub-adviser is responsible for exercising voting authority over securities in client portfolios consistent with the client's best interests, which is viewed as making a judgment as to what voting decision (including a decision not to vote) is reasonably likely to maximize total return to the client. Each sub-adviser must maintain proxy voting policies and procedures consistent with SEC Rule 206(4)-6 of the Advisers Act and DOL Interpretive Bulletin 2016-1, where applicable.

Regarding AHIC's non-discretionary clients, AHIC does not advise on the manner in which to vote proxies in a client's plan/portfolio. However, from time to time, non-discretionary clients may request guidance on investment decisions related to mutual fund proxies. No opinion will be issued directly related to the manner in which the proxy should be voted by the client. All opinions produced for these purposes will be provided to the client for its evaluation of the proxy merits. The client would be responsible for voting of any proxies issued and the maintenance of any supporting documentation related to its proxy vote.

In the event that AHIC would vote proxies on behalf of the AH funds ("Funds"), we may retain a third-party service provider to manage the proxy process, to provide proxy recommendations or guidelines, to cast votes, to respond to client requests for the policy or voting information, and/or to keep and maintain records required under the policy. Sub-advisers will be added or removed from the third-party service as applicable.

General Voting Guidelines

- Sub-advisers with equity holdings are to vote proxies for accounts they manage on behalf of an AHIC client in a manner consistent with the sub-adviser's proxy voting policies and procedures and any written instructions from AHIC or our client.

- A sub-adviser must notify AHIC of votes contrary to its general guidelines, votes on non-routine matters, and instances where the sub-adviser refrains from voting during its quarterly reporting to AHIC.

- We expect sub-advisers to vote proxies according to each respective sub-adviser's stated proxy voting policy and in the best interest of shareholders, except when a client's proxy guidelines require specific voting instructions contrary to the sub-adviser's proxy policies.

- Sub-advisers may refrain from voting client proxies in certain circumstances consistent with AHIC's Proxy Voting Policy.

Conflicts of Interest

The sub-adviser must have procedures in place to address the mitigation of such Conflicts of Interests. In the case of conflicts of interests arising with a proxy held by a sub-adviser in the Funds, the sub-adviser should vote per their usual policy but notify AHIC so that we may review the identified conflict and provide further guidance, if applicable.

Aon Hewitt Funds Voting Guidelines

In those cases where AHIC votes proxies, AHIC will delegate to business management to review the particular matter being voted on. Votes will be cast in a manner which AHIC believes is in the best interest of fund investors. For matters related to:

- Board of Directors - AHIC will generally vote for directors up for election. However, votes on director nominees will be determined on a case-by-case basis, considering relevant factors.

- Compensation - AHIC will determine on a case-by-case basis the vote that will be taken.

Class Action Claims

From time to time, in its capacity as investment manager to an Aon Hewitt Fund, AHIC receives notice that such Fund may be eligible to participate in a securities class action claim to recover losses incurred as a result of fraud or other alleged bad act ("Class Action Claim"). AHIC will only pursue Class Action Claims related to Aon Hewitt Funds, excluding the AHCIT. AHIC's affiliate, ATC, is responsible for the participation of any Class Action Claims associated with investors in the AHCIT.

AHIC has contracted with a third-party class action service to participate in Class Action Claims for any eligible securities held in an Aon Hewitt managed Fund. The third-party service provider will file a Class Action Claim for any and all settlements in which a Fund held positions in or transacted in the securities that are subject to the settlement.

For a copy of AHIC's Proxy Voting Policy, please contact AHIC Compliance.

Item 18: Financial Information

Registered investment advisers are required to provide you with certain financial information or disclosures about AHIC's financial condition. AHIC has no financial commitment that impairs its ability to meet contractual and fiduciary commitments to clients. AHIC has not been the subject of a bankruptcy petition at any time during the past ten years.

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Aon Hewitt Investment Consulting, Inc.

200 East Randolph Street, Suite 1500

Chicago, IL 60601

Phone: 312.381.1200

www.aonhewitt.com/investmentconsulting

Claire P. Shaughnessy, CFA, Partner

Merritt 7 Corporate Park

Building 201

Norwalk, CT 06851

203-523-8163

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EDUCATIONAL AND BUSINESS EXPERIENCE

Claire P. Shaughnessy (b. 1967), Partner, Aon Hewitt Investment Consulting, Inc.

Education

M.B.A., New York University

B.S. & B.A., Georgetown University

Business Background

Aon Hewitt Investment Consulting, Inc. (2010 – Present): Claire serves as a lead consultant and works with a focused group of institutional clients including public and corporate pension funds, defined contribution plans, and foundations to build successful investment programs.

Professional Designations

CFA Charterholder

DISCIPLINARY INFORMATION

Ms. Shaughnessy has not had any legal or disciplinary events in the past.

OUTSIDE BUSINESS ACTIVITIES

Ms. Shaughnessy is not actively engaged in any other investment-related business or occupation, nor is she actively engaged in any other business or occupation for compensation.

ADDITIONAL COMPENSATION

Not Applicable.

SUPERVISION

Ms. Shaughnessy is subject to Aon Hewitt Investment Consulting, Inc.'s written compliance and supervisory procedures and Code of Ethics, which includes ongoing compliance monitoring. Ms. Shaughnessy's activities are directly supervised by Steven Voss, Senior Partner. Mr. Voss can be reached at 312-381-1308.

CFA Charterholder: The Chartered Financial Analyst (CFA) designation is an international professional certification offered by the CFA Institute (formerly AIMR) to financial analysts who complete a series of three examinations. To become a CFA Charterholder, a candidate must pass each of three six-hour exams, possess a bachelor's degree (or equivalent, as assessed by CFA Institute) and have 48 months of qualified, professional work experience. CFA Charterholders are also obligated to adhere to a strict Code of Ethics and Standards governing their professional conduct.

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Aon Hewitt Investment Consulting, Inc.

200 East Randolph Street, Suite 1500

Chicago, IL 60601

Phone: 312.381.1200

www.aonhewitt.com/investmentconsulting

Kevin J. Vandolder, CFA, Partner

4900 Canyon Ranch Trail

Spicewood, TX 78669

312-882-6281

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EDUCATIONAL AND BUSINESS EXPERIENCE

Kevin J. Vandolder (b. 1969), Partner, Aon Hewitt Investment Consulting, Inc.

Education

M.B.A., New York University

B.Comm., University of Windsor

Business Background

Aon Hewitt Investment Consulting, Inc. (1996 – Present): Kevin leads the Defined Contribution (DC) investment consulting practice. Kevin conducts research in order to develop solutions to increase retirement readiness for AHIC's DC clients.

Professional Designations

CFA Charterholder

DISCIPLINARY INFORMATION

Mr. Vandolder has not had any legal or disciplinary events in the past.

OUTSIDE BUSINESS ACTIVITIES

Mr. Vandolder is not actively engaged in any other investment-related business or occupation, nor is he actively engaged in any other business or occupation for compensation.

ADDITIONAL COMPENSATION

Not Applicable.

SUPERVISION

Mr. Vandolder is subject to Aon Hewitt Investment Consulting, Inc.'s written compliance and supervisory procedures and Code of Ethics, which includes ongoing compliance monitoring. Mr. Vandolder's activities are directly supervised by Beth Halberstadt, Partner. Ms. Halberstadt can be reached at 781-906-2386.

CFA Charterholder: The Chartered Financial Analyst (CFA) designation is an international professional certification offered by the CFA Institute (formerly AIMR) to financial analysts who complete a series of three examinations. To become a CFA Charterholder, a candidate must pass each of three six-hour exams, possess a bachelor's degree (or equivalent, as assessed by CFA Institute) and have 48 months of qualified, professional work experience. CFA Charterholders are also obligated to adhere to a strict Code of Ethics and Standards governing their professional conduct.

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Aon Hewitt Investment Consulting, Inc.

200 East Randolph Street, Suite 1500

Chicago, IL 60601

Phone: 312.381.1200

www.aonhewitt.com/investmentconsulting

Jeanna Cullins, Partner

200 East Randolph Street

Chicago, IL 60601

312-381-1241

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EDUCATIONAL AND BUSINESS EXPERIENCE

Jeanna Cullins (b. 1954), Partner, Aon Hewitt Investment Consulting, Inc.

Education

J.D., Georgetown University Law Center

B.A., (cum laude) Brooklyn College, City University of New York

Business Background

Aon Hewitt Investment Consulting, Inc. (2008 – Present): Jeanna is a Partner and serves as the primary consultant and manages consulting assignments for a select number of Aon Hewitt retainer and project clients. She leads AHIC's Fiduciary Services group, which focuses on fiduciary reviews, strategic planning, trustee education and plan governance matters.

Independent Fiduciary Services (1998 – 2008): Prior to joining AHIC, Jeanna served as Managing Director and Operational Review Practice Leader at IFS. During her 10-year tenure at IFS, she worked on more than 30 fiduciary reviews (a.k.a "operational reviews") advising the leadership of some of the largest pension funds in the country to develop effective, efficient, practical ways to enhance their operations.

District of Columbia Retirement Board (1993 – 1997): Executive Director (1985 – 1993): Board's General Counsel.

Jeanna serves on the Board of Directors of the Metropolitan Chicago YWCA; the Illinois Student Assistant Commission Investment Advisory Panel; and the emeritus board and is an active member of the National Association of Public Pension Attorneys. She was recognized as a Top Employee Benefits Consultant by Risk & Insurance magazine and by Chicago United as a Business Leader of Color. She has also served as a trustee on the District of Columbia Tobacco Settlement Trust Fund and the National Association Securities Professionals Board.

DISCIPLINARY INFORMATION

Ms. Cullins has not had any legal or disciplinary events in the past.

OUTSIDE BUSINESS ACTIVITIES

Ms. Cullins actively serves on HE&R Co.'s Board of Directors. She is also a member of the Illinois Student Assistance Commission Investment Advisory Panel.

ADDITIONAL COMPENSATION

Ms. Cullins receives additional compensation in her role as a director for HE&R Co.

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SUPERVISION

Ms. Cullins is subject to Aon Hewitt Investment Consulting, Inc.'s written compliance and supervisory procedures and Code of Ethics, which includes ongoing compliance monitoring. Ms. Cullins' activities are directly supervised by Russ Ivinjack, Senior Partner. Mr. Ivinjack can be reached at 312-715-1700.

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Aon Hewitt Investment Consulting, Inc.

200 East Randolph Street, Suite 1500

Chicago, IL 60601

Phone: 312.381.1200

www.aonhewitt.com/investmentconsulting

Stephen T. Cummings, Head of North America Investment Consulting

200 East Randolph Street

Suite 1500

Chicago IL, 60601

847-442-0064

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EDUCATIONAL AND BUSINESS EXPERIENCE

Stephen T. Cummings (b. 1963), Head of North America Investment Consulting, Aon Hewitt Investment Consulting, Inc.

Education

M.B.A., University of Chicago – Booth School of Business

B.S., University of Texas at Austin

Business Background

Aon Hewitt Investment Consulting, Inc. (1989 – Present): As the Chief Executive Officer of AHIC, Stephen leads over 200 investment consulting professionals with over 550 clients and continues to serve as the primary consultant for several retainer and project clients. During his time with AHIC and the predecessor, EnnisKnupp, he completed such client projects as the coordination and implementation of multiple defined benefit and defined contribution plans into a consolidated structure for a multi-billion-dollar corporate client. He also frequently speaks before industry groups on a broad range of topics including, public fund oversight, portfolio construction, and the evolution of the consulting industry.

Professional Designations

CFA Charterholder

DISCIPLINARY INFORMATION

Mr. Cummings has not had any legal or disciplinary events in the past.

OUTSIDE BUSINESS ACTIVITIES

Mr. Cummings is not actively engaged in any other investment-related business or occupation, nor is he actively engaged in any other business or occupation for compensation.

ADDITIONAL COMPENSATION

Not Applicable.

SUPERVISION

Mr. Cummings is subject to Aon Hewitt Investment Consulting, Inc.'s written compliance and supervisory procedures and Code of Ethics, which includes ongoing compliance monitoring. Mr. Cummings' activities are directly supervised by Cary Grace, CEO, Global Retirement and Investment. Ms. Grace can be reached at 847-777-1464.

CFA Charterholder: The Chartered Financial Analyst (CFA) designation is an international professional certification offered by the CFA Institute (formerly AIMR) to financial analysts who complete a series of three examinations. To become a CFA Charterholder, a candidate must pass each of three six-hour exams, possess a bachelor's degree (or equivalent, as assessed by CFA Institute) and have 48 months of qualified, professional work experience. CFA Charterholders are also obligated to adhere to a strict Code of Ethics and Standards governing their professional conduct.

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Aon Hewitt Investment Consulting, Inc.

200 East Randolph Street, Suite 1500

Chicago, IL 60601

Phone: 312.381.1200

www.aonhewitt.com/investmentconsulting

Amanda Janusz, Senior Consultant

201 Merritt 7

Norwalk, CT 06851

203-523-8039

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EDUCATIONAL AND BUSINESS EXPERIENCE

Amanda Janusz (b. 1985), Senior Consultant, Aon Hewitt Investment Consulting, Inc.

Education

M.B.A., University of Connecticut

B.A., Williams College

Business Background

Aon Hewitt Investment Consulting, Inc. (2007 – Present): Amanda serves as a Senior Consultant, working with client that include corporate defined contribution and defined benefit clients, public defined benefit clients, endowment clients, 403(b) clients, and non-profit/hospital operating assets.

DISCIPLINARY INFORMATION

Ms. Janusz has not had any legal or disciplinary events in the past.

OUTSIDE BUSINESS ACTIVITIES

Ms. Janusz is not actively engaged in any other investment-related business or occupation, nor is she actively engaged in any other business or occupation for compensation.

ADDITIONAL COMPENSATION

Not Applicable.

SUPERVISION

Ms. Janusz is subject to Aon Hewitt Investment Consulting, Inc.'s written compliance and supervisory procedures and Code of Ethics, which includes ongoing compliance monitoring. Ms. Janusz's activities are directly supervised by Diane Smola, Associate Partner. Ms. Smola can be reached at 203-523-8292.

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Aon Hewitt Investment Consulting, Inc.

200 East Randolph Street, Suite 1500

Chicago, IL 60601

Phone: 312.381.1200

www.aonhewitt.com/investmentconsulting

Darren Moran, Consultant

Merritt 7 Corporate Park

Building 201

Norwalk, CT 06851

203-523-8905

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EDUCATIONAL AND BUSINESS EXPERIENCE

Darren Moran (b. 1988), Associate Partner, Aon Hewitt Investment Consulting, Inc.

Education

M.B.A., Fairfield University

B.S., Bryant University

Business Background

Aon Hewitt Investment Consulting, Inc. (2011 – Present): Michael serves as a primary consultant and manages consulting assignments for several retainer and project clients.

DISCIPLINARY INFORMATION

Mr. Moran has not had any legal or disciplinary events in the past.

OUTSIDE BUSINESS ACTIVITIES

Mr. Moran is not actively engaged in any other investment-related business or occupation, nor is he actively engaged in any other business or occupation for compensation.

ADDITIONAL COMPENSATION

Not Applicable.

SUPERVISION

Mr. Moran is subject to Aon Hewitt Investment Consulting, Inc.'s written compliance and supervisory procedures and Code of Ethics, which includes ongoing compliance monitoring. Mr. Moran's activities are directly supervised by Diane Smola, Associate Partner. Ms. Smola can be reached at 203-523-8292.

B. DR/BC Ongoing Operations Overview

Ensuring Ongoing Operations

Overview

Aon's Business & Technology Resilience (BTR) program provides a global, systematic, practiced response to unplanned incidents or catastrophic events, allowing Aon to continue or quickly recover business operations. The program represents the combined disciplines of Business Continuity, Technology Resilience and Situation Response under unified leadership.

Program Leadership and Structure

The practice leader of Business & Technology Resilience (BTR) is responsible for overseeing and coordinating all three sub-programs in close partnership with the practice leader of Corporate Protection Services (CPS) and the practice leader of the Global Emergency Operations Center (GEOC) to deliver incident response and business continuity globally. All programs receive executive sponsorship from Aon's Executive Leadership team, and are aligned within the converged Global Security Services (GSS) organization under Aon's global Chief Security Officer.

The BTR program is staffed with skilled, certified, dedicated professionals who guide operational and strategic program delivery activities and develop a continuity culture at Aon. In addition, Aon has an extended network of trained, accountable business colleagues at the local level to ensure comprehensive plans are developed, maintained and tested. Our delivery model follows generally accepted industry best practices.

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Global Business & Technology Resilience Program

The BTR program provides guidance, oversight and a perpetual focus on Aon's contingency planning efforts to maximize preparedness, minimize impact and continue operations in the event of a major business disruption. Plans are developed, rehearsed and used during incidents, and updated regularly to maintain capability and validity. Aon's program follows a standard methodology governed through formal global program policies, standards and frameworks. This program ensures the development, maintenance and exercise of strategies and plans for our global operations.

Starting with Risk

All Aon locations are given a risk ranking using standard criteria to determine the required level of contingency planning. Business units determine business processes and dependencies that have the greatest potential impact in the event of a major disruption. This information forms the foundation for strategy and planning.

Case ID: 210601197

Strategy & Planning

Business Continuity

The Aon Business Continuity sub-program establishes Aon's strategies for adequately preparing Aon to anticipate and respond to significant business disruptions with protocols that protect business operations and the interests of our clients.

Aon has developed a framework for global business continuity plans supported through established governance and a business continuity policy, standard and framework. These tools support efficient business operations, preservation of corporate memory and compliance with relevant legal and regulatory requirements.

Aon develops and maintains carefully thought-out and exercised Business Continuity Plans (BCPs). All BCPs are directly managed by BC Plan Owners and Coordinators. These BCPs help manage the recovery of business processes and operations following a major incident at any office. The local office BCPs are based on an all-hazards approach and address worst case scenarios and act as catalysts to sustain critical operations. The approach includes:

- Identifying critical business processes and the impact of disruption
- Formulating and implementing strategies to minimize the impact and recover critical processes
- Administering a testing and maintenance program to ensure viability of the plans
- Ensuring compliance with appropriate governance and regulatory obligations, and relevant external practices.

Business Continuity plans detail the steps required to recover business operations. The plans adhere to standard program requirements and include:

- **Business:** processes, recovery time objectives and prioritization
- **Colleagues**: capabilities, roles and responsibilities, and teams
- **Operations:** recovery strategies, recovery tasks, and procedures
- **Resources:** applications, equipment, supplies, telecomm, vital records and documents
- **Communications:** internal and external contact lists

Work area recovery strategies are identified and documented during the plan development cycle and are specific to individual plans. Aon relies primarily on five types of recovery strategies during significant business interruptions:

- Move key colleagues to an unaffected Aon location(s)
- Relocate key colleagues to a contracted work area recovery center or approved alternate location(s)
- Transfer work activities to an unaffected Aon location(s)
- Have key colleagues work virtually from home or other non-office locations; and
- Stop non-essential business operations

Colleagues in alternate offices with similar skill-sets, training or certifications can carry out tasks on behalf of impacted colleagues when conditions prevent staff relocation. Additionally, Aon has processes in place to perform "just in time" training for key colleagues in non-affected locations who will be responsible for supporting client facing services.

Many Aon offices in major metro areas have options for relocating within or outside of the metro area in response to the specific disaster situation. Additionally, Aon operates in over 120 countries and approximately 600 offices worldwide. Corporate Real Estate can leverage relationships with existing property owners to quickly expand office space. The Situation Response team, in coordination with the Corporate Crisis Management team coordinates the logistics with the Business Continuity Plan Owners to relocate colleagues and/or work activities.

Aon colleagues who relocate to other Aon office sites or third-party locations for temporary operations can access critical systems from anywhere on the Aon network via the secure Virtual Private Network (VPN). Aon has a geographically diverse, high availability VPN with multiple access points and flexible bandwidth that can be increased. Colleagues who normally use a fixed desktop can quickly be issued a laptop when warranted by the situation.

Technology Resilience

The Aon Technology (TR) sub-program establishes Aon's requirements for adequately preparing Aon to anticipate and respond to significant technology disruptions with protocols that protect business operations and the interests of our clients. With the increasing importance of information technology for the continuation of business critical functions, protecting and recovering an organization's data and IT infrastructure in the event of a disruptive situation has become a more visible business priority. The TR program is the framework of established governance for processes, policies and procedures related to preparing for recovery or continuation of critical technology infrastructure after a natural or human-induced disaster.

A "disaster" is any event or incident that prevents essential application or data center operations beyond downtime tolerances at a specific location. A disaster forces the move of an individual application or entire data center operations to a different geographic location in order to recover critical operations in a more acceptable timeframe.

Incidents that can be resolved within the tolerated downtimes without moving operations to a different geographic location are not considered disasters. These incidents are not covered in Aon's TR plans, and are not in scope in the global TR program.

Aon's Technology Resilience Plans (TRPs) document and manage the process of recovering applications and/or datacenter operations to a different geographic location. Technology Resilience planning includes planning for resumption of applications, data, hardware, communications (such as networking) and other IT infrastructure. TRPs must be adaptable and routinely updated as part of a change management process.

Aon develops and maintains TRPs for critical applications and key data centers. Typically, critical systems and data are identified using the Technology Resilience Criticality framework and/or the Business Impact Analysis (BIA) process, which identify business requirements following a disaster or significant incident affecting normal business operations. The TRPs act as catalysts to recover critical operations by:

- Reducing the risk of disruption of business operations or loss of information
- Identifying and prioritizing the recovery of technology infrastructure, systems, services, and data to reduce disruption of these services
- Formulating and implementing strategies to minimize impact and recover technology infrastructure, systems, services, and data
- Administering a testing and maintenance program to ensure viability of the strategies and services
- Ensuring Technology Resilience is considered part of technology services
- Ensuring compliance with appropriate governance and regulatory obligations, and relevant external standards and good business practices.

These plans detail the steps required during an incident to enable recovery of critical infrastructure, systems, services and data. TR plans adhere to standard program requirements and include:

- **Technology:** applications, systems, data and infrastructure (production and recovery)
- **Objectives:** recovery time objectives (RTO), recovery point objectives (RPO), dependencies and recovery prioritization
- **Colleagues:** roles and responsibilities, and teams
- **Operations:** recovery strategies and recovery procedures
- **Resources:** equipment, software, supplies, vital records and documents
- **Communications:** internal and external contact lists

Aon's large data centers are well-equipped and include appropriate precautions, including regularly scheduled maintenance and testing commensurate with the services operating within these locations. In general, this includes:

- Security measures with controlled access, monitoring and alarms
- Fire suppression systems with detection and alarms
- Air conditioning/mechanicals with leak detection, monitoring and alarms
- Generator(s) and uninterruptible power supply (UPS) system(s)
- Appropriate redundancy measures for standard data center equipment and controls

Services (i.e., network, telecomm, storage, etc.) are diverse and vendor arrangements are in place to ensure expedited restoration or equipment replacement. Additionally, Aon's enforcement of policies, standards, change management (technology service administration) facilitates rapid, secure installation and/or recovery of technology services.

As part of Aon's back-up strategy, established storage tiers dictate the type and frequency of strategy (i.e., tape, replication, etc.) for applications, systems and data. Detailed media inventory tracking and emergency retrieval procedures are maintained. Data stored on systems used by Aon colleagues is regularly backed-up and securely stored at locations outside of the primary data center either at another Aon data center or approved storage solution.

Globally, applications and systems hosted in Aon's data centers are recovered using various strategies based on the pre-determined recovery time objectives (RTO) and recovery point objectives (RPO). Strategies run from fully redundant, mirrored, high availability solutions to recovery at third-party sites with traditional tape back-ups.

Generally, systems and data hosted in local offices that are not co-located with an Aon data center may be recovered in a larger Aon office or in a data center supporting Aon. Additionally, spare equipment, development or test platforms can be temporarily reallocated to address recovery for the impacted site on a priority basis.

Aon information technology has established and documented escalation processes to manage technology outages and/or crisis situations. These procedures are regularly tested, updated and integrated with the Global Emergency Operations Center (GEOC) and Business & Technology Resilience programs.

Aon's technology service vendors support and participate in relevant aspects of the Technology Resilience program, including testing.

Situation Response

The Aon Situation and Crisis Management Program establishes Aon's strategies and procedures for adequately preparing Aon to anticipate and respond to disasters and/or significant business disruptions with protocols that protect colleagues, and provide for coordination, communication and decision-making.

Aon has developed a framework for global situation response plans supported through established governance and a situation response policy, standard and framework. These tools support efficient business operations, preservation of corporate memory and compliance with relevant legal and regulatory requirements.

The Business & Technology Resilience team works in close partnership with the Corporate Protection Services team to provide end-to-end preparation and response support. As such, Aon has established a standard situation response organization, with incident management activities coordinated locally and globally by Aon's Global Emergency Operations Center.

Aon develops and maintains well-rehearsed Situation Response Plans (SRPs) at each office location. All SRPs are directly managed by the appropriate identified SR Plan Owner and Coordinator (generally senior leaders at a given location). The SRPs act as catalysts to sustain critical operations by:

- Identifying critical leaders responsible for decision making and leading situation response activities
- Documenting incident notification and escalation procedures
- Formulating and implementing effective response and communication strategies to minimize impact and recover critical and vital processes; and
- Administering a testing and maintenance program to ensure viability of the plans

These plans detail the steps required during an incident to enable swift, organized, and coordinated responses to business interruptions that may affect critical processes. Situation Response plans adhere to standard program requirements and include:

- **Business:** activation and prioritization,
- **Colleagues:** team members, designated alternates, roles and responsibilities
- **Operations:** incident response & Engagement, Immediate Situation Response Team Tasks
- **Resources:** documents (supplemental reference information)
- **Communications:** internal and external contact lists, protocols and procedures, media guidelines

The Situation Response teams, using the documented plans, are responsible for managing and coordinating the overall response to a situation at a location, until it is under control or contained without impact to the business, or until business continuity and/or other supporting plans are executed and normal operations have been restored.

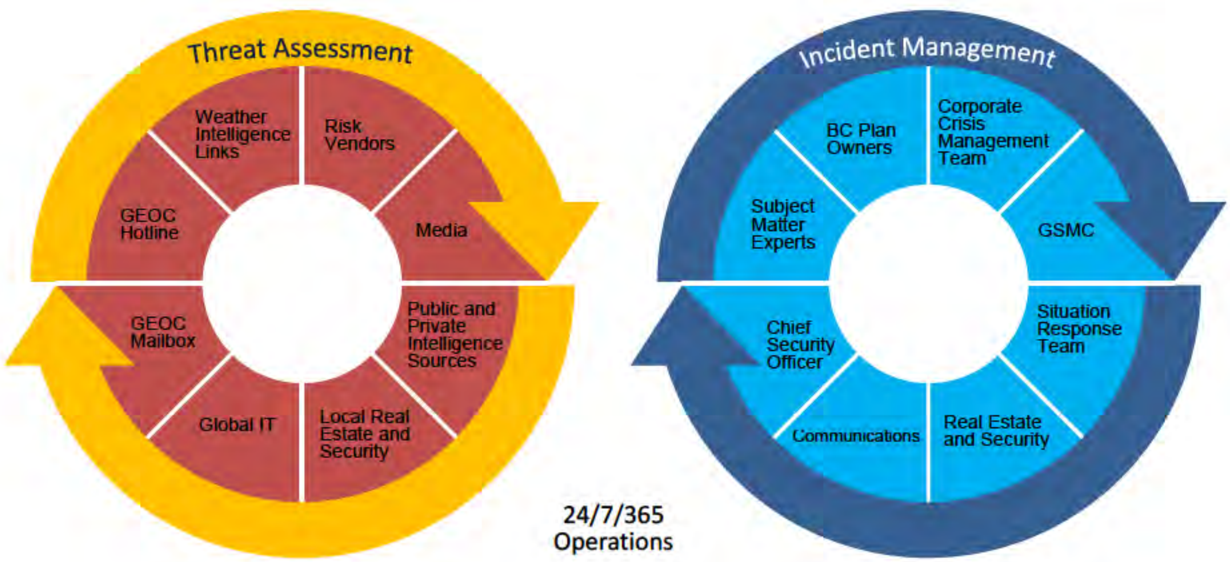
Emergency Response

Under the direction of the Corporate Protection Services (CPS) team, Aon offices maintain facility-level Emergency Response Plans (ERPs) to coordinate life safety actions in the event of a building emergency. The ERPs outline steps for fire/evacuation, medical emergencies and other immediate response incidents. Trained colleague volunteers serve as emergency response team members to provide additional direction and ensure all occupants within Aon space evacuates safely including specific procedures for persons needing evacuation assistance. The CPS team administers the Security Risk Assessment to determine the level of physical security and emergency response preparedness at each site.

Global Emergency Operations Center (GEOC)

As a centralized function for business risk intelligence, incident reporting and incident response coordination, the Global Emergency Operations Center (GEOC) provides a set of defined services to colleagues at all levels of the organization, following standard global protocol. Services fall into two distinct categories:

- Business risk intelligence
- Incident management and coordination



Activation & Communication

A continuity incident is generally declared when business operations will be severely impacted for a period of 24 hours or more. The decision that a situation is severe enough to warrant implementation of all or a portion of the contingency plan(s) will be made through a consensus of the appropriate Situation Response team(s), Business Continuity Plan Owner(s) and Technology Resilience leaders, depending on the exact nature of the incident.

Throughout the incident, conference calls are used to initiative and facilitate response and recovery efforts. Briefing calls and associated situation status communications are coordinated by the GEOC with support capabilities available 24x7x365.

Continuous Improvement

Testing and Exercises

Plans are regularly tested in accordance with the program standards. Exercises are developed and conducted based on criticality using one of Aon's acceptable methods. Action plans for identified deficiencies are developed. Documented results are either drafted by or submitted to the appropriate leader in the BTR program.

Training

Aon colleagues involved in BTR activities are trained regularly (annually at a minimum), so they understand their plan(s), roles and responsibilities involved in responding to a situation.

Maintenance and Change Control

Plans are reviewed regularly (annually at a minimum) to ensure adequacy and currency of the plans, teams and solutions. In the event of material operating or technology changes, plans are reviewed and updated accordingly.

Monitoring and Reporting

Regular reporting is produced to create awareness and drive development, testing and maintenance of plans.

Client Communications

In the event of a disruption to services the appropriate Aon personnel will contact affected clients to advise them of the situation. Regular communications will be established based on the type and duration of incident.

Additionally, clients can contact their Aon relationship managers to discuss or obtain program summary documentation.

Contact Information

Theresa Enright
Practice Leader
Global Protection Services
Global Business & Technology Resilience
+1-312-381-2463
theresa.enright@aon.com

Empower Results®

Why Aon

Our integrated approach to risk management and our state-of-the-art security toolkit are what sets us apart.

We've integrated the risk management functions into an industry best practice organization that addresses all aspects of security risk management, and we're at the forefront of technology and process innovations that are defining risk solutions for the future.

In addition, our technical environment is unparalleled. We're continually refining our delivery models for clients and are developing a range of security and risk management offerings from which clients can choose, since different clients may require different levels of security. All of the models, however, benefit from Aon's integrated approach and state-of-the-art technology.

At Aon, our clients expect us to be experts in providing the right combinations of people, processes, and technology to safeguard their data. We are leaders in the risk management field and take pride in the competitive advantage our protections provide our clients.

About Aon

Aon plc (NYSE:AON) is a leading global provider of risk management, insurance brokerage and reinsurance brokerage, and human resources solutions and outsourcing services. Through its more than 72,000 colleagues worldwide, Aon unites to empower results for clients in over 120 countries via innovative risk and people solutions. For further information on our capabilities and to learn how we empower results for clients, please visit: http://aon.mediaroom.com.

C. AHIC's Manager Buy-Rated Record

Selected Aon Buy-Rated Strategy Results

Prepared For: INSERT
Delivery Date: INSERT

Information presented is for illustrative purposes only and should not be considered investment advice. None of the information presented above has been calculated using the recipient's portfolio information.

Empower Results®

Gross of Fees Buy-Rated Strategy Results (as of 9/30/2018)
Model Performance - Equity

Strategy	1 Year Excess Return	3 Years Excess Return	5 Years Excess Return	10 Years Excess Return	Since Inception Excess Return	Since Inception Months
Total U.S. Large Cap	-0.8%	0.3%	-0.2%	-0.1%	0.3%	1/1/2001
Russel 1000 Index						
Total U.S. Mid Cap	2.1%	1.2%	0.6%	N/A	0.1%	1/1/2010
Russell MidCap Index						
Total U.S. SMid Cap	-0.5%	-1.5%	-1.2%	-0.6%	-0.3%	1/1/2007
Russel 2500 Index						
Total U.S. Small Cap	1.7%	-0.3%	-0.1%	0.8%	0.7%	1/1/2002
Russell 2000 Index						
International Equity	0.8%	0.4%	1.4%	2.2%	1.2%	1/1/2001
MSCI ACW ex-U.S. Index (Net)						
Emerging Markets	-1.9%	-0.1%	0.4%	1.2%	1.6%	4/1/2007
MSCI EM Index (Net)						
Global Equity	1.5%	1.5%	1.8%	2.4%	3.0%	7/1/2002
MSCI ACWI Index (Net)						

Source: Aon Hewitt, fund managers, eVestment
Data: USD (net)
See following slides for benchmark descriptions

Hypothetical Composite Performance Disclosure: The returns presented for the buy-list results represent model performance for Aon's buy-rated investment strategies for the asset class(es) as shown. These investment strategies are managed by external investment advisers and not Aon. The investment strategies included in the model performance are subject to change without notice due to the changing nature of Aon's manager research. Model performance is purely hypothetical, cannot be invested in, and is shown only for illustrative purposes; returns do not reflect the performance of an actual account. Model performance has inherent limitations. The model performance does not reflect the impact of material economic and market factors that would be experienced if actual client assets were being managed. While model performance may have performed better than the associated benchmark for some or all of the time periods shown, the future performance may not be as favorable relative to the benchmark in the future. Please refer to the Appendix disclosures for additional details.

Gross of Fees Buy-Rated Strategy Results (as of 9/30/2018)
Model Performance – Fixed Income

Strategy	1 Year Excess Return	3 Years Excess Return	5 Years Excess Return	10 Years Excess Return	Since Inception Excess Return	Since Inception Months
Global Agg	-0.4%	0.4%	0.0%	0.6%	0.3%	1/1/2001
Blmbg. Barc. Global Aggregate Index						
US Fixed Income	0.6%	1.2%	0.8%	N/A	1.3%	1/1/2008
Blmbg. Barc. US Agg Index						
US Core	0.5%	0.7%	0.6%	1.0%	0.7%	1/1/2008
Blmbg. Barc. US Agg Index						
US Core+	0.9%	1.7%	1.0%	2.3%	1.6%	1/1/2008
Blmbg. Barc. US Agg Index						
US Long Credit	0.3%	0.4%	0.5%	N/A	0.7%	9/1/2010
Blended Benchmark						
US Long Gov/Credit	0.2%	0.6%	0.4%	N/A	0.7%	9/1/2010
Blmbg. Barc. Long Govt/Credit Index						
US Bank Loans	-0.1%	0.2%	0.3%	N/A	0.3%	1/1/2011
Blended Benchmark						
US High Yield	0.0%	-0.4%	0.0%	N/A	0.1%	1/1/2011
Blended Benchmark						

Source: Aon Hewitt, fund managers, eVestment
Data: USD (net)
See following slides for benchmark descriptions

Hypothetical Composite Performance Disclosure: The returns presented for the buy-list results represent model performance for Aon's buy-rated investment strategies for the asset class(es) as shown. These investment strategies are managed by external investment advisers and not Aon. The investment strategies included in the model performance are subject to change without notice due to the changing nature of Aon's manager research. Model performance is purely hypothetical, cannot be invested in, and is shown only for illustrative purposes; returns do not reflect the performance of an actual account. Model performance has inherent limitations. The model performance does not reflect the impact of material economic and market factors that would be experienced if actual client assets were being managed. While model performance may have performed better than the associated benchmark for some or all of the time periods shown, the future performance may not be as favorable relative to the benchmark in the future. Please refer to the Appendix disclosures for additional details.

Appendix: Gross of Fees Buy-Rated Returns Composite Disclosures

The model returns presented herein for the Buy-list results represent hypothetical, model performance for AHIC's buy-rated investment strategies across asset classes, which has been derived from the application of a model. These models do not represent the returns of an actual client account, they are intended to be illustrative and they cannot be invested in by any person. AHIC's buy-rated investment strategies are managed by third-party investment advisers ("managers") and not AHIC. Further, the investment strategies included in the model performance are subject to change without notice. Model performance has inherent limitations. Model performance is not necessarily indicative of future results, and there can be no assurance that AHIC will achieve comparable results or that such model returns will be realized. Please see below for additional details on the methodology used in the development of this model portfolio performance.

The model performance does not reflect the impact of material economic and market factors that would be experienced if actual client assets were being managed. Any change to the assumptions, however minor, will alter the outcome. While model performance may have performed better than the associated benchmark identified in the presentation for some or all of the time periods shown, the future performance may not be as favorable relative to the benchmark in the future. Further, the model portfolio does not reflect the impact of market volatility compared to the volatility of the index which is materially different from that of the model portfolio. The gross model performance results portrayed may or may not reflect the reinvestment of dividends and other earnings from the underlying third-party managers' strategies. The performance information of the underlying third-party managers' strategies used in the model portfolio is obtained either through a third party service provider, eVestment, which does not have a standard reporting requirement from managers on whether the performance reflect the reinvestment of dividends and other earnings, or directly from the investment manager.

The model performance is presented on a "gross" basis and does not take into account any AHIC advisory fees, taxes, brokerage commissions, custodial fees, or other expenses that may be borne by a client, which will reduce returns and in the aggregate are expected to be substantial. Any actual return experienced will be reduced by the advisory fees and other expenses you may incur as a client. Actual underlying third party manager's fees may vary and schedules of such fees are available upon request.

Your actual returns will be reduced by your advisory fees and other expenses you may incur as a client. AHIC's advisory fees are described in Part 2A of AHIC's Form ADV. As an example of the impact of advisory fees compounded over time, a portfolio worth an initial value of $10 million, invested over a five-year period and returns 8% per year and charged a 0.45% annual advisory fee would be worth $14,693,281 before advisory fees and $14,370,454 after the deduction of advisory fees.

Appendix: Gross of Fees Buy-Rated Returns Composite Disclosures

Investors should note that the terms and assumptions used in preparing the model returns may not be consistent with the terms, investment strategy or investment objectives of the investors; therefore, the model performance should not be construed as a performance expectation for any actual account. A client's account would not be structured to include all the buy-rated investment strategies included in the asset class or sub-asset class model performance. The model portfolio does not represent a strategy or advisory services currently or previously offered by AHIC. An actual account will vary significantly from the model performance as the account is customized based on a client's investment objective; therefore, the actual composition and performance of the account will differ from those of the model portfolio due to the client's risk budget, experienced market conditions, manager selection, and asset allocation decisions. There can be no assurance that an investment mix or any model performance shown will lead to the expected results shown or perform in any predictable manner. Aon Hewitt, AHIC, or AHIM do not guarantee any minimum level of investment performance or the success of any portfolio or investment strategy. All investment involves risk and investment recommendations will not always be profitable, and a loss of principal may occur.

Buy-Rated model performance is calculated as follows:

- Buy-rated strategy track records are aggregated by asset class and/or sub asset class (e.g., equity, fixed income, liquid alternatives, or real estate)
- The returns of the buy-rated investment strategies are equal-weighted to calculate the model performance for each monthly period
- The individual monthly returns are compounded to result in annualized returns reflecting changes in unit value, the strategies' trading costs, and reinvestment of all distributions. Results do not take into account sales, redemption, distribution or optional charges or income taxes payable by any investor, which will reduce returns
- Model performance results are shown as the excess return versus the respective benchmarks for the time period under consideration
- The inception date for each individual model performance is the earliest date of the buy-rated strategy(ies) included in that model performance (e.g., International Equity)
- The inception date for each "total" model performance is the earliest common date of the sub asset class model performance included in that model performance (e.g., Total Small Cap, which includes Small Cap Growth, Small Cap Core, and Small Cap Value) over the longest common time period
- When a strategy is no longer buy-rated, it is removed from its respective model performance on a go-forward basis but not retroactively; returns of strategies removed from the model performance remain in the model performance for the period in which they were buy-rated
- New buy-rated investment strategies are added to the model performance in the month following it being buy-rated; returns of investment strategies that are added to the buy-list are not backfilled
- There may be additional sub-adviser's fund management fees and expenses associated with investing in buy-rated strategies not taken into account in the model performance; investors should refer to the relevant disclosure information and/or offering documents for detailed information before investing

Gross of Fees Buy-Rated Returns Composite Disclosures (continued)

Benchmark performance is:

- The relevant index for that asset class or sub asset class and is a standard market index; or
- A custom benchmark, representing the benchmarks of the underlying investment strategies, equally weighted
- The individual monthly benchmark returns are compounded to result in the corresponding annualized benchmark returns
- Unmanaged index returns assume reinvestment of any and all distributions. Performance of the benchmark(s) is not an exact representation of any particular investment, as you cannot invest directly in an index or custom benchmark. All returns for investment adviser strategies and benchmarks are compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed.

Gross of Fees Composites Benchmark Index Definitions

- **Russell 1000 Index** - A capitalization-weighted index of the 1,000 largest publicly traded U.S. stocks by capitalization.
- **Russell MidCap Stock Index** - A capitalization-weighted index of the 800 smallest stocks in the Russell 1000 Index. This index is a broad measure of mid-capitalization stocks.
- **Russell 2000 Index** - A capitalization-weighted index of the smallest 2,000 stocks in the Russell 3000 Index. The index excludes the largest- and smallest-capitalization issues in the domestic stock market.
- **MSCI All Country World Index** - A capitalization-weighted index of stocks representing 46 stock markets in Europe, Australia, the Far East, the Middle East, Latin America and North America.
- **MSCI All Country World ex-U.S. Index** - A capitalization-weighted index consisting of 23 developed and 21 emerging countries, but excluding the U.S.
- **MSCI Emerging Markets Index** - A capitalization-weighted index of stocks representing 22 emerging country markets.
- **Bloomberg Barclays Aggregate Bond Index** - A market value-weighted index consisting of government bonds, SEC-registered corporate bonds and mortgage-related and asset-backed securities with at least one year to maturity and an outstanding par value of $250 million or greater. This index is a broad measure of the performance of the investment grade U.S. fixed income market.
- **Bloomberg Barclays Capital Global Aggregate** - Provides a broad-based measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian government, agency and corporate securities, and USD investment grade 144A securities.
- **Barclays Capital Long Gov't/Credit Index** - The Barclays Capital U.S. Government/ Credit Bond Index measures performance of U.S. dollar denominated U.S. treasuries, government-related, and investment grade U.S. corporate securities that have a remaining maturity of greater than or equal to 1 year. In addition, the securities have $250 million or more of outstanding face value, and must be fixed rate and non-convertible.
- **Blended Benchmark** - An equal weighted benchmark consisting of the high-yield benchmarks of the strategies included in the composite.

Net of Fees Buy-Rated Strategy Results (as of 9/30/2018)
Model Performance – Hedge Funds

Strategy	1 Year Excess Return	3 Years Excess Return	5 Years Excess Return	10 Years Excess Return	Since Inception Excess Return	Since Inception Months
Single Hedge Funds	0.6%	-1.4%	0.9%	1.1%	0.8%	10/31/2005
Single HF Composite Benchmark						
Fund of Hedge Funds	1.9%	1.1%	1.1%	2.1%	1.6%	1/31/2005
HFRI Fund of Funds Composite Index						
Equity Hedge Buy List	1.1%	-3.8%	0.4%	0.8%	1.3%	10/31/2005
Equity Hedge Composite Benchmark						
Event Driven (Total) Buy List	1.2%	-1.5%	1.1%	-0.1%	-1.4%	4/30/2007
Event Driven Composite Benchmark						
Global Macro Buy List	3.8%	0.9%	2.3%	3.2%	2.6%	4/30/2006
Macro Composite Benchmark						
Relative Value (Total) Buy List	0.4%	0.7%	0.5%	N/A	0.6%	7/31/2010
Relative Value Composite Benchmark						
Multi-Strategy (Total) Buy List	-3.3%	-1.8%	-0.8%	0.8%	-0.6%	1/31/2008
Multi-Strat Composite Benchmark						

Source: Aon Hewitt, fund managers, Hedge Fund Research, Inc. (www.hedgefundresearch.com)
Data: USD (net)
Note: Single hedge funds Includes Equity Hedge, Relative Value, Credit, Macro, Multi-Strat, and Activist buy rated strategies

Hypothetical Composite Performance Disclosure: The returns presented for the buy-list results represent model performance for Aon's buy-rated investment strategies for selected hedge fund strategy types. These investment strategies are managed by external investment advisers and not Aon. The investment strategies included in the model performance are subject to change without notice due to the changing nature of Aon's manager research. Model performance is purely hypothetical, cannot be invested in, and is shown only for illustrative purposes; returns do not reflect the performance of an actual account. Model performance has inherent limitations. The model performance does not reflect the impact of material economic and market factors that would be experienced if actual client assets were being managed. While model performance may have performed better than the associated benchmark for some or all of the time periods shown, the future performance may not be as favorable relative to the benchmark in the future. The returns used in the composite calculation are net of investment management fees as calculated by the underlying managers, either sourced from HFR Database, eVestment, or the manager directly. AHIC's model performance does not consider any Aon Hewitt Investment Consulting ("AHIC") advisory fees or other expenses incurred by a client. Actual returns will be reduced by the sub-advisors' investment management fees, your AHIC advisory fee and other expenses you may incur as a client. AHIC's advisory fees are described in Form ADV Part 2A. Please refer to the Appendix disclosures for additional details.

Appendix: Net of Fees Buy-Rated Returns Composite Disclosures Model Performance

The returns presented for the buy-list results represent model performance for Aon's buy-rated investment strategies across different hedge fund categories. These investment strategies are managed by external investment advisers and not Aon. The investment strategies included in the model performance are subject to change without notice due to the changing nature of Aon's manager research. Model performance is purely hypothetical, cannot be invested in, and is shown only for illustrative purposes; returns do not reflect the performance of an actual account. Model performance has inherent limitations. The model performance does not reflect the impact of material economic and market factors that would be experienced if actual client assets were being managed. While model performance may have performed better than the associated benchmark for some or all of the time periods shown, the future performance may not be as favorable relative to the benchmark in the future. Further, the model portfolio may not reflect the impact of market volatility compared to the volatility of the index which is materially different from that of the model portfolio. Model performance is not necessarily indicative of future results, and there can be no assurance that AHIC will achieve comparable results or that such model returns will be realized. Please see below for additional details on the methodology used in the development of this model portfolio performance.

Model performance returns presented are net of each respective sub-advisors' investment management fees, either actual fees or a model fee as determined and applied by each manager, and trading expenses and include the reinvestment of dividends and interest. The model performance does not consider any Aon Hewitt Investment Consulting ("AHIC") advisory fees or other expenses incurred by a client. Returns do not reflect the deduction of AHIC's investment advisory fees, as the proposal presumes an annual retainer fee, and not an asset based fee. Actual returns will be reduced by the sub-advisors' investment management fees, your AHIC advisory fee and other expenses you may incur as a client. AHIC's advisory fees are described in Form ADV Part 2A. More information regarding the buy-rated model performance is included below.

As an example of the impact of sub-advisors' investment management fees compounded over time, a portfolio worth an initial value of $10 million, invested over a five year period and returns 8% per year and charged a 0.70% annual investment management fee would be worth $14,693,281 before advisory fees and $14,186,165.43 after the deduction of investment management fees.

The model performance should not be construed as a performance expectation for any actual account. A client's account would not be structured to include all the buy-rated strategies included in the asset class or sub-asset class model performance presented. An actual account will vary significantly from the model performance as the account is customized based on a client's investment objective; therefore the actual composition and performance of the account will differ from those of the model portfolio due to the client's risk budget, experienced market conditions, manager selection, and asset allocation decisions. There can be no assurance that an investment mix or client account will lead to the model portfolio results shown or perform in any predictable manner. AHIC does not guarantee any minimum level of investment performance or the success of any portfolio or investment strategy. All investment involves risk and investment recommendations will not always be profitable, and a loss of principal may occur.

Appendix: Net of Fees Buy-Rated Returns Composite Disclosures

Buy rated strategy composites are calculated as follows:

- Buy-rated strategy track records are aggregated by asset class and/or sub asset class (e.g., equity, fixed income, hedged funds)
- The returns of the buy-rated investment strategies are equal-weighted to calculate the model performance for each monthly period.
- The individual monthly returns are compounded to result in annualized returns reflecting changes in unit value, the strategies' trading costs, and reinvestment of all distributions. Results do not take into account sales, redemption, distribution or optional charges or income taxes payable by any investor that would have reduced returns.
- Model performance results are shown as the excess return versus the respective benchmarks for the time period under consideration.
- When a strategy is no longer buy-rated, it is removed from its respective model performance on a go forward basis but not retroactively; returns of strategies no longer buy-rated are removed from the model performance going forward but remain in the model performance for the period in which they were buy-rated.
- Newly buy-rated strategies are added to the model performance in the month following it being buy-rated; or at quarter-end if only quarterly returns are available. Returns of strategies that are added to the buy-list are not backfilled.
- The investment adviser's fund management fees and expenses may be associated with investing in buy-rated strategies; investors should refer to the relevant disclosure information and/or offering documents for detailed information before investing.
- The returns used in the composite calculation are net of fees as calculated by each individual manager; net of fee results used in the buy list composite calculation are sourced from eVestment, Hedge Fund Research, NCREIF, or the manager directly. Aon does not apply a fee assumption for the manager. The model performance does not consider any Aon Hewitt Investment Consulting ("AHIC") advisory fees or other expenses incurred by a client.

Benchmark performance is:

- The relevant index for that asset class or sub asset class and is a standard market index; or
- A custom benchmark, representing the benchmarks of the underlying investment strategies, equally weighted
- The individual monthly benchmark returns are compounded to result in the corresponding annualized benchmark returns
- Unmanaged index returns assume reinvestment of any and all distributions. Performance of the benchmark(s) is not an exact representation of any particular investment, as you cannot invest directly in an index or custom benchmark. All returns for investment adviser strategies and benchmarks are compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed.

Net of Fee Composites Benchmark Index Definitions

- **Single HF Composite Benchmark - HFRI Fund Weighted Composite Index.** The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of $50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- **HFRI Fund of Funds Composite Index** – Fund of Funds invests with multiple managers through funds or managed accounts. The strategy designs a diversified portfolio of managers with the objective of significantly lowering the risk (volatility) of investing with an individual manager. The Fund of Funds manager has discretion in choosing which strategies to invest in for the portfolio. A manager may allocate funds to numerous managers within a single strategy, or with numerous managers in multiple strategies. The minimum investment in a Fund of Funds may be lower than an investment in an individual hedge fund or managed account. The investor has the advantage of diversification among managers and styles with significantly less capital than investing with separate managers. PLEASE NOTE: The HFRI Fund of Funds Index is not included in the HFRI Fund Weighted Composite Index.
- **Equity Hedge Composite Benchmark** – A weighted average of the underlying managers benchmarks which are either HFRI Equity Hedge (Total) Index, HFRI EH: Equity Market Neutral Index, or HFRI Emerging Markets (Total) Index.
- **Event Driven Composite Benchmark** - A weighted average of the underlying managers benchmarks which are either HFRI ED: Activist Index, HFRI ED: Distressed/Restructuring Index, or HFRI Event-Driven (Total) Index
- **Macro Composite Benchmark** - A weighted average of the underlying managers benchmarks which are either HFRI Macro: Discretionary Thematic Index or HFRI Macro: Systematic Diversified Index.
- **Relative Value Composite Benchmark** - A weighted average of the underlying managers benchmarks which are either 50% HFRI RV: Fixed Income-Corporate Index 50% HFRI ED: Credit Arbitrage Index, HFRI Relative Value (Total) Index, or HFRI RV: Fixed Income-Asset Backed
- **Multi-Strat Composite Benchmark** - A weighted average of the underlying managers benchmarks which are either SG (Newedge) Multi Alternative Risk Premia Index or Dow Jones Credit Suisse Multi-Strategy Index.
- **HFRI Equity Hedge (Total) Index** – Equity Hedge: Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH managers would typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.
- **HFRI Emerging Markets (Total) Index** – Emerging Markets funds invest, primarily long, in securities of companies or the sovereign debt of developing or 'emerging' countries. Emerging Markets regions include Africa, Asia ex-Japan, Latin America, the Middle East and Russia/Eastern Europe. Emerging Markets - Global funds will shift their weightings among these regions according to market conditions and manager perspectives.

Net of Fee Composites Benchmark Index Definitions

- **HFRI EH: Equity Market Neutral Index** – Equity Market Neutral strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. These can include both Factor-based and Statistical Arbitrage/Trading strategies. Factor-based investment strategies include strategies in which the investment thesis is predicated on the systematic analysis of common relationships between securities. In many but not all cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical Arbitrage/Trading strategies consist of strategies in which the investment thesis is predicated on exploiting pricing anomalies which may occur as a function of expected mean reversion inherent in security prices; high frequency techniques may be employed and trading strategies may also be employed on the basis on technical analysis or opportunistically to exploit new information the investment manager believes has not been fully, completely or accurately discounted into current security prices. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.
- **HFRI ED: Activist Index** – Activist strategies may obtain or attempt to obtain representation of the company's board of directors in an effort to impact the firm's policies or strategic direction and in some cases may advocate activities such as division or asset sales, partial or complete corporate divestiture, dividend or share buybacks, and changes in management. Strategies employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently or prospectively engaged in a corporate transaction, security issuance/repurchase, asset sales, division spin-off or other catalyst oriented situation. These involve both announced transactions as well as situations which pre-, post-date or situations in which no formal announcement is expected to occur. Activist strategies are distinguished from other Event Driven strategies in that, over a given market cycle, Activist strategies would expect to have greater than 50% of the portfolio in activist positions, as described.
- **HFRI ED: Distressed/Restructuring Index** – Distressed/Restructuring strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. Managers are typically actively involved with the management of these companies, frequently involved on creditors' committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in most cases portfolio exposures are concentrated in instruments which are publicly traded, in some cases actively and in others under reduced liquidity but in general for which a reasonable public market exists. In contrast to Special Situations, Distressed Strategies employ primarily debt (greater than 60%) but also may maintain related equity exposure.
- **HFRI Event-Driven (Total) Index – Event-Driven:** Investment Managers who maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

Net of Fee Composites Benchmark Index Definitions

- **HFRI Macro: Discretionary Thematic Index** – Discretionary Thematic strategies are primarily reliant on the evaluation of market data, relationships and influences, as interpreted by an individual or group of individuals who make decisions on portfolio positions; strategies employ an investment process most heavily influenced by top down analysis of macroeconomic variables. Investment Managers may trade actively in developed and emerging markets, focusing on both absolute and relative levels on equity markets, interest rates/fixed income markets, currency and commodity markets; frequently employing spread trades to isolate a differential between instrument identified by the Investment Manager to be inconsistent with expected value. Portfolio positions typically are predicated on the evolution of investment themes the Manager expect to materialize over a relevant time frame, which in many cases contain contrarian or volatility focused components.
- **HFRI Macro: Systematic Diversified Index** – Systematic: Diversified strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies which employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Strategies typically employ quantitative process which focus on statistically robust or technical patterns in the return series of the asset, and typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies. Although some strategies seek to employ counter trend models, strategies benefit most from an environment characterized by persistent, discernible trending behavior. Systematic: Diversified strategies typically would expect to have no greater than 35% of portfolio in either dedicated currency or commodity exposures over a given market cycle.
- **HFRI RV: Fixed Income-Corporate Index** – Fixed Income: Corporate includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple corporate bonds or between a corporate and risk free government bond. Fixed Income: Corporate strategies differ from Event Driven: Credit Arbitrage in that the former more typically involve more general market hedges which may vary in the degree to which they limit fixed income market exposure, while the later typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.
- **HFRI ED: Credit Arbitrage Index** – Credit Arbitrage strategies employ an investment process designed to isolate attractive opportunities in corporate fixed income securities; these include both senior and subordinated claims as well as bank debt and other outstanding obligations, structuring positions with little or no broad credit market exposure. These may also contain a limited exposure to government, sovereign, equity, convertible or other obligations but the focus of the strategy is primarily on fixed corporate obligations and other securities are held as component of positions within these structures. Managers typically employ fundamental credit analysis to evaluate the likelihood of an improvement in the issuer's creditworthiness, in most cases securities trade in liquid markets and managers are only infrequently or indirectly involved with company management. Fixed Income - Corporate strategies differ from Event Driven: Credit Arbitrage in that the former more typically involve more general market hedges which may vary in the degree to which they limit fixed income market exposure, while the latter typically involve arbitrage positions with little or no net credit market exposure, but are predicated on specific, anticipated idiosyncratic developments.

Net of Fee Composites Benchmark Index Definitions

- **HFRI Relative Value (Total) Index** – Investment Managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.
- **HFRI RV: Fixed Income-Asset Backed Index** – Fixed Income: Asset Backed includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed income instrument backed physical collateral or other financial obligations (loans, credit cards) other than those of a specific corporation. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments specifically securitized by collateral commitments which frequently include loans, pools and portfolios of loans, receivables, real estate, machinery or other tangible financial commitments. Investment thesis may be predicated on an attractive spread given the nature and quality of the collateral, the liquidity characteristics of the underlying instruments and on issuance and trends in collateralized fixed income instruments, broadly speaking. In many cases, investment managers hedge, limit or offset interest rate exposure in the interest of isolating the risk of the position to strictly the yield disparity of the instrument relative to the lower risk instruments.
- **Dow Jones Credit Suisse Hedge Fund Index** - an asset-weighted hedge fund index and includes open and closed funds. The index is an asset-weighted hedge fund index that provides a rules-based measure of an investable portfolio.
- **SG (Newedge) Multi Alternative Risk Premia Index-** represents risk permia managers who employ investment programs diversified across multiple asset classes while utilizing multiple risk premia factors. These managers trade multiple asset classes such as equities, fixed income, currencies, and in many cases commodities, and aim to capture discrete risk premia, including value, carry, and momentum. Single asset class and risk premia programs are excluded. It is equally weighted, non-investable index of funds.

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Aon Hewitt Investment Consulting, Inc.

200 E. Randolph Street

Suite 1500

Chicago, IL 60601

ATTN: AHIC Compliance Officer

Private Markets Track Records

As of 6/30/2018

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Private Equity Track Record by Vintage Year

As of 6/30/2018

	Track Record Returns										
Vintage Year	# of Partnerships	Total Commitments	Cumulative Paid-In	Cumulative Distributions	Net Asset Value	Total Value	DPI	RVPI	TVPI	IRR	IRR Quartile
2006	1	$ 15,000,000	$ 15,000,000	$ 25,178,082	$ 559,044	$ 25,737,126	1.68x	0.04x	1.72x	8.97%	2
2007	8	215,502,649	225,408,299	276,762,177	84,183,151	360,945,328	1.23x	0.37x	1.60x	10.35%	2
2008	10	262,236,000	269,207,781	322,272,082	157,220,461	479,492,543	1.20x	0.58x	1.78x	16.30%	1
2009	11	236,121,000	233,661,019	231,714,451	121,937,697	353,652,148	0.99x	0.52x	1.51x	10.89%	3
2010	4	115,287,500	116,794,161	95,424,669	77,778,927	173,203,596	0.82x	0.67x	1.48x	12.50%	2
2011	10	290,000,000	266,099,250	297,643,002	177,577,321	475,220,323	1.12x	0.67x	1.79x	18.79%	2
2012	13	575,602,920	586,615,719	316,646,871	543,074,326	859,721,197	0.54x	0.93x	1.47x	13.81%	2
2013	12	397,248,276	334,685,143	158,311,448	319,210,408	477,521,856	0.47x	0.95x	1.43x	16.45%	2
2014	15	545,394,000	458,083,930	139,429,474	477,580,790	617,010,264	0.30x	1.04x	1.35x	17.31%	2
2015	18	814,752,125	594,969,098	111,669,451	707,146,438	818,815,889	0.19x	1.19x	1.38x	24.86%	1
2016	18	662,608,871	268,481,502	27,220,024	284,008,878	311,228,902	0.10x	1.06x	1.16x	18.59%	2
2017	18	1,299,835,106	257,041,853	8,431,722	246,967,383	255,399,105	0.03x	0.96x	0.99x	-1.34%	2
2018	15	608,949,580	34,454,208	0	30,353,441	30,353,441	0.00x	0.88x	0.88x	-18.02%	3
Total Portfolio	153	$6,038,538,027	$3,660,501,963	$2,010,703,453	$3,227,598,265	$5,238,301,718	0.55x	0.88x	1.43x	14.66%	N/A
Burgiss Peer Universe Benchmark							0.39x	0.89x	1.28x	10.58%	
Over/Under Benchmark							0.16x	-0.01x	0.15x	4.08%	

Past performance does not guarantee future results. There is a potential for a loss of principal. The performance presented is net of fund management fees and expenses but does not include any AHIC consulting fees. Actual returns will be reduced by AHIC's investment advisory fees and other expenses you may incur as a client. Figures are presented in USD. AHIC's advisory fees are described in Form ADV Part 2A. Please see following page for additional important notes.

Private Equity Track Record by Vintage Year

Notes

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2. Fund of funds recommendations are excluded from the track record.
3. Only partnerships recommended to and utilized by current AHIC investment consulting clients in an advisory or delegated capacity who have engaged AHIC to provide private equity reporting services are included.
4. Benchmark data provided by Burgiss. Benchmark returns are based on the pooled cash flows and valuations of all relevant vintage year funds in the Burgiss Manager Universe. Total portfolio benchmark returns are the commitment-weighted averages of the individual vintage year benchmark returns. The Burgiss Manager Universe contains cash flow and valuation data for over 7,000 private markets funds with total capitalization of over $6 trillion. Data is sourced directly from institutional investor portfolios. Quartiles are determined by ranking the funds in the Burgiss Manager Universe and comparing vintage year returns to the fund rankings. The first quartile represents the top 25% performing funds, and the fourth quartile represents the bottom 25% performing funds.
5. These returns are internal rates of return (IRRs) based upon the aggregate cash flows of our clients within Private Equity investments recommended by AHIC's Global Investment Management team. This dollar-weighted return calculation methodology lends greater significance to client portfolios and fund managers with larger dollar commitments and consequently underweights the returns from client portfolios and fund managers with smaller dollar commitments.
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7. The track record includes all fund commitments made as of the date of presentation whether or not a fund has called capital. Funds in subsequent vintage years are not expected to call capital until the stated year.
8. Dividends, interest and the impact of subscription lines of credit are incorporated in these returns to the extent they are embedded in the underlying cash flows of the funds.

Discretionary Private Equity Track Record by Vintage Year

As of 6/30/2018

	Track Record Returns										IRR Quartile
Vintage Year	# of Partnerships	Total Commitments	Cumulative Paid-In	Cumulative Distributions	Net Asset Value	Total Value	DPI	RVPI	TVPI	IRR	
2007	4	$ 80,000,000	$ 84,069,412	$ 112,471,105	$ 32,791,080	$ 145,262,185	1.34x	0.39x	1.73x	11.82%	2
2008	4	80,000,000	84,586,550	101,370,722	58,249,189	159,619,911	1.20x	0.69x	1.89x	17.82%	1
2009	7	114,621,000	127,481,642	125,285,838	74,594,500	199,880,338	0.98x	0.59x	1.57x	11.48%	3
2010	3	65,000,000	65,889,007	60,889,870	47,125,960	108,015,830	0.92x	0.72x	1.64x	14.79%	2
2011	7	120,000,000	117,082,857	134,571,791	90,455,554	225,027,345	1.15x	0.77x	1.92x	19.97%	2
2012	9	205,000,000	206,607,221	105,840,543	191,790,535	297,631,078	0.51x	0.93x	1.44x	13.17%	2
2013	9	173,501,276	141,956,204	58,165,752	143,184,667	201,350,419	0.41x	1.01x	1.42x	15.62%	2
2014	8	217,868,000	163,415,308	48,193,471	169,237,544	217,431,015	0.29x	1.04x	1.33x	17.07%	2
2015	12	350,366,625	274,489,168	62,916,653	340,036,863	402,953,516	0.23x	1.24x	1.47x	28.65%	1
2016	12	275,924,871	107,343,146	10,979,764	110,665,842	121,645,606	0.10x	1.03x	1.13x	15.84%	2
2017	10	319,000,000	63,260,461	2,486,956	59,938,365	62,425,321	0.04x	0.95x	0.99x	-2.60%	3
2018	7	214,121,000	12,864,047	0	10,949,737	10,949,737	0.00x	0.85x	0.85x	-39.52%	4
Total Portfolio	92	$2,215,402,772	$1,449,045,023	$ 823,172,465	$1,329,019,836	$2,152,192,301	0.57x	0.92x	1.49x	15.64%	N/A
Burgiss Peer Universe Benchmark							0.41x	0.89x	1.31x	11.40%	
Over/Under Benchmark							0.15x	0.02x	0.18x	4.24%	

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Discretionary Private Equity Track Record by Vintage Year

Notes

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Aon Hewitt Investment Consulting, Inc.

200 E. Randolph Street

Suite 1500

Chicago, IL 60601

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D. Research Papers

- Alternative Premia
- Alternative PriceBank Capital Relief
- Direct Lending: An Investment Opportunity Within Private Debt

Aon Hewitt
Retirement & Investment

Alternative Premia, Alternative Price

August 2017

Empower Results®

Key Points

- Alternative risk premia (ARP) consist of a range of strategies that offer a premium for either taking risks others do not wish to bear or for exploiting market anomalies.
- ARP have increased in popularity over the last few years with a spate of new product launches.
- ARP are a viable investment proposition for many investors, bringing diversification and added return potential to traditional portfolios.
- Not all implementations are created equal, and care must be taken when choosing a provider.
- We recommend investment in ARP products to those looking for alternative sources of return at reasonable fee levels.

Introduction

ARP strategies have risen to prominence over the last few years, fuelled by investors' desire for diversification and an advancing understanding over what should be categorised as alpha and beta. We believe these strategies can aid diversification within a portfolio and allow investors access to sources of return that are different from traditional equity and bonds, at a reasonable price point.

In this paper we discuss:

- Evolution of ARP
- Defining ARP
- Overview of ARP strategies
- Role of ARP in portfolios

Evolution of ARP

The existence of the equity risk premium (excess return earned by investing in stocks above the risk-free rate) is widely accepted by today's investor. Markowitz[1] was amongst the first to link investment return and risk and enabled the "risk premia" of different investments to be measured. This ability to measure the risk premia of different assets led to a realisation amongst investors that not all investing was skill-based and there were gains to be generated by just investing in an index like the FTSE 100 or S&P 500. What had previously been thought of as alpha[2] was actually beta.[3]

As markets evolved, a plethora of indices sprung up across asset classes, allowing investors access to ever-more-exotic investment strategies with corresponding "exotic betas." During this period, we also witnessed the growth of the hedge fund industry, which usually charged both management and

[1] Portfolio Selection, Harry Markowitz, *The Journal of Finance,* Vol. 7, No. 1 (1952)
[2] Alpha is a term used to denote manager skill.
[3] Beta is a term used to denote the return available from the market; e.g., an investment in an S&P 500 tracker would have a beta of roughly 1 to the S&P 500 index.

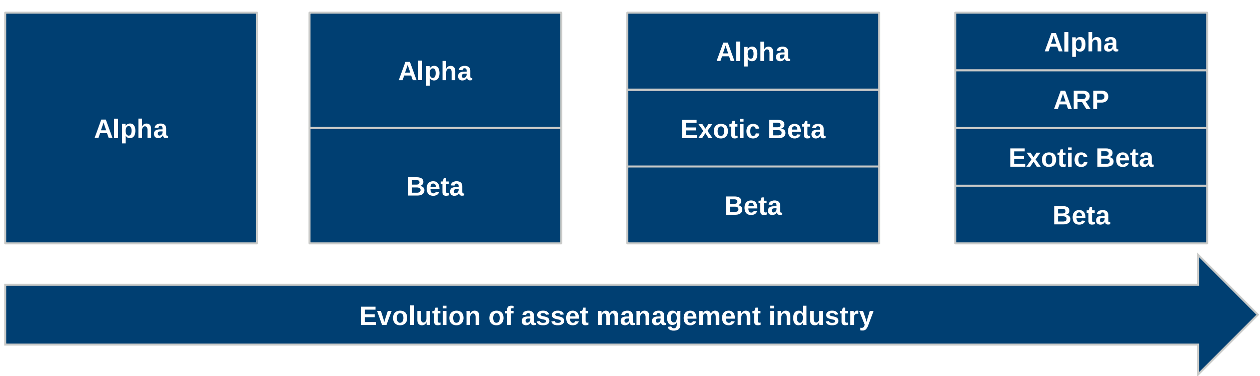
performance fees for what many claimed was alpha.[4] These strategies promised and delivered outstanding returns through investing in an unconstrained manner across or within certain markets.

As hedge funds evolved, some market practitioners examined whether hedge fund strategies were in part also targeting risk premia and whether these could be extracted in a systematic manner. For example, was merger arbitrage a pure alpha strategy, or were the majority of the returns generated simply by taking deal risk? Perhaps returns could be generated by investing in **all** deals rather than trying to select the "best" ones. A few found success with this bottom-up approach, and the first ARP products were launched in the mid- to late 2000s with varying degrees of success.

At the same time as the first ARP products were appearing, a similar revolution was occurring in the equity long-only space. Here, "smart beta" or "factor-based investing"[5] products were appearing that looked to capture the returns from well-known equity (and later fixed income) factors such as Value in a simple, transparent, rules-based manner. The main differences between smart beta and ARP are as follows:

1. Smart beta is concerned with long-only investing, whereas ARP are mainly implemented in a long short manner.
2. Smart beta is concerned mainly with single-stock equity investing,[6] whereas ARP strategies can be applied across all asset classes.

After the global financial crisis, interest in ARP generally fell away as equity markets surged. However, after the difficult markets of 2011, interest in ARP was reignited and more ARP products came to market, at first launched by banks and soon after by asset managers. These offerings are generally characterized by lower fees than traditional hedge funds, exposure to a number of different risk premia, and high levels of transparency into the mechanics behind the various implementations.



Defining ARP

There are a multitude of definitions of ARP. Broadly speaking, the definition breaks down as follows:

- The "alternative" part of the ARP definition can be thought of, in general terms, as an ability to go long or short and an ability to invest across asset classes.

[4] The hedge fund industry grew from an estimated $39 billion in 1990 to an estimated $3.0 trillion in December 2016 (HFR).
[5] *10 Insights on Rules-Based and Factor Investing,* Aon Hewitt (2015)
[6] More recently, attempts have been made to adapt the smart beta framework to fixed income investing.

- The term “risk premia” can be thought of in two ways:
  - First, as accepting a premium for taking on a risk that others do not wish to hold (i.e., providing insurance against tail risk to other market participants)
  - Second, other types of strategies better characterised as market anomalies[7] than reward for bearing a well-defined risk

Let’s delve further into the two ways to think of risk premia.

- **Providing insurance against tail risk:** An example would be a short volatility strategy, a simple expression of which would be selling straddles (appropriately hedged)[8] on an index. In this case, the seller receives an option premium for bearing the risk of a large increase in volatility, which generally accompanies a large fall in the market. As with other forms of insurance, the strategies can be successful over the long term (which is why insurers exist!) but prone to large payouts when the insured event occurs (i.e. the market experiences a large fall).[9]
- **Market anomalies:** We believe the most obvious is momentum (or trend-following) across asset classes, which is included as a strategy in many risk premia products, but is not a reward for bearing a certain kind of risk and does not have a return distribution that is negatively skewed. There are several behavioural explanations as to why momentum, or trend-following is successful, and has proved to have been so over many years,[10] but this strategy does not bear the hallmarks of a risk premia strategy as defined above; it has a tendency to perform well in volatile periods and displays positive skew.

So there are two distinct explanations as to what qualifies as alternative risk premia. As a general rule, these strategies will also display the following characteristics:

- **Intuitive:** There must be a sound rationale as to why the premia exist. This can be a behavioural or economic explanation.
- **Well known:** There must be strong academic evidence of the existence of such premia and a conventional way of implementing them. However, some practitioners may employ a greater degree of sophistication than others.
- **Scalable:** The premia need to be sufficiently scalable and liquid so that they are a viable trading strategy and would not disappear due to trading costs.
- **Value add:** The premia need to have a positive expected return over time.
- **Persistent:** The premia need to demonstrate persistence over time and the ability to potentially persist in the future.

In the general lexicon, ARP strategies have come to mean strategies that display most, if not all of the five qualities above, whether they are a market anomaly or a reward for bearing risk. ARP products normally contain both types of investment opportunities—providing insurance and exploiting market anomalies. The reason for this is that the return profile of some market anomalies sits nicely alongside that of certain insurance premia, meaning a combination of the two can be a compelling proposition.

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[7] Capital Fund Management, in particular, uses the market anomaly/insurance for risk illustration of Risk Premia. See *Risk Premium Investing—A Tale of Two Tails,* CFM, 2015.
[8] A straddle is the sale/purchase of a put and a call of the same strike. Such a strategy is not affected by changes in the price level of the index but is exposed to a change in volatility of the index. A short volatility strategy is profitable over time because investors are willing to overpay for market insurance.
[9] Such strategies can be described as negatively skewed—they make regular and consistent small gains but can suffer large losses. Past performance is no guarantee of future results.
[10] *Two Centuries of Trend Following,* Capital Fund Management (2015); *A Century of Evidence on Trend-Following Investing,* AQR (2014)

Overview of ARP Strategies

There have been a large number of product launches in this space over the last couple of years. These range from a customized approach, where an asset manager or bank will offer a menu of up to 100 risk premia to choose from, to products that feature five or more premia in a traditional fund format, where sizing of the individual premium is included as part of the package. Although there are a bewildering number of ARP strategies available, they generally fall into four buckets:

- Momentum
- Value
- Carry
- Other

The first three buckets can generally be applied across equities, fixed income, commodities, and currencies whilst the fourth generally encompasses risk premia strategies that are difficult to generalise and in some cases are asset class-specific. Examples of all can be found in the academic literature; however, in many cases the "devil is in the details" in terms of implementation. Most of the strategies would be executed through equities, futures and forwards.

Momentum[11]

As an ARP strategy, momentum comes in two forms: time series and cross-sectional. Time series momentum is commonly referred to as trend following, which is a strategy widely used within managed futures. This exploits the well-known anomaly that markets tend to trend. The second type, cross-sectional, looks at relative performance within an asset class, rather than absolute performance across asset classes.[12,13] A number of behavioural explanations have been posited for why the momentum phenomenon exists, based mostly on investor under and overreaction, such as investors underreacting to short-term news and overreacting to long-term news.[14,15]

Value[16]

Value strategies look to buy cheap assets and sell expensive assets. The origins of value investing date back to the early 1930s and are based on the work of Benjamin Graham and David Dodd, who noticed that after the Great Depression, many stocks seemed cheap compared to book value and created a strategy that looked to buy "cheap" stocks that displayed certain characteristics. Such a strategy proved successful, with Warren Buffett being a well-known advocate of such an approach. The value phenomenon has since been expanded to encompass other asset classes[17]—for example, in bonds an

[11] *Time Series Momentum* , Moskowitz et al. (2011)
[12] *Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency,* Jegadeesh and Titman (1993)
[13] For time series momentum, a security's own past return predicts its future return. For cross sectional momentum, a security's outperformance relative to peers predicts future relative outperformance (*Time Series Momentum*, Moskowitz, Ooi and Pedersen (2010))
[14] *A Unified Theory of Underreaction, Momentum Trading, and Overreaction in Asset Markets,* Hong and Stein (1999)
[15] *The Disposition Effect and Underreaction to News,* Frazzini (2006)
[16] *Security Analysis,* Graham and Dodd, 1934
[17] *Value and Momentum Everywhere,* Asness, Moskowitz, and Pedersen (2013)

investor could go long bonds with the highest real yield (ex-ante cheap) and short bonds with the lowest real yield (ex-ante expensive).

Carry[18]

Carry strategies involve the search for yield and favour investing in high-yielding assets over low-yielding assets regardless of valuations. Carry is the return derived merely from holding an asset, independent of any price movements, and is most well-known as a strategy exploited in currency markets, where investors buy high-yielding currencies or currencies that have high nominal interest rates and borrow in lower-yielding currencies. However, the strategy can be extended to other asset classes—for example, dividends could represent carry within stocks and the slope of the yield curve within fixed income.

Other

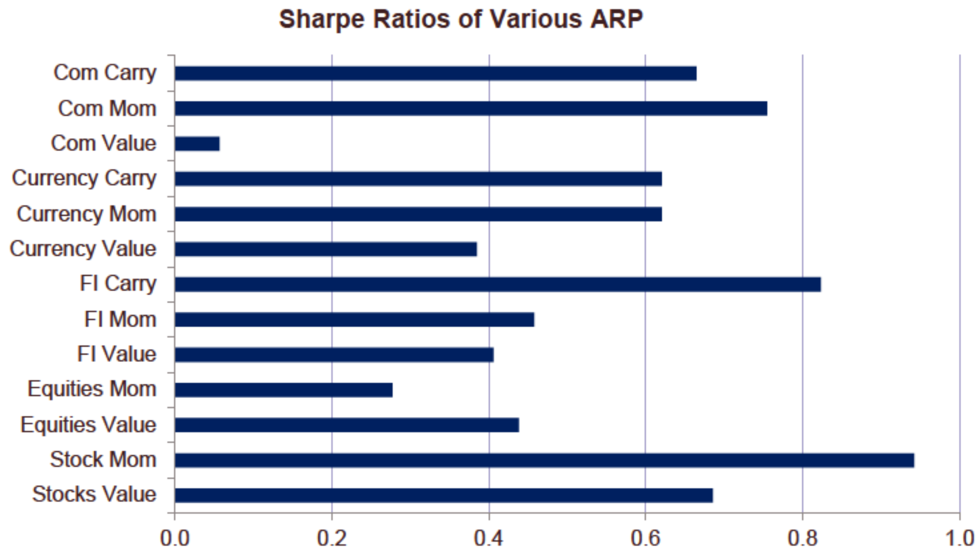
There are a large number of potential risk premia strategies not covered by the first three categories. One example would be the short volatility strategy mentioned above, which could be extended across asset classes. There are also risk premia styles such as quality and size, which are long/short implementations of “smart beta” factors.

How Have the Various Strategies Performed

Most ARP products have quite short track records, as this is an investment style that has established itself only recently. As such, we use backtests for any meaningful performance analysis, with all the caveats that entails.[19] As these strategies can be scaled up or down relatively easily (subject to capacity constraints) to meet a range of risk and return combinations, it appears more useful to examine the ratio of risk to return rather than the absolute level of return. Hence, the Sharpe ratio is used rather than nominal risk and return metrics.

[18] Carry, Koijen et al. (2015)
[19] The data for the following charts has been sourced from AQR, which manages a number of products within this space. The strategies shown do not represent all of the strategies that AQR manages. All data is shown from January 1990 through March 2016 except for FI Carry, Momentum, and Value, which is from February 1990 and Commodity Value, Momentum, and Carry, which is from May 1990. Momentum represents cross-sectional momentum strategies. All data presented is **gross of fees and gross of trading costs**. Any returns shown are excess of cash. Volatility has been normalised to 10% per annum for all strategies and combinations of strategies. Returns shown are a backtest and do not represent returns realised by any investor.

Strategy Sharpe Ratios



Source: AQR, Aon Hewitt
Note: "Com" is short for "commodities." "Mom" is short for "momentum." Stocks represent single-name strategies whilst equities represent equity indices. Momentum represents cross-sectional rather than time series momentum.

As can be seen from the above, individual Sharpe ratios of the strategies are positive for the period under review, spanning 26 years, ranging from 0.1 to more than 0.9. Some have achieved better risk-adjusted returns than others, but all of the strategies have added value over long periods of time.

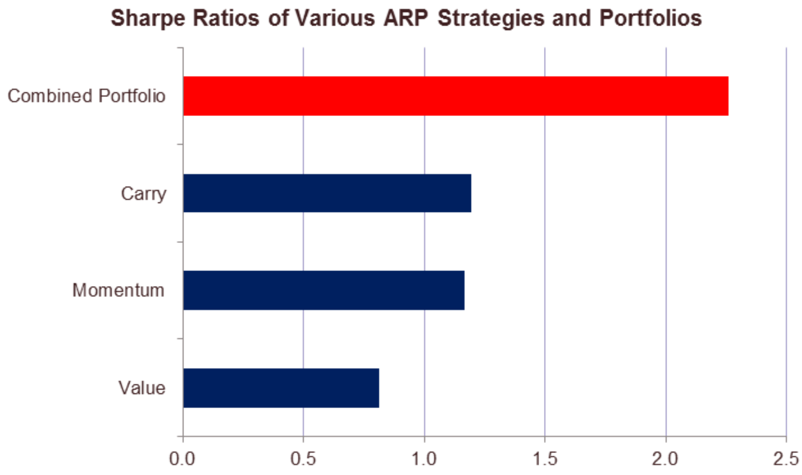
Although strategies like those above are available on a stand-alone basis, increasingly asset managers are approaching the market with strategies that combine a number of the above premia in a single product. The main reason for this is the power of diversification at the ARP level, combining a number of strategies with low correlation, and a positive Sharpe ratio can create a portfolio with a much higher Sharpe ratio. The lower the correlation, the greater the increase in Sharpe ratio (all else being equal).

Correlations period 1990 - March 2016

	Stock Value	Stocks Mom.	Equities Value	Equities Mom.	FI Value	FI Mom.	FI Carry	Currency Value	Currency Mom.	Currency Carry	Com Value	Com Mom.	Com Carry
Stock Value	1.0												
Stocks Mom.	-0.7	1.0											
Equities Value	0.2	-0.2	1.0										
Equities Mom.	-0.2	0.2	-0.2	1.0									
FI Value	0.0	0.0	0.1	0.0	1.0								
FI Mom.	0.0	0.1	-0.1	0.1	-0.3	1.0							
FI Carry	0.1	0.1	-0.1	0.0	-0.2	0.1	1.0						
Currency Value	0.2	-0.2	0.1	0.0	0.1	-0.1	-0.1	1.0					
Currency Mom.	-0.1	0.3	-0.1	0.2	-0.2	0.1	0.1	-0.3	1.0				
Currenc Carry	0.1	0.0	-0.1	0.2	-0.1	-0.1	0.3	0.0	0.3	1.0			
Com Value	0.1	-0.1	0.1	-0.1	0.0	0.0	0.1	0.1	-0.1	0.0	1.0		
Com Mom.	0.0	0.1	-0.1	0.2	-0.1	0.0	0.0	0.0	0.2	0.1	-0.5	1.0	
Com Carry	0.0	0.0	-0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	-0.4	0.5	1.0

Source: AQR, Aon Hewitt

We can see from the above that the correlation between individual substrategies is low. In fact, the average pairwise correlation stands at 0.14. This means that creating a portfolio of these strategies should produce much higher risk-adjusted returns than individually allocating to any single strategy.[20] This is in fact what we find. Finally, we can take this one step further and create a portfolio that is diversified across asset classes and different premia.[21]



Source: AQR, Aon Hewitt

Here we can see how the combined portfolio had a much higher Sharpe ratio than the single-strategy portfolios, which in themselves exhibited higher Sharpe ratios than the underlying ARP. We can also view this using simpler risk metrics:

Annualised Excess Return (gross of fees and trading costs)	22.6%
Annualised Volatility	10.0%
Sharpe Ratio	2.3

The simulation above does not account for trading costs, other fees (including management fees), market impact, and market constraints. However, if we put market constraints to one side (and there are managers running strategies such as those above with billions of dollars), we can have reasonably conservative estimates for both management fees (1% per annum (“p.a.”) and trading costs (3% p.a.) for ARP strategies based on conversations with asset managers operating these types of strategies. Adjusting for these on a linear basis results in the following.

Annualised Excess Return (net of estimated fees and trading costs)	17.8%
Annualised Volatility	10.0%
Sharpe Ratio	1.8

[20] Taking this one step further, if strategies have a zero correlation to each other, the Sharpe ratio of a portfolio of such strategies will increase by the square root of the number of such strategies added. However, very few strategies are completely orthogonal to each other. See also *Correlation and portfolio construction,* Metolius Capital, 2013
[21] In this case, we will follow a naïve allocation of 33% to Carry, 33% to Momentum, and 33% to Value resulting in a portfolio of 13 different ARP. Carry, Momentum, and Value portfolios are equally weighted allocations to the relevant strategies above, rebalanced monthly.

Although 'live' track records of these strategies are limited, there are reputable managers operating in this area with track records of one to five years. Realised Sharpe ratios have been between 0 and 1.2 with annualised returns of 0% to 10% and realised annualised volatility of 5% to 10%. The difference between the simulation above and realised performance of managers could be attributed to real-life implementation constraints as well as uncertainty over historical costs/opportunities. Our view is that Sharpe ratios in the region of 0.5 – 1 are more realistic going forward than those in the historical backtests above.

Expected Excess Returns (net of estimated fees and trading costs)	3%–10%
Expected Volatility	6%–10%
Sharpe Ratio	0.5–1

Role of ARP in Portfolios

If the expected risk and return statistics are achieved by an ARP strategy, it would be a compelling addition to a traditional 60/40 portfolio,[22] even with a moderate level of correlation. What we find is that the correlation of a traditional portfolio to the ARP portfolio described above is very low:

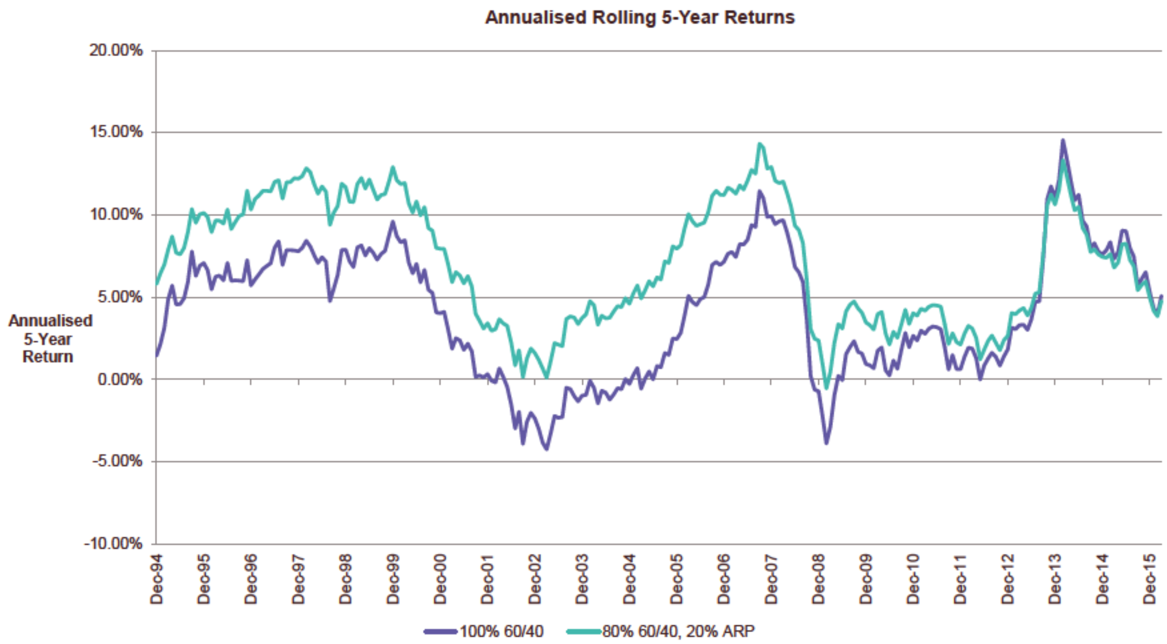
Correlations Period 1990 - March 2016

	Value	Momentum	Carry	ARP Portfolio	Equities	Bonds	60/40 Portfolio
Value	1.0						
Momentum	-0.5	1.0					
Carry	-0.1	0.3	1.0				
ARP Portfolio	0.2	0.5	0.8	1.0			
Equities	0.0	0.0	0.2	0.2	1.0		
Bonds	-0.2	0.1	0.1	0.0	0.3	1.0	
60/40 Portfolio	0.0	0.0	0.3	0.1	1.0	0.5	1.0

Source: AQR, Aon Hewitt

[22] The "traditional portfolio" is a 60/40 mix of equities and bonds, with equities represented by the MSCI World Index and bonds by the Barclays Global Aggregate Bond Index.

Taken together, the respectable expected returns of ARP portfolios coupled with the very low correlations to traditional allocations, you may conclude that the addition of such strategies could have an advantageous impact on a traditional portfolio:



Source: AQR, Aon Hewitt. The chart above is net of a presumed management fee of 1% per annum for the ARP portfolio and net of estimated trading costs of 3% per annum for the ARP portfolio. It assumes costless exposure to the index strategies. The estimated management fee is based on our conversations with asset managers as are estimated transaction costs. These have been applied linearly at the portfolio level rather than the underlying strategy level and assume the ability to scale up or down at zero cost. As such, they are merely indicative.

Although the above likely overestimates the improvement in outcome by utilising ARP strategies, due to the inflated Sharpe Ratio, the low correlation of these strategies to traditional portfolios means that outcomes may still be significantly improved over many time frames using the more realistic expected risk and return metrics above (e.g. a Sharpe of 0.5-1).[23] It is interesting to note the convergence between the rolling five-year returns in recent times. We would attribute this to the solid performance from equity and bond markets that we have seen in recent years, which is unlikely to be sustained.

However, rather than just adding ARP strategies to traditional portfolios, we see a number of uses for these strategies:

1. For investors looking for diversification to traditional assets at an attractive price point, ARP could be a relevant option, to be considered alongside multi-asset funds. This could include investors who have previously been put off by the higher fees charged by hedge funds.
2. For investors looking to build out a hedge fund allocation, the core building blocks could initially be ARP funds. These could be supplemented and replaced with hedge fund managers who generate alpha over time, or a long-term core/satellite approach could be adopted, with the addition of hedge funds that exploit opportunities not targeted by ARP strategies. It should be noted that the correlation between hedge funds and ARP portfolios is generally low, as hedge funds can generate alpha and

[23] For reference, the 60/40 portfolio has a Sharpe ratio of approximately 0.4 over the period.

may be targeting one or two specific approaches rather than the multi-strategy approach of a typical ARP portfolio.

3. Larger investors may wish to consider a principal component analysis[24] of their existing portfolios to identify certain ARP that may be underrepresented, and allocate to the relevant single sleeves accordingly.

As for the number of ARP funds an investor may wish to allocate to, that will depend on individual circumstances. Due to the inherent diversification with the funds, an allocation to one fund may be sufficient and should contain the governance burden of adding managers to the portfolio. We believe two or three managers is likely to be the optimal allocation, as we expect a significant degree of dispersion within this space, and there are enough nuances in approach from different managers to warrant such an approach. Finally, in terms of how much of a portfolio should be allocated to such strategies that would again depend on individual circumstances and risk/return objectives. However, it should be enough to make a difference[25] and may potentially come from traditional assets for those clients who do not have many diversifiers — or it may come from hedge funds for those who wish to rationalise their exposure or replace some of their hedge funds with ARP funds

Further Considerations

Not all providers are equally equipped to provide a diversified portfolio of risk premia. Some of the details we would consider when looking at these providers are listed below:

Trading is not trivial

Trading costs for these strategies can be significant, depending on a number of factors. First, the underlying instruments being traded; as a general rule, equity-based strategies will usually be more expensive than futures-based strategies. Costs may also depend on the sophistication of both the trading platform and the trading strategy. The trading platform of the manager is important as it needs to be set up to trade large volumes of different instruments at low costs. The sophistication of the trading strategy can also increase or decrease costs. For example, more regular rebalancing will potentially increase costs; however, it may also mean the strategy is at all times more focussed on the specific risk premia it is trying to isolate. A trade-off needs to be made, and previous experience in this space can help the decision-making process.

Strategy smorgasbord

We have only scratched the surface of the available universe of specific ARP. There are many others, which raises the question of how many should be included in a portfolio. Theoretically, continuing to add ARP with low correlation and positive Sharpe ratios to each other in a portfolio should continue to increase the Sharpe ratio of that portfolio, up to a point. However, we prefer to see managers sticking to strategies where they have some experience, expanding the universe only when they have performed appropriate research and have developed a robust strategy. We would prefer managers to target a small number of ARP effectively rather than offer a whole suite of completely generic ARP.

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[24] A principal component analysis will decompose the portfolio into the main set of factors that are driving its returns.
[25] *Go Big or Go Home: A Case for an Evolution in Risk Taking,* Mike Sebastian/Aon Hewitt, June 2012

Devil is in the details

There is no standard implementation of the ARP strategies discussed above. The choice of parameters is at the discretion of the provider. Hence, the same strategy can have wildly different outcomes depending on the construction. Although at face value many of the ARP appear relatively simple, on closer inspection there are a large number of choices to make when implementing a specific strategy. These choices are not only about how to implement specific strategies, but also about how to combine these strategies. For this reason, careful review of strategies and the available offerings is helpful when considering an investment in ARP.

Out-of-sample performance is limited

Most of the providers of ARP have launched diversified products only within the last few years, hence out-of-sample performance is limited. We have observed wide-ranging performance with net realised Sharpe ratios over the last few years, generally anywhere from 0 to above 1 on products that target 5% to 10% volatility. We believe this is more realistic than the backtested Sharpe ratios achieved in the above analysis, but is still compelling.

Strategy crowding

As this area grows in popularity, we believe further assets will flow into these strategies—particularly if they perform well and more providers begin to offer products. There is a question as to whether the strategies will continue to work as effectively in such a scenario. This is outside the scope of this paper and is an issue that should be revisited as the market grows.

Fees

ARP are not classified as alpha strategies and because of this, fees are lower than standard hedge fund fees. Typically, the fees for an ARP product featuring multiple premia would be from 0.7% per annum to 1% per annum management fee and 0% to 10% performance fee, with target volatilities of 6% to 10%. Higher volatility targets will generally command higher fees with the price point similar to multi-asset strategies on a unit risk basis.

Conclusion

Alternative risk premia strategies have exploded in popularity over the last few years driven by an increasing understanding of the demarcation between alpha and beta, and the potential for these strategies to add diversification to traditional portfolios. We are of the view that these strategies can offer sources of return that are different to traditional equities and bonds, at a price point that is appealing compared to hedge funds and competitive compared to actively managed long only and multi asset-strategies. As with other actively managed strategies, care must be taken in the evaluation and selection of these products.

Although these strategies do not provide alpha in the traditional sense, they do provide alternative sources of return, many that are not present in traditional portfolios. There are large discrepancies in implementation and strategy construction, and existing experience and platforms in trading systematic strategies can be an advantage. Going forward, we would expect relatively high performance dispersion within this space, closer to that seen in hedge funds than other actively managed strategies due to large variance in skillsets. Thus, while there is the potential to add significant value, we believe manager selection is critical to successful investing in this area.

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Aon plc/Aon Hewitt Limited
Registered office
The Aon Centre
The Leadenhall Building
122 Leadenhall Street
London
EC3V 4AN

Aon Hewitt Investment
Consulting, Inc.
200 E. Randolph Street
Suite 1500
Chicago, IL 60601
USA

Aon Hewitt Inc./Aon Hewitt
Investment Management Inc.
225 King Street West, Suite 1600
Toronto, ON
M5V 3M2
Canada

Contact Information

Matthew Towsey
Principal Consultant
Retirement & Investment
Aon Hewitt Investment Consulting, Inc.
+44 (0)20 7086 9332
matthew.towsey@aonhewitt.com

Chris Walvoord
Partner
Retirement & Investment
Aon Hewitt Investment Consulting, Inc.
+1.312.381.1748
chris.walvoord@aonhewitt.com

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Bank Capital Relief

October 2018

Empower Results®

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Executive summary

New European banking regulations brought about by the financial crisis have forced banks to take measures to repair their balance sheets and improve their capital ratios. Bank capital relief emerged as a strategy to address this issue. The strategy has features that make it attractive to investors seeking alternative sources of income.

This paper serves as an introduction to the bank capital relief strategy and provides clients with our key thoughts and conclusions.

Our key conclusions are that the bank capital relief strategy:

- Offers the potential for a relatively high and sustainable income of around 8% per annum for investors willing to lock up capital for five years or more
- Should exhibit low performance volatility
- Has low correlation with other illiquid credit opportunities
- Provides sufficient reduction in a bank's capital requirements to support sustainable excess returns versus risk

What is a bank capital relief strategy?

A bank capital relief strategy enables a bank to use capital markets to mitigate some of its risk by buying credit protection on a portfolio of loans. This helps a bank to achieve its regulatory capital requirements by essentially "insuring" a portion of the risk associated with that portfolio, thereby reducing the amount of regulatory capital it is required to hold on its balance sheet. This type of transaction allows the bank to reduce its credit risk without having to sell assets or reduce its lending activity.

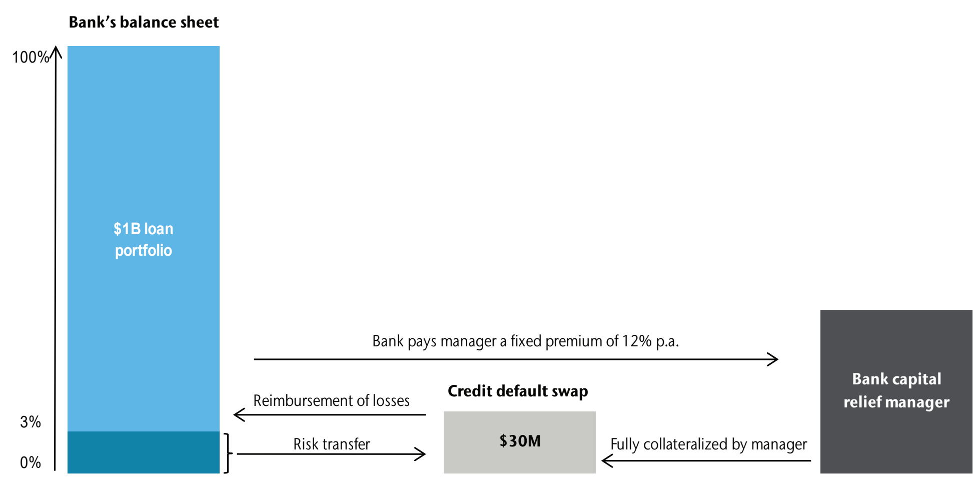
For example, a common type of bank lending provides revolving loan facilities to large companies with the flexibility to draw down capital if needed. These types of loans typically carry high regulatory charges even though they tend to be unprofitable for the bank because the company may not use the facility. A bank is therefore often willing to pay a significant premium for a bank capital relief transaction, since the impact on its return on equity can be substantial. Also, it allows the bank to maintain strategically important borrower relationships.

The opportunity set for this strategy is already meaningful—and driven by regulatory pressure on the banking industry, particularly in Europe, where banks have lagged their U.S. counterparts in selling non-core assets and reducing debt on their balance sheets. Since the financial crisis, regulators have forced banks to increase their balance sheet reserves to meet the required regulatory capital ratios; the potential size of the market is therefore significant. At present around 30 banks have entered into these transactions. The size of the market is estimated at around $26 billion, and is growing rapidly with $8 billion of this issuance in 2017 alone.

The conventional ways to reduce a bank's regulatory shortfall include issuing equity, reducing lending or selling assets. The attraction for the bank of a regulatory capital strategy is that it offers a reasonably non-invasive due diligence process and transaction structure, which allows the bank to maintain relationships with valued borrowers while improving the equity returns on its balance sheet.

The diagram below shows the outline of a typical bank capital relief transaction. The investor agrees with the bank on a portfolio (pool) of loans on the bank's balance sheet that is eligible for risk sharing. The lending can include short-term (60–90 days) trade finance loans or longer-term (around five years) loans to corporates, often small to medium enterprises (SMEs) in Europe. Of this loan pool, the investor will typically provide protection for the first or second loss tranche, with the bank often retaining the first portion (for example, 1%) of losses and the senior tranche. It is preferable that transactions are structured such that the bank retains some of the credit risk to ensure an alignment of interests between the bank and the investor, often meaning the bank is the first to "feel the pain" when there is a credit loss.

Diagram 1: Illustrative example of bank capital relief transaction



Source: Aon, September 2018

The transaction is structured in the form of a credit default swap with the full notional amount of the investment transferred to a separate account that represents the maximum loss investors could incur, often held with a third-party custodian. The bank then pays a fixed premium for the term of the agreement, paid annually in advance, for terms of about five years. At the end of the term, the manager receives back the full notional amount less any losses on the reference portfolio. The net result for the investor is the premium minus the realized default losses. Other risks, such as currency risk, interest rate risk and counterparty risk, are mitigated through this structure.

The terms of the transaction will be agreed upon by the bank and the investor, and can include strict parameters on the loans that are eligible for inclusion in the pool. The choice of which loans are eligible can be made on a disclosed basis, where the investor knows the exact names of the borrowers, or on a blind pool basis, where the investor does not know the borrower identities but knows the overall characteristics of the pool—such as asset type, sector, geography and credit risk. Particular attention is paid to a bank's underwriting practices and historic loss experiences within its lending business. As such, due diligence on both the bank and the underlying portfolio is critical, as is the assessment of appropriate pricing for the assets. Hence, the only realistic way for our clients to access this opportunity would be via an experienced manager.

Bank capital relief may be compared to other forms of bank disintermediation such as securitization or direct lending; however, there are very clear distinctions. The key difference is that the loans are not being sold by the bank and instead remain on its balance sheet, unlike an asset-backed security where the loans are transferred to a special purpose vehicle, or in direct lending where the investment manager is underwriting loans to companies generally not served by banks.

The strategy enables institutional investors to obtain exposure to corporate borrowers they wouldn't otherwise be able to access, since these are the loans the banks want to retain on their balance sheets.

Table 1: The key differences between bank capital relief, direct lending and collateralized loan obligations:

	Bank Capital Relief	Direct Lending	Collateralized Loan Obligations
Purpose for bank	Regulatory equity optimization	Bank disintermediation	Reduce balance sheet
Typical asset types	Corporate exposures, SME lending, trade finance	Corporate loans	Corporate loans
Number of investments	5–10 transactions	25–60	Varies
Fund term	5 years	5 years	Open-ended
Target returns (net of fees)	8–11%	6–10%	LIBOR + 0.5%–12%
Income distributed?	Yes	Yes	Yes
Volatility	Low NAV volatility expected	Low NAV volatility expected	Medium NAV volatility
Credit risk	Varies	Below investment grade (IG)	Varies
Rate sensitivity	Low	Low	Floating rate
Target fund size	\$200–\$750 million	\$200–\$5,000 million	\$200–\$1,000 million
Fees	100bps and performance fee with preferred return	75–150bps and performance fee with preferred return	50–150bps
Leverage	Unlevered	Unlevered or levered options	Unlevered

Source: Aon, September 2018

Role within a portfolio

We think there is a strong case for an investment in this strategy for those clients who can give up medium-term liquidity. We consider bank capital relief strategies to be income-generating strategies for comparison and evaluation alongside other enhanced income opportunities. Some of their advantages:

- **The potential of a relatively high and sustainable income.** The upside for the banks, in terms of the reduction in their tier 1 capital requirements, drives the argument for excess returns versus risk.
- **Low correlation to other credit strategies.** The strategy's return will be derived almost entirely from the income generated from the pre-agreed premium. The risk sourced by the approach is largely uncorrelated to credit risk from other strategies that rely on the capital markets for asset sourcing. In addition, even for clients that have exposure to direct lending to companies in Europe, this strategy offers diversification since it provides exposure to a diverse set of corporate borrowers.
- **The strategy features low performance volatility.** The primary risk of the strategy is losses that are significantly greater than expected in the reference portfolios on which the fund sells protection. However, even during the last major recession, there was no substantial increase in defaults on corporate loan portfolios.
- **The bank capital relief strategy is conceptually quite simple, even though the structure of the transaction can be complex.** An investor receives a premium from taking credit risk on a selected portfolio of loans from a bank up to a pre-agreed amount.
- **This is an illiquid investment opportunity,** typically implemented via closed-ended funds with terms of five years or more. There is no secondary market at present, so no liquidity can be provided unless matching interest is eventually found in the market. The transactions are themselves self-liquidating.

Potential considerations

As with any investment, there are certain risks and details that investors should consider when looking at bank capital relief funds.

The primary risk of the strategy is losses that are significantly greater than expected in the reference portfolio on which the fund sells protection. When accumulated losses exceed the attachment point retained by the bank, the investor will automatically start to experience capital erosion; i.e., the investor's exposure is not linear with the default losses on the overall loan portfolio. Ultimately, investor returns depend on how much these losses erode the transaction capital and on the annual default rate of the underlying portfolio. However, this capital loss is partly compensated by the premiums paid over the term of the transaction.

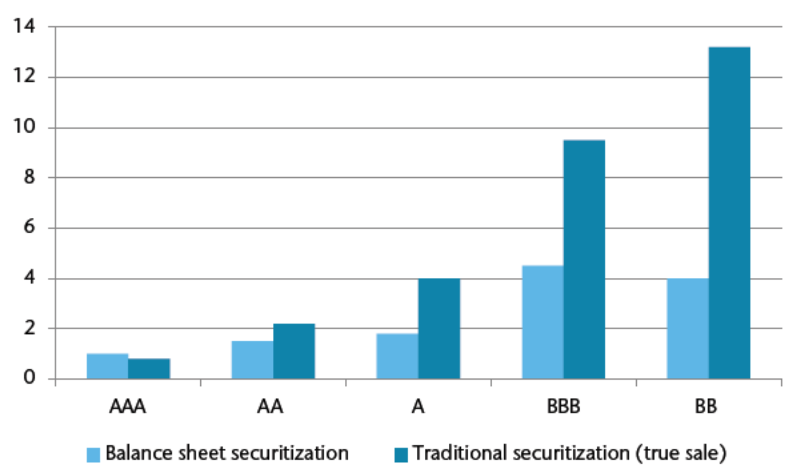
Clearly there is obvious potential for adverse selection in the choice of the loan portfolio. This risk is mitigated to some extent by the manager conducting thorough due diligence on the bank on which it intends to transact. Pre-investment analysis includes but is not limited to an assessment of a bank's internal credit rating system, the bank's credit process, the robustness of the bank's underwriting and lending platform, and the client base in terms of industry, country and credit instruments used. This risk can be further mitigated by ensuring that the reference portfolio of loans is a reflection of the bank's core lending activity, such that there is some assurance that the bank will continue to service the whole book being referenced.

Transactions are impacted only by real losses in the portfolio; mark-to-market fluctuations do not create losses for the investors. In the case of default, recoveries and their timing are tied to actual workouts undertaken by the bank (usually longer than banks estimate—but the investor is still paid during this period). Unlike leveraged loans or high-yield bonds, core SME borrowers (typically German family-owned firms) and trade finance have shown a strong willingness to pay, and defaults have exhibited low volatility over the cycle.

Data on historical loss and default performance is more difficult to gather for bank capital relief portfolios, as most transactions are not public and are often unrated. Data provided by the managers we have researched estimates the annual expected loss for the corporate loan portfolios they reference to be in the range of 0.3% p.a. to 0.9% p.a. The losses for the associated bank capital relief trades depend on the details of how the transaction is structured.

The European Banking Authority's report on "synthetic" securitization, as bank capital relief is often referred to, shows that the default rate compares very favorably to "true sale" securitization whereby the bank actually sells off the assets in a structure such as collateralized loan obligation ("CLO").

Figure 1: Lifetime default rate as of 2014 (%); ratings issued from 2000



Source: European Banking Authority

Even following the financial crisis in 2008, the losses on these loan portfolios peaked at 0.8% versus the losses of 3.6%[1] on all rated corporate credit instruments. This illustrates the resilience of corporate loans versus corporate bonds during periods of market stress.

[1] *Moody's Corporate Annual Default Rate Survey 2017*

Case ID: 210601197

While we must treat these figures with caution, it does appear that unexpected losses represent an extremely stressed scenario such that there would have to be an unprecedented level of defaults to result in poor returns. In addition, if the bank itself were to default, then the transaction would unwind and the investor would receive its capital back, although any further premium payments would obviously not be received.

Conclusion

We believe bank capital relief strategies can aid diversification within a portfolio and allow investors to access an attractive level of income of that is significantly uncorrelated with traditional equities and fixed income.

An allocation to bank capital relief is especially appealing for investors that do not currently have an allocation to private debt, but should also complement existing investment in strategies such as direct lending and real estate debt.

An increase in capital flows to this space has had an impact on premiums, and banks now have a wider number of specialist managers with whom to transact. However, there are still attractive premiums in the double digits to be earned.

As with actively managed strategies, care must be taken when evaluating and selecting a bank capital relief manager. The strategy remains niche and in our view requires a specialist skill set with considerable experience implementing and structuring these transactions. We believe manager selection is therefore critical to successful investing in this area.

Contacts

Alison Trusty
Senior Consultant
Aon
+44 (0)20 7086 7166
alison.trusty@aon.com

Chris Walvoord
Partner & Global Head of Hedge Fund Research
Aon
+1.312.381.1748
chris.walvoord@aon.com

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Direct Lending: An Investment Opportunity Within Private Debt

March 2018

Empower Results®

Executive Summary

- This paper discusses direct lending, a growing segment of the private debt market, which Aon Hewitt Investment Consulting, Inc. (AHIC) believes could be a potential fit for certain portfolios.
- Private debt includes a wide range of illiquid credit strategies, including distressed debt, direct lending, mezzanine debt, special situations, and venture debt.
- U.S. banks have significantly scaled back their middle-market lending activities post-2008 and the subsequent introduction of more stringent banking regulations. Since the beginning of 2009, we have seen European banks restrict their middle-market lending activities as well. The lack of “traditional” bank lending in this space has created the opportunity for attractive risk-adjusted investment opportunities.
- Direct lending strategies are typically accessed by investors through closed-ended vehicles with an expected life of seven to 10 years. Because of the illiquid nature of small- and middle-market loans—which are the segments of the market primarily targeted by direct lending strategies—our capital market assumptions for a typical leveraged direct lending fund has similar expected returns as public equity.

Market Overview

What Is Private Debt?

Private debt can be broadly defined as any non-publicly traded debt financing of a company and typically references companies in the small- and middle-market segment. The debt of large-market companies is more commonly traded in the public markets. Private debt includes a wide range of investment strategies, which offers investors access to a broad opportunity set that is capable of meeting varying risk/return goals. While private debt may be considered a stand-alone asset class today, many of the underlying investment strategies are not new to institutional investors and have historically been classified under different asset classes such as private equity, hedge funds, and real estate. Investment strategies that fall within the private debt asset class include distressed debt, direct lending, mezzanine debt, special situations, and venture debt. This paper will focus on direct lending, which is defined as the origination of loans by nonbank lenders to primarily non-investment-grade small- and middle-market companies.

Macro Trends Impacting Private Debt

Within the U.S., we see increased demand for alternative investments among institutional investors, including driving growth across the private debt segments. Historically, distressed debt investment strategies have accounted for the largest portion of annual fundraising within the private debt asset class. This trend has shifted over the past several years as direct lending strategies have accounted for a larger portion of fundraising. As shown in Exhibit 1, Preqin[1] reported that private debt funds raised an aggregate $92.6 billion of capital globally in 2016 with direct lending funds accounting for $23.2 billion of the aggregate capital.[2] Demand for capital from nonbank lenders continues to increase as private equity dry powder has reached unprecedented levels. In contrast to the U.S., European middle-market lending remains a bank-dominated market with approximately 80% of the lending market share held by banks. However, direct lending has grown significantly as an asset class in Europe over the past several years as banks have reduced lending volumes, particularly to middle-market companies.

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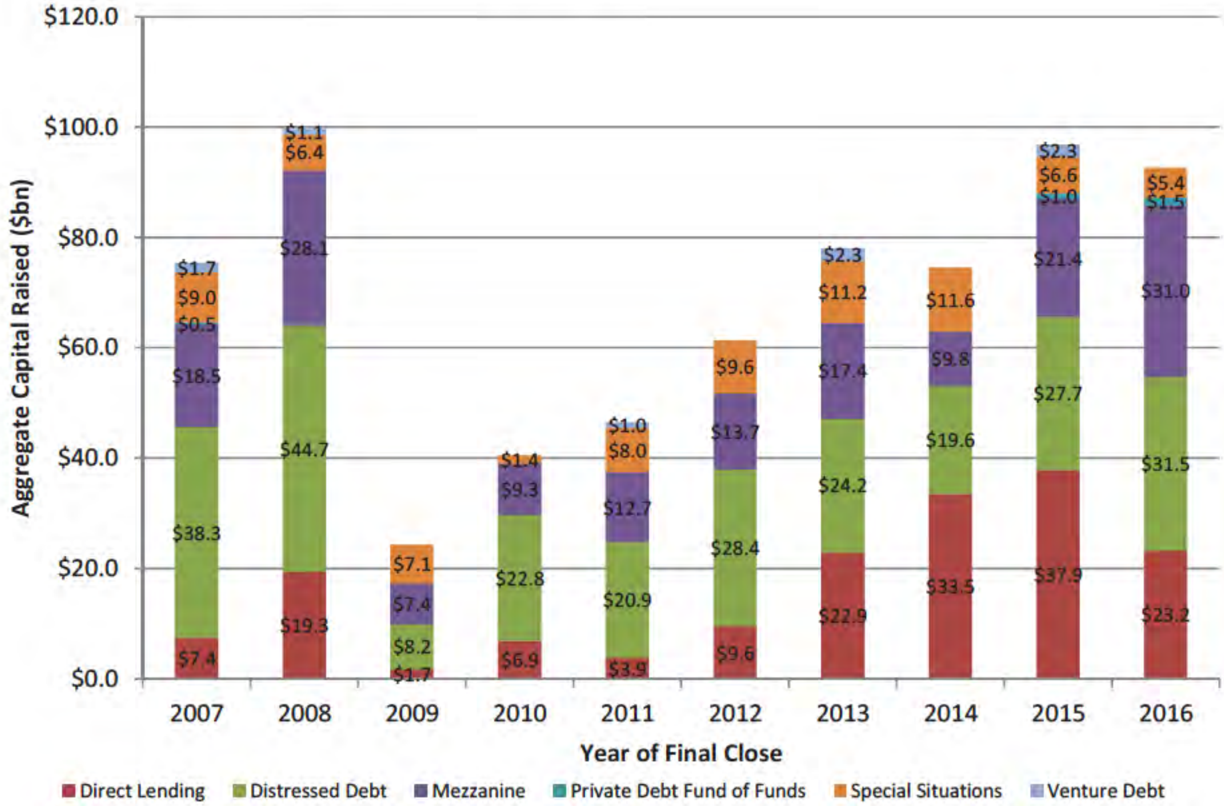
[1] Preqin provides data and information on the private equity, real estate, hedge fund, infrastructure, private debt, and natural resources asset classes at preqin.com.
[2] 2017 Preqin Global Private Debt Report.

Exhibit 1: Annual Private Debt Fundraising by Type



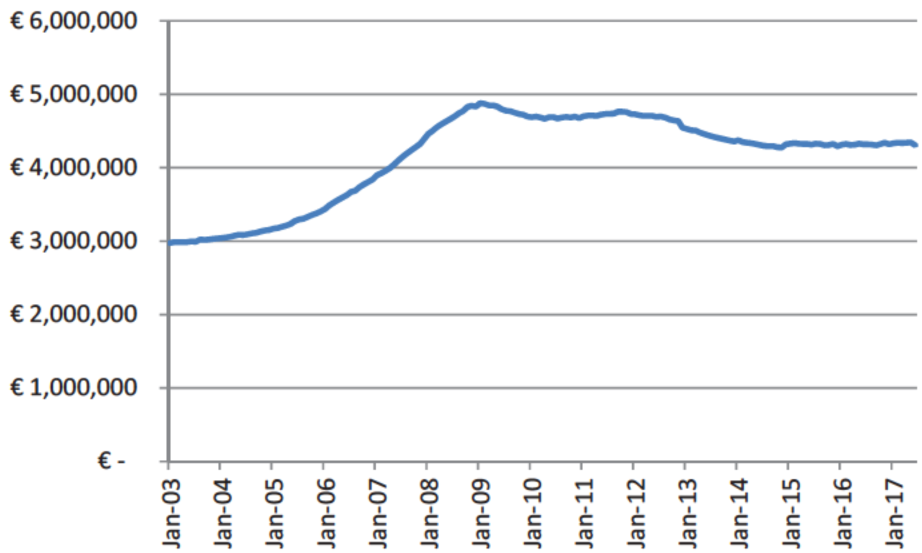
Source: 2017 Preqin Global Private Debt Report

Direct lending experienced significant growth in capital raised between 2009 and 2015. While capital commitments to direct lending funds declined significantly in 2016, the fundraising outlook remains promising for this segment of private debt. Preqin reported that 129 direct lending funds were in the market targeting an aggregate of $50 billion of capital as of the beginning of 2017.[3]

The political, economic, and regulatory backdrops point to nonbank lenders maintaining or growing market share in the U.S. and particularly in Europe.[4] However, banks have not disappeared entirely from middle-market lending. As shown in Exhibit 2, banks remain active in senior debt lending despite being constrained by the size of loan they can make.[5] Some banks work with direct lenders to co-originate loans, while others have developed loan referral arrangements with direct lenders as they look to retain profitable nonlending relationships with borrowers. Still other banks have sold loan portfolios to direct lenders, enabling the latter to build scale quickly.

[3] 2017 Preqin Global Private Debt Report.
[4] Governments and regulators globally have introduced rules to make the financial system more robust and stable coming out of the recent financial crisis, including implementing the Dodd-Frank Act (U.S.) and Basel III (Europe).
[5] European Central Bank.

Exhibit 2: Eurozone Bank Lending to Nonfinancial Corporates (€mn)



Source: European Central Bank

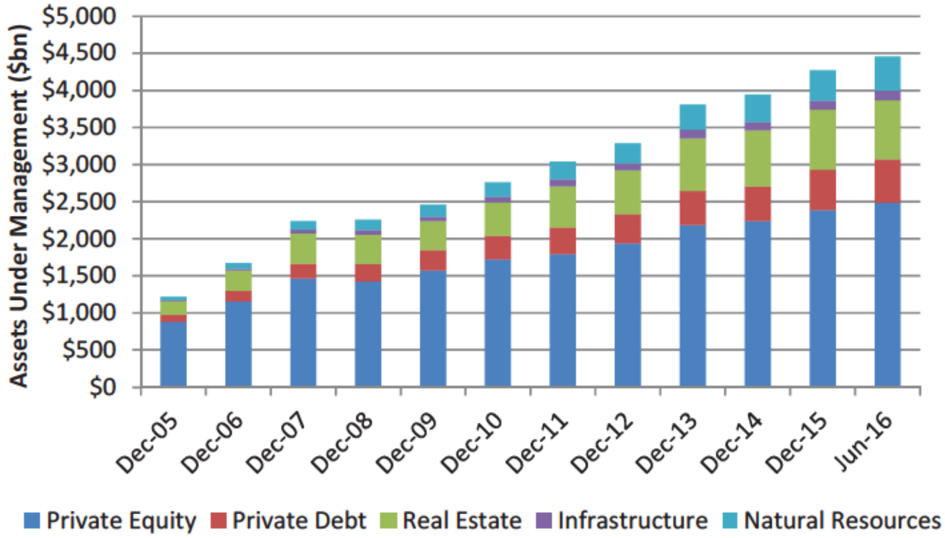
We believe direct lending will continue to be a significant portion of private debt moving forward given the shift from banks to nonbanks that has occurred within the U.S. middle-market leveraged lending market and is occurring within Europe as well. In addition, we believe direct lending will be less cyclical in nature when compared to distressed debt, mezzanine debt, and special situations. The remainder of this paper focuses on direct lending as an investment opportunity.

Rise of Direct Lending

There has been significant growth in interest for private debt over the past decade as shown in Exhibit 3, with assets under management increasing from approximately $90 billion in 2005 to approximately $590 billion in 2016.[6] Private debt assets under management accounted for approximately 13% of all private capital assets under management as of June 30, 2016.[6] We have seen a significant increase in fundraising for direct lending investment strategies, which accounted for slightly more than 25% of all private debt assets under management as of June 30, 2016. In 2007, direct lending accounted for less than 10% of all private debt capital raised.[6]

[6] Preqin.

Exhibit 3: Private Market Assets Under Management by Asset Class



Source: Preqin

Direct lending has existed for decades in the U.S., and it has been slowly growing in scale since the 1990s as banks' share of corporate loans began to shift to nonbank financial sources.[7] As a result, small- and middle-market companies have increasingly been able to look toward nonbank lenders to finance their business needs. We saw a tremendous jump in this trend post-2008 and the global financial crisis as banks quickly retreated from their lending businesses, which allowed nonbank lenders to significantly gain scale in a short period of time. Flexibility is one aspect of direct lending strategies that should allow nonbank lenders to keep hold of their market share gains in the future.[8]

Loan Structures

There are various loan types targeted by direct lending strategies, including the following:

- First lien loans (or senior secured loans)
- Unitranche loans (or one-stop loans)
- Second lien loans
- Mezzanine debt (or subordinated debt)

The most common loan type originated through a direct lending strategy is a senior secured loan, which pays a floating rate coupon and matures in five to seven years. Borrowers typically pay upfront fees or issue at a discount to par, which enhances returns for investors. Senior secured loans often will include a covenant package, which gives the lender specific rights of action should a borrower's financial profile deteriorate. Financial

[7] "The Importance of the Nonbank Financial Sector", remarks by Stanley Fischer, Vice Chairman, Board of Governors of the Federal Reserve System, March 27, 2015 (federalreserve.gov).

[8] Flexibility in this instance references the ability of nonbank lenders to provide financing solutions to borrowers that encompasses the entire debt portion of the capital structure, including first lien loans, unitranche loans, second lien loans, and mezzanine debt.

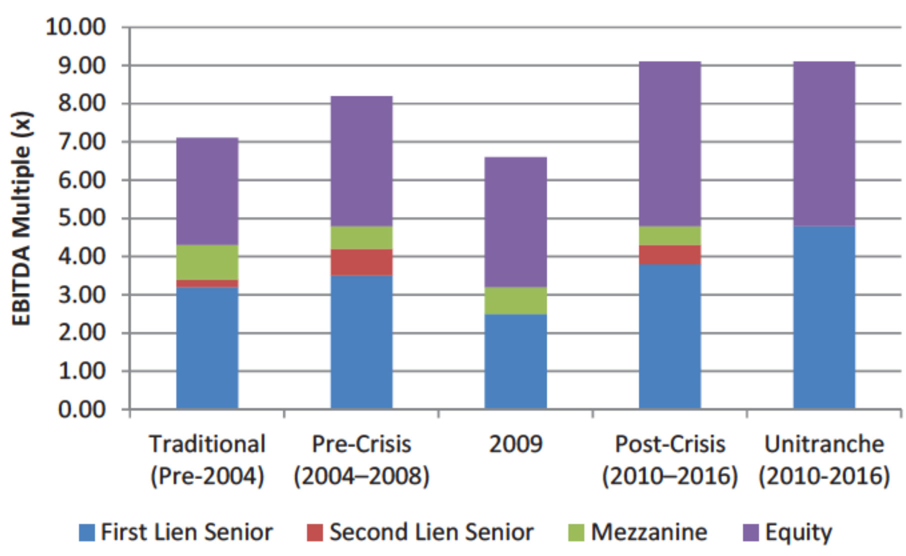
covenants may incentivize a borrower to focus on financial discipline and prevent them from pursuing business strategies that may result in an increase in leverage on the balance sheet.

Mezzanine debt and second lien loans do not offer the same structural protection as senior loans, are issued at higher leverage multiples, and, consequently, are issued with significantly higher coupons relative to senior loans. In some cases, mezzanine loans are issued with a combined cash pay and payment-in-kind coupon. Some direct lending strategies that focus on senior secured loans also will permit investment in non-senior secured loans to a limited extent.

Historically, the capital structure of a middle-market company would have included a strip of mezzanine debt below the senior debt tranche; however, we have seen an evolution in the market to unitranche structures in recent years. Unitranche loans are becoming an increasingly popular route of financing middle-market companies. These are senior secured loans that are issued at higher leverage multiples compared to “traditional” senior loans and effectively blend a combined senior and junior loan structure into one loan.

In our opinion, there are advantages for borrowers to go down the unitranche loan route. These include the lower administrative burden of having to issue just one loan (potentially to one investor) and the speed of executing a transaction. Unitranche loans typically offer higher coupons compared to traditional senior loans on account of higher leverage levels. Illustrative capital structures are shown in the chart below. The chart shows that post-crisis capital structures exhibit lower leverage (on a percentage basis) on average as compared to pre-crisis capital structures.

Exhibit 4: Evolution of Middle-Market Capital Structures



Source: S&P Global Market Intelligence, Leveraged Commentary & Data M&A Stats, December 2016.

Competitors

Historically, nonbank lending has been dominated by several types of players, including collateralized loan obligations (CLOs), specialty finance companies, business development companies (BDCs), and hedge funds.

- CLOs use funds received from the issuance of debt and equity to acquire a diverse portfolio of senior secured bank loans. U.S. CLO issuance tends to be cyclical and has declined significantly from its high in 2014 as new banking regulations around risk retention have made investing in the middle-market less appealing for many CLO managers.
- Increasing banking regulations have also impacted the ability of specialty finance companies, such as GE Capital, to lend to middle-market companies.
- BDCs provide financing for small- and middle-market companies and generally provide investors, who purchase shares in the BDC, more liquid access to private credit than the traditional private equity-style funds through either publicly traded vehicles that are listed on an exchange or unlisted, nontraded vehicles. BDCs are dependent on equity markets to raise growth capital, and the vast majority of the vehicles are facing share prices that trade below their net asset value (NAV), which leaves them unable to raise new capital from investors.
- Poor performance and redemptions from hedge funds during the global financial crisis resulted in many managers stepping back from direct lending as the asset/liability mismatch with the open-ended vehicle forced hedge managers looking to remain active in direct lending to shift to a more private equity-style closed-ended vehicle. All together, this adds up to less competition for private, equity-style direct lending vehicles in the current environment.

Investment Considerations

Return Expectations

Middle-market loans typically offer a spread premium as well as higher upfront fees (or original issue discount) compared to broadly syndicated leveraged loans. The spread premium comprises (1) an illiquidity premium as middle-market loans are typically buy-and-hold investments; and (2) a "smaller company" risk premium. Loans sometimes have LIBOR[9] floors, which may bolster returns in a low-rate environment, as well as call protection features. Some managers have the ability to purchase broadly syndicated loans if attractive investment opportunities present themselves. For example, some direct lenders have taken "anchor" stakes in hung syndications (where the underwriting investment banks have been unable to sell a deal) buying broadly syndicated loans at a significant discount.

Performance is difficult to benchmark for direct lending managers as currently there is no public index that tracks the middle-market private loan space. Most middle-market loans are extended to companies that are too small for U.S. market analysts to efficiently cover and track. As well, most of the loans originated through direct lending strategies will be held by the lenders and not made available on the secondary market—essentially there is no secondary market for middle-market loans today.

The industry has used the public market indices tracking broadly syndicated loans as a proxy for direct lending strategies. While the broadly syndicated loans are similarly focused on the senior tranches like middle-market loans, the companies included in the indices are much larger (generally borrowing greater than $100 million) and the loans are typically traded on the open market and not held to maturity. We certainly recognize the differences between the broadly syndicated loans and middle-market loans—but with correlations greater than 0.9, there is enough similarity to warrant the comparison.

[9] The London Interbank Offered Rate (LIBOR) is a benchmark rate many of the world's leading banks charge each other for short-term loans.

Exhibit 5: Actual Correlation Matrix (10 Years Ending June 30, 2017)

	Cliffwater Direct Lending Index	S&P/LSTA Leveraged Loan Index	Credit Suisse Leveraged Loan Index	Bloomberg Barclays U.S. Aggregate Bond Index	BofA Merrill Lynch Global High Yield Index	Russell 3000 Index + 300 bps
Cliffwater Direct Lending Index	1.0000					
S&P/LSTA Leveraged Loan Index	0.7751	1.0000				
Credit Suisse Leveraged Loan Index	0.8043	0.9966	1.0000			
Bloomberg Barclays U.S. Aggregate Bond Index	(0.3119)	(0.2112)	(0.2307)	1.0000		
BofA Merrill Lynch Global High Yield Index	0.7081	0.9155	0.9130	(0.0456)	1.0000	
Russell 3000 Index + 300 bps	0.7049	0.6882	0.7177	(0.2914)	0.7819	1.0000

Source: Aon Monthly Benchmark and Index Report and Cliffwater Direct Lending Index Report (cliffwaterdirectlendingindex.com).

Our current long-term (10-year), forward-looking assumptions for a typical leveraged direct lending fund have similar net-of-fee expected returns as public equities.[10] This reflects a 1-2% illiquidity premium (yield spread over bank loans), which is lower than it has been historically. We believe private debt remains attractive relative to broadly syndicated loans.

Exhibit 6: Manager Survey of Market Yields (As of December 31, 2016)

	U.S.	Europe
Senior Debt	LIBOR+475-600 bps	LIBOR+500-650 bps
Unitranche Debt	LIBOR+650-800 bps	LIBOR+700-800 bps
Mezzanine Debt	LIBOR+850-1300 bps	LIBOR+850-1100 bps

Source: AHIC surveyed four direct lending managers that had either been Buy rated previously or selected to manage separately managed accounts on behalf of Aon clients for their market pricing experiences as of December 31, 2016.

[10] The opinions referenced are as of the date of publication and are subject to change due to changes in the market or economic conditions and may not necessarily come to pass. Information contained herein is for informational purposes only and should not be considered investment advice.

The table below highlights historical performance of direct lending relative to several public market indices. As shown, direct lending has consistently generated alpha relative to the broadly syndicated loan indices and the broad fixed income markets.

Exhibit 7: Comparative Performance (as of June 30, 2017)[11]

	1 Year	3 Years	5 Years	10 Years	15 Years
Cliffwater Direct Lending Index	10.41%	8.28%	10.13%	9.01%	8.24%
S&P/LSTA Leveraged Loan Index	7.42%	3.35%	4.58%	4.49%	5.03%
Credit Suisse Leveraged Loan Index	7.49%	3.49%	4.83%	4.16%	5.00%
Bloomberg Barclays U.S. Aggregate Bond Index	-0.31%	2.48%	2.21%	4.48%	4.48%
BofA Merrill Lynch Global High Yield Index	12.40%	3.34%	6.88%	7.37%	9.14%
Russell 3000 Index + 300bps	22.01%	12.35%	17.98%	10.46%	11.90%

Source: Aon Monthly Benchmark and Index Report and Cliffwater Direct Lending Index Report (cliffwaterdirectlendingindex.com).

Risks Associated With Direct Lending

The primary risks associated with direct lending strategies are credit, interest rate, illiquidity, and regulatory risk.

Credit Risk

Credit risk references the likelihood that a borrower will default in the payment of principal and/or interest. Credit risk is something that many fixed income investors face, particularly those investing in lower-quality investments. Credit risk is higher for direct lending strategies compared to traditional broad market fixed income strategies given that the focus in direct lending strategies is on below-investment-grade issuers. Credit risk will vary depending on the loan type. For example, a traditional first lien senior loan would have less credit risk associated with it than a unitranche loan (a combination of the first lien and second lien debt tranches), which carries less credit risk than a mezzanine debt or subordinated loan. Credit risk will also be driven by underlying business risks such as customer concentration, cyclicality, product obsolescence, quality and experience of management, etc. As part of the underwriting process, direct lending managers assess financial and business risks and seek to structure their loans in a manner that appropriately aligns the expected return from the loan with the perceived risk.

Direct lenders, and especially those taking a controlling stake in a loan, can structure a loan that affords them certain rights should a borrower's financial condition deteriorate. Direct lenders may also be able to negotiate a board seat or board observer seat with the borrowing entity, which gives the lender additional oversight. In the event of a default, the senior lender may be able to take control of the restructuring and equitize their position within the company's new capital structure with a view toward selling the business rather than being forced to liquidate the underlying assets. S&P Capital IQ's Leveraged Commentary & Data (LCD) has produced default statistics for the U.S. leveraged loan market that show a lower default rate and higher recovery rates for middle-market borrowers compared to the broadly syndicated loan market. In Europe, default statistics are not widely available largely due to this being a nascent strategy.

[11] Past performance is no guarantee of future results. Unmanaged index returns assume reinvestment of any and all distributions and do not reflect our fees and expenses. Your actual returns will be reduced by your advisory fees and other expenses you may incur as a client.

Interest Rate Risk

Interest rate risk (also known as duration risk) references the measure of sensitivity to valuation changes from interest rate movements. As interest rates change, they may affect the value of outstanding debt. Generally, rising interest rates will negatively impact the price of a loan, and falling interest rates will positively impact the price of a loan. Floating rate debt, which is the most common approach used by direct lending managers, reacts to interest rate changes in a similar manner, although typically to a lesser degree. Floating rate debt reduces the duration risk associated with a rising rate environment. Interest rate sensitivity is generally larger and less predictable in debt with uncertain payment or prepayment schedules. In addition, direct lending strategies are not actively traded portfolios; therefore, duration risk is less of a factor as it would be in a more liquid fixed income portfolio.

Illiquidity Risk

In the majority of cases, private debt investments either directly originate from or are purchased through a secondary transaction and held until maturity (or a repayment event). In a distressed situation, loans are typically held until bankruptcy or a restructuring event occurs that provides an exit opportunity either through the debt or because of a newly structured equity position. There is limited ability to trade these loans on the public market due to the fact that issuers are generally small and consequently not well-known. Lenders have to perform lengthy due diligence to familiarize themselves with an issuer as there will typically not be third-party research (e.g., rating agency or investment bank credit reports) available to assist them as part of their investment process. Moreover, loan documentation can be complex and differ considerably across the middle-market loan universe.

The typical private debt strategy will be structured such that its fund life terminates after 10+ years due to the illiquid nature of the hold-to-maturity style of the underlying strategies. In situations where there is an event prior to the loan reaching maturity, private debt strategies are designed to maximize value for investors through operational and/or financial support that may take several years to result in a desirable outcome. Direct lending strategies are typically structured such that the fund life terminates within six to eight years, on average. The shorter lifecycle for direct lending strategies is yet another reason why their popularity has increased in recent years.

Exhibit 8: Direct Lending Terms vs. Other Private Debt Terms

	Direct Lending	Other Private Debt (Distressed/Special Situations)
Fund Term	6–8 years, on average	10 years, on average
Investment Period	1–3 years	3–5 years
Liquidity Provision	None; underlying loans mature in 5–7 years; underlying loans typically repaid within 1–3 years	None; underlying investments vary in terms of maturity
Distributions	Income distributed quarterly; principal distributed as investments mature or repayment occurs	Income distributed quarterly; principal plus proceeds distributed as investments mature or an event occurs
Recycling Provision[12]	Yes; during the investment period	Yes; applies only to investments returned within 18–24 months of the date of acquisition
Leverage Usage	Yes; typically 0.5:1.0 to 2.5:1.0	Yes, typically up to 1.0:1.0

Source: Summary of market intelligence gathered by AHIC research team through normal course of diligence.

Regulatory Risk

Regulatory risk refers to the potential impact that legislative or regulatory changes involving the U.S. or European capital markets, banking industry, and investment fund industry could have on direct lending strategies. Any changes that could potentially impact income tax rates with respect to income expected to be generated by direct lending strategies may have a material effect on the after-tax returns of investors in direct lending strategies. Typically, there is a period of time allowed before any legislative or regulatory changes take effect that provides investors some time to consider whether the impact would offset the potential attractiveness of an investment in a direct lending strategy.

Role in Portfolios

While strategies such as direct lending may offer returns with relatively low levels of market risk compared to equities, the lower return target can be a drag on returns within a traditional private equity portfolio. That said, investors have typically funded private debt allocations from their private equity or other alternative strategy allocations. We are aware of a number of large institutional investors who have classified their direct lending strategies either as an illiquid fixed income allocation or as part of a stand-alone private debt or opportunistic credit portfolio. Investors should give careful consideration to the timing of investments given the closed-ended nature of the asset class.

In terms of how direct lending should be categorized within portfolios, we believe lower-return target strategies (e.g., senior only or unitranche direct lending) are best considered as fixed income-alternative strategies that should be bucketed in a separate private debt or opportunistic credit portfolio or as an illiquid fixed income allocation. Whereas, we believe higher-return target strategies (e.g., mezzanine, distressed debt, and special situations) are best bucketed within a more traditional private equity portfolio.

[12] A recycling provision is intended to allow a general partner to recycle (or reinvest) the capital invested in an investment that is exited within a defined period of time.

Before committing to a direct lending fund, investors need to give some thought to the liquidity profile of the assets that will be liquidated to fund drawdowns during the investment period. The nature of those assets will, to some extent, depend on tolerance to risk (e.g., if risk tolerance is low, drawdowns could be funded from cash accounts or low-risk absolute or total return bond funds). If investors fund direct lending drawdowns directly from more volatile asset classes such as equities, they could be subject to increased market risk and, hence, the possibility that they could be forced to sell equities during an unfavorable period of time.

Access to Opportunity

In the U.S., investors can invest in direct lending through multiple vehicle types, including limited partnerships, CLOs, and BDCs. In addition, most direct lending strategies within the U.S. tend to employ leverage to enhance returns. There is no comparable BDC market in Europe; hence, investors invest mainly through limited partnerships. Limited partnerships are closed-ended vehicles offering zero liquidity, and an investor's capital is therefore locked away for the term of the fund, which is approximately six to eight years (and may be up to 10 years in some instances). Fees comprise a combination of a management fee, which can be based on invested or committed capital, and a performance fee (carried interest), which is paid to the manager once a hurdle rate has been achieved for investors.

Exhibit 9: Private Equity Vehicle vs. Liquid Alternative Vehicle

	Private Equity Vehicle (Less Liquid)	Liquid Alternative Vehicle (More Liquid)
Fund Term	6–8 years, on average	5 years or less
Investment Period	1–3 years	1–2 years
Management Fee	1.00%–1.50% on invested capital[13]	1.00%–2.00% on invested capital
Incentive Fee (Carried Interest)	10%–20%	15%–20%
Hurdle Rate (Preferred Return)	5%–8%	5%–8%
Liquidity Provision	None	90-days' notice; liquidity provided as loans are repaid
Distributions	Income distributed quarterly	Income distributed quarterly
Recycling Provision[14]	Yes; during the investment period	Yes; details can vary
Leverage Usage	Yes; typically 0.5:1.0 to 2.5:1.0	Yes, but not typical

Source: Summary of market intelligence gathered by AHIC research team through normal course of diligence.

As direct lending gains acceptance by the institutional investor universe, global funds are becoming more common and offer a wider investment opportunity set for managers. It is important for managers to have sufficient scale and expertise on a global basis to ensure that they are able to source high-quality loans.

[13] Invested capital typically refers to the sum of the aggregate amount of capital contributions made by a limited partner less any capital contribution refunds and less any capital contributions returned with respect to realized investments. Invested capital does not typically include capital contributions for the payment of management fees and organizational expenses.

[14] A recycling provision is intended to allow a general partner to recycle (or reinvest) the capital invested in an investment that is exited within a defined period of time.

Conclusion

AHIC believes that for many portfolios, investing in private debt—and more specifically in direct lending—could be beneficial. Careful manager selection remains paramount, as is awareness of the potential risks, for building a successful portfolio. In summary:

- The current market dynamics are favorable for direct lending as historical players are leaving the market, driven partially by shifting regulations.[15]
- Certain investors may find that direct lending offers attractive risk-and-return characteristics relative to other private debt strategies.
- Direct lending may provide a stream of current income.
- Middle-market loans have historically generated lower default rates and higher recovery rates than broadly syndicated loans.
- Direct lending offers investors a substitute for traditional fixed income (if current income is a goal), but investors must be willing to accept illiquidity and understand there is little potential for capital appreciation through such a strategy.
- Manager selection is key to success as the market offers a range of risk/return expectations.

[15] The opinions referenced are as of the date of publication and are subject to change due to changes in the market or economic conditions and may not necessarily come to pass. Information contained herein is for informational purposes only and should not be considered investment advice.

Cliffwater Direct Lending Index: An index that seeks to measure the unlevered, gross of fee performance of U.S. middle market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements. The CDLI Total Return Index includes three components: Income Return, Realized Gain/Loss and Unrealized Gain/Loss.

S&P/LSTA Leveraged Loan Index: An index designed to track the market-weighted performance of the largest institutional leveraged loans based on market weightings, spreads and interest payments.

Credit Suisse Leveraged Loan Index: An index designed to mirror the investable universe of the U.S. dollar denominated leveraged loan market.

Bloomberg Barclays U.S. Aggregate Bond Index: A market value-weighted index consisting of government bonds, SEC-registered corporate bonds and mortgage-related and asset-backed securities with at least one year to maturity and an outstanding par value of $250 million or greater. This index is a broad measure of the performance of the investment grade U.S. fixed income market.

BofA Merrill Lynch Global High Yield Index: An index designed to track the performance of USD, CAD, GBP and EUR denominated below investment grade corporate debt publicly issued in the major domestic and Eurobond markets.

Russell 3000 Index: A capitalization-weighted index consisting of the 3,000 largest publicly traded U.S. stocks by capitalization. This index is a broad measure of the performance of the aggregate domestic equity market.

Contact Information

Eric Denneny
Senior Consultant, Global Private Equity Research
Aon Hewitt Investment Consulting, Inc.
+1 (312) 381-1267
eric.denneny@aon.com

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Aon plc/Aon Hewitt Limited
Registered office
The Aon Centre
The Leadenhall Building 122
Leadenhall Street London
EC3V 4AN

Aon Hewitt Investment
Consulting, Inc.
The Aon Center
200 E. Randolph Street Suite
1500
Chicago, IL 60601 USA

Aon Hewitt Inc./Aon Hewitt Investment
Management Inc. 225 King Street West,
Suite 1600 Toronto, ON
M5V 3M2
Canada

Contact your local Aon representative for additional contact and/or registration information relevant to your local country if not included above.

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E. Q1 2019 Economic and Investment Views

Investment Views January / Q1 2019

Last updated: 01/16/2019

Data as at 12/31/2018 unless otherwise stated.

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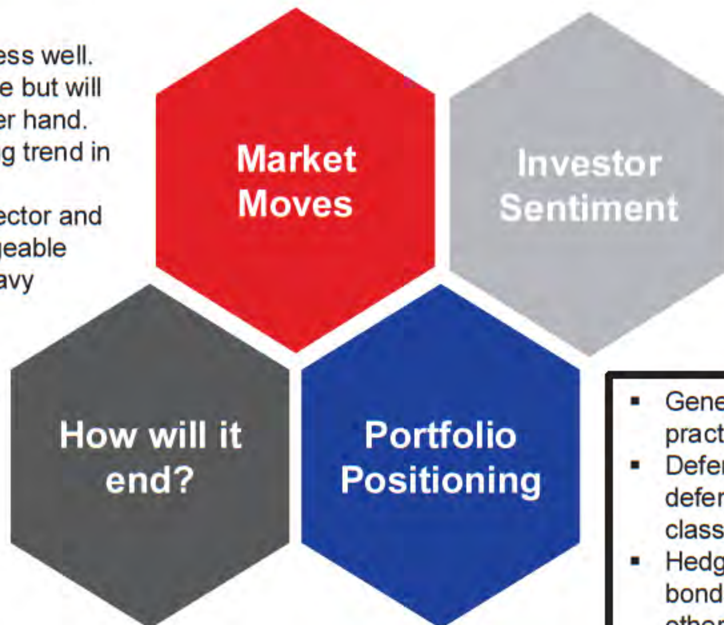
Market transition is advancing

Our view is that we are well advanced in a transition phase in global markets from a period where risky assets have outperformed bonds, to one where bonds will start outperforming on a more sustained basis. As we advance along this market path, views can change quickly. Our views on what to expect and portfolio positioning recommendations are below. This broad market view is reflected through the rest of this document.

- Risky assets perform less well. Bonds can also struggle but will gradually gain the upper hand.
- More volatility, flattening trend in returns
- Market leadership at sector and stock level more changeable
- Drawdowns can be heavy



- Markets nervous about end of cycle triggers
- Periods of optimism followed by pessimism become common

- Transition phase is likely to see more corrections, though large scale capital losses can be some time away… timing will depend on data flow and how quickly liquidity tightens..
- …Tightening financial conditions, escalating trade conflict or an unpredictable event could be the trigger.

- Generally advisable to de-risk where practical to more attractive assets
- Defense becomes more important and defensive approaches within asset classes
- Hedges for risk assets – long duration bonds, non-directional hedge funds, other hedges for equities and credit

High Level Views

We see markets currently taking us more definitively towards a fully risk-off regime. Equities will outperform bonds for certain periods of time but less and less convincingly.

Interest Rates

US bond yields have come off their highs for 2018 in response to some softer economic data, a turn in risk preferences, and some ambiguity about the future path of interest rate hikes. Q4's volatility also pulled yields lower. Yields are close to our views, leaving us about neutral on duration. Near term yields could rise but the upward move is unlikely to be sustained. Expected returns from bonds are improving as we advance through the current market transition phase.

Credit

Credit spreads have moved higher in investment grade and high yield. Spreads, while marginally better value, still are not offering good compensation for the risks being taken in credit markets. The yield pick up over treasuries is fragile. In our view, overweight credit positions need reining back significantly. Credit weakness is normally a leading indicator to a deterioration in overall market conditions.

Equities

Equity markets are volatile and have suffered a decline which given our outlook has not been entirely unexpected. Strong earnings in early 2018 were largely discounted, future expectations have been revised lower, while higher bond yields are a check and trade/politics are also pushing volatility up. EM equities have reasonable fundamentals and we believe that, combined with cheap valuations, these will be realized in higher returns over the medium-term. We continue to believe in incremental equity de-risking constraining equity beta close to the benchmark. The implementation of this will be important and will depend on other assets available in portfolios.

Alternatives

The message on alternatives is that good manager and strategy selection leaves some opportunities alive, notwithstanding growing overcrowding in this space. With equities finding it hard going, non-directional approaches should be preferred (including option hedging strategies). Real estate is exposed to rising rates and late cycle risk suggests defensive real estate is now better.

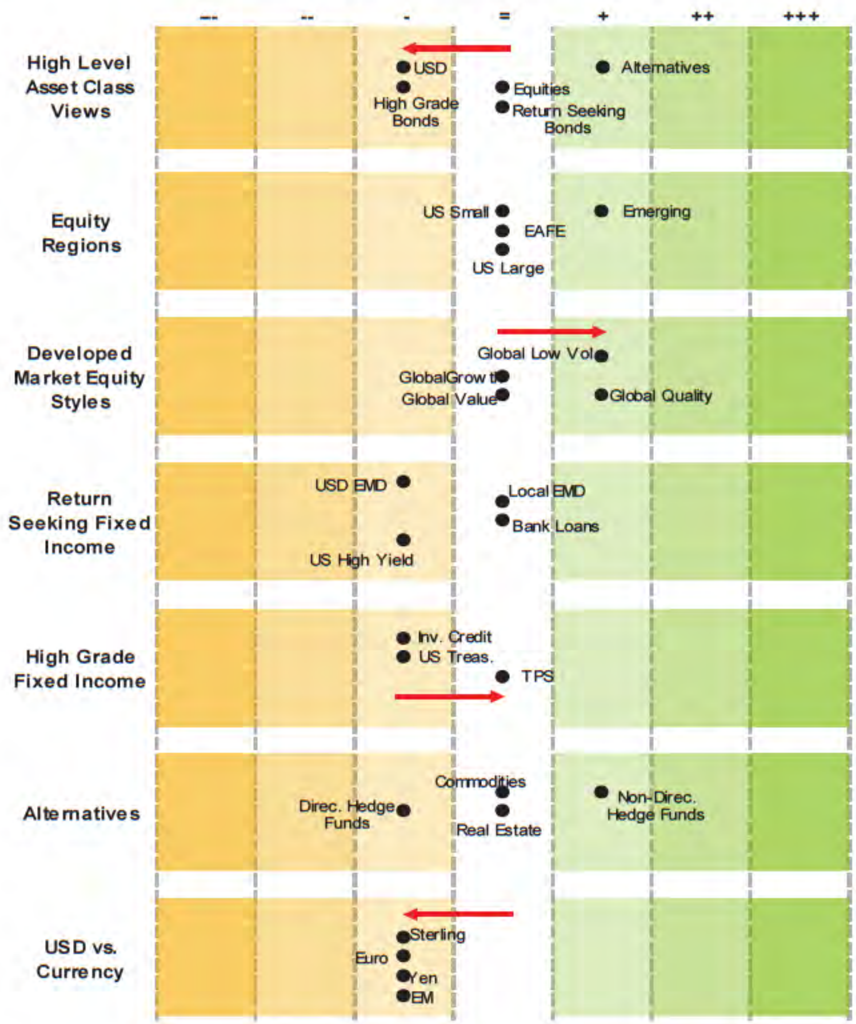
Currency

The changed outlook for US policy interest rates from the US Federal Reserve sees us with a revised view on earlier weakness emerging in the US dollar. We believe that over the medium-term EM currencies should recoup some of the ground lost during 2018.

Medium-Term Views: 1 to 3 Year Time Horizon

Medium-term Views Express our desired over/under weights relative to a diversified long-term strategic benchmark.

January 2019 Medium-Term Views (1/16/2019)



Changes and Actions

Look to be reining back equity positions. Bonds (duration exposure) are offering more competition, and alternatives still offer some reasonable choices, particularly where return from manager skill and lower correlations with equities and credit are available. Constrain equity beta close to benchmark.

EM equity is still preferred. We do not have a preference between US and non-US markets now. We still like valuations, but recognize that economic and market conditions are making it trickier to translate into performance.

We have introduced a small preference for low volatility equities, whilst maintaining a preference for quality orientated factors.

We maintain a negative stance on high yield bonds despite recent spread widening, and a neutral stance on bank loans. Local EMD offers scope to benefit from a clawback of some oversold EM currencies.

All in yields have moved higher. Credit spreads could easily move higher still. Break-even inflation has improved TIPS relative valuations to nominal bonds prompting an upgrade to the view.

Non-directional low correlation strategies, for example global macro and some CTA strategies, should be preferred for risk mitigation. Rising interest rates pose some risk to real estate and defense should be built into real estate portfolios. Rates are not quite high enough yet to be a major problem.

We think that the US$ rebound that we saw over 2018 may now be over although we do not expect much weakness against the euro. EM currencies should recoup some recently lost ground.

Market Aware Implementation (MAI): Less Than 1 Year Horizon

Market aware implementation should be used to accelerate or decelerate towards desired market tilts. They have a shorter time horizon versus Medium-Term Views. They are not for appropriate for every client.

01/15/2019 MAI

Changes and Actions

Near-term our views on Non-U.S Developed Market equities are negative.

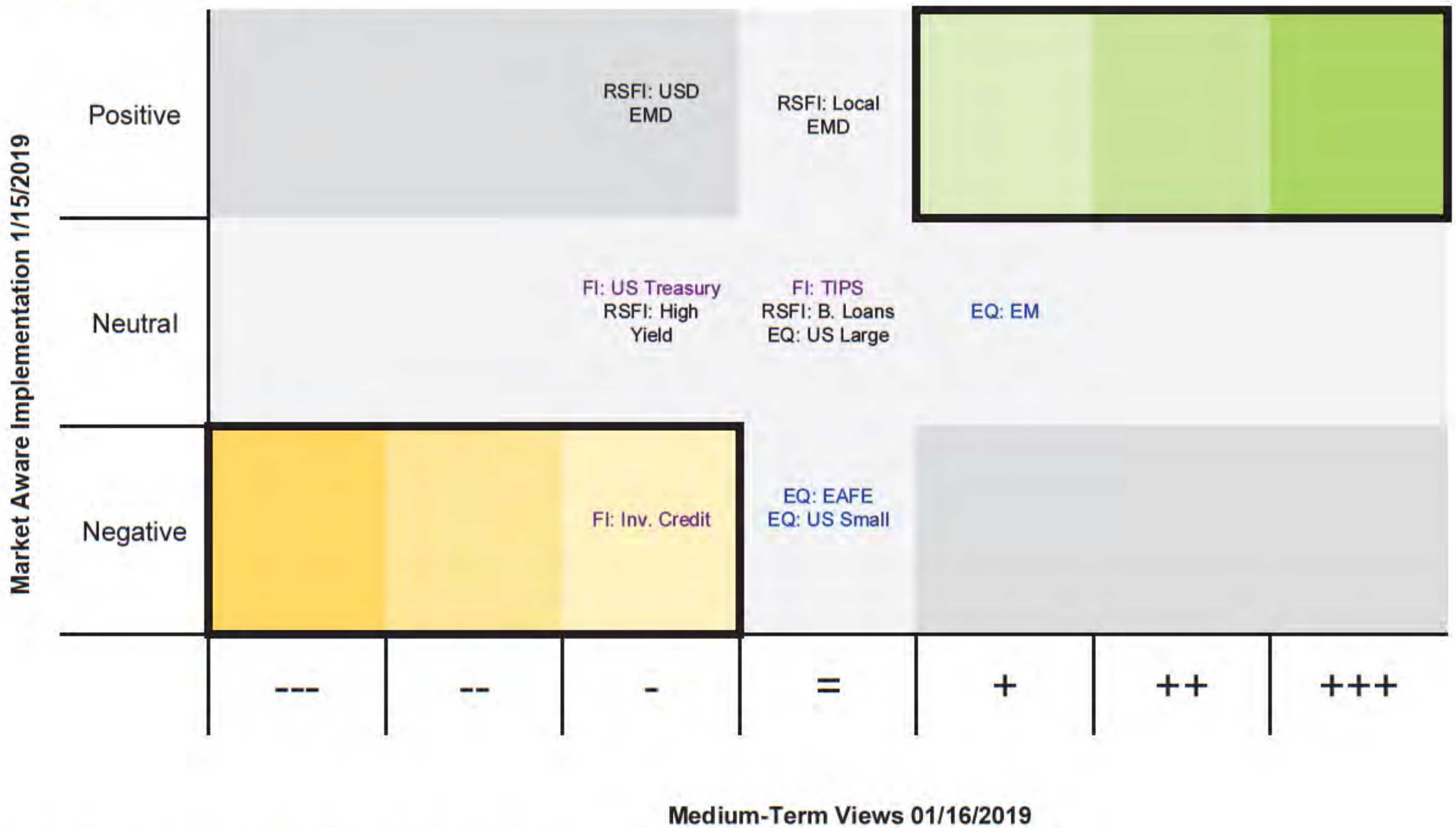
Near-term there is a more defensive tone to our positioning outside of the US.

Neutral on floating rate and high yield bonds. Local EMD and USD EMD remain positive. High yield bonds have been upgraded from negative to neutral, owing to improved yield levels near-term.

Reward per unit of risk is now attractive at the front-end of the curve after a sizable move higher in rates, however rates at the long-end are likely to rise faster than what's currently priced into the forward curve .

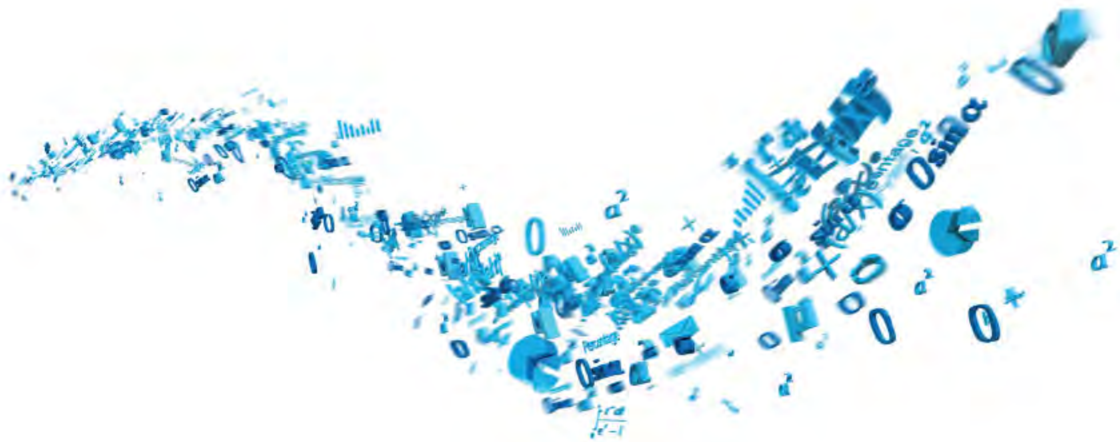
MTV vs. MAI

Below is a graphical representation of MTVs against MAI where views exist over both time horizons. This calls out our **highest conviction views**.



Key: FI – Fixed Income, EQ – Equity, RSFI – Return Seeking Fixed Income

Medium Term Views represents AHIC's outlooks on capital markets and economies over the next several years. These views are constructed based on our framework of analyzing fundamental, valuation and near-term drivers of capital markets.



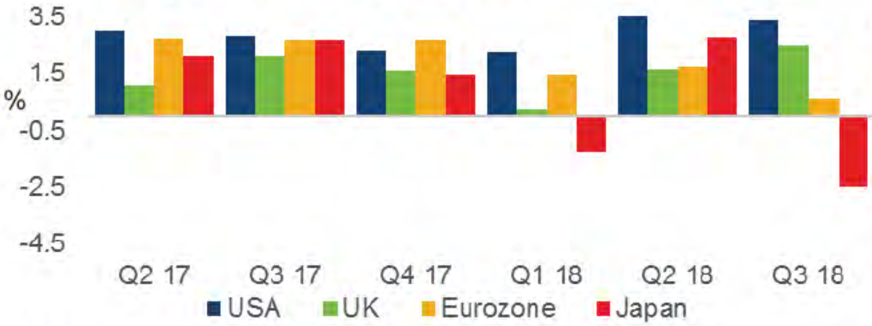
Economic Overview

Economic Highlights

There were clear signs of slowdown in the Japanese and Eurozone economies, whilst US growth is starting to lose momentum too. The story in markets grabbed the headlines of course, with most assets falling back sharply, including oil. We believe the US is in the late stages of its economic cycle and this slower trajectory is likely to continue going forward.

Palpable Japanese and Eurozone slowdown, not in US

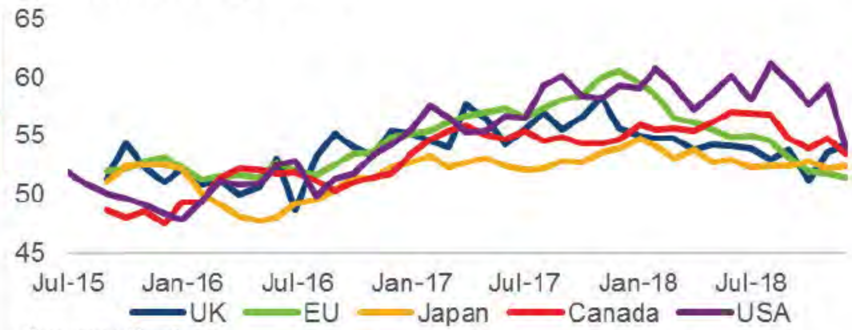
Quarterly annualized GDP growth



Source: Factset

But US activity is starting to show cracks

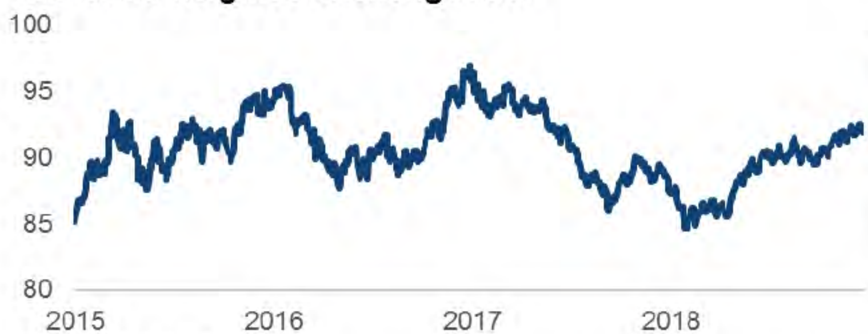
Manufacturing PMIs



Source: Factset

The US dollar resumed its assent over Q4

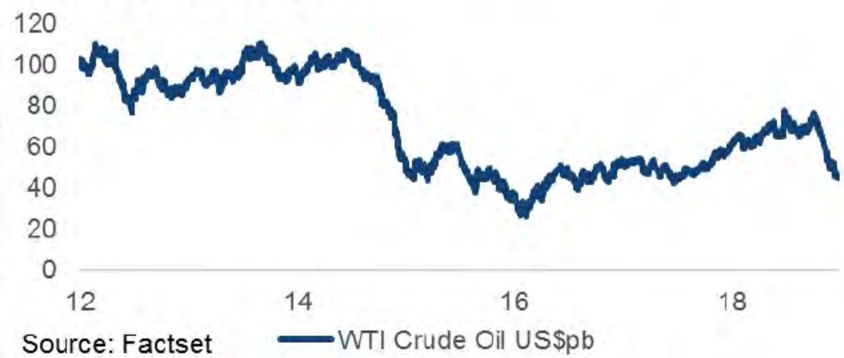
US trade weighted exchange rate



Source: Factset

Oil prices plunge sharply over the fourth quarter

WTI oil price US$pb



Source: Factset

US Economy

The US economy remained relatively strong over the last quarter of 2018 but there were increasing signs of slowing momentum. Meanwhile, political tensions rose again, this time due to a partial government shutdown and open criticism of Fed policy. We expect a weaker economic trend over time but not immediately, despite the signals from the markets.

US economic growth slowed from a very strong 4.2% in Q2 to a still strong 3.4% in Q3. More concerning, however, was the large fall back in the December manufacturing sector ISM index, from 59.3 to 54.1. Whilst this is still in expansion territory, this is the lowest reading since October 2016.

There were also clear signs of slowdown in the housing and retail sectors. New and existing home sales dipped strongly into contraction territory over Q4 (although the latter fell for much of 2018) and the National Association of Home Builders index of activity fell back sharply over November and December. The pattern can be seen in retail sales growth too (see top chart for the latter).

The biggest developments over Q4 were not economic, however, but political. Tensions between the US and China continued to rumble on, with signs of improvement followed by more hardline statements. Also, ongoing disagreements in Congress came to a head in late December, resulting in a partial government shutdown.

The other controversy was with monetary policy. The Fed raised its policy rate for the fourth time in 2018 to 2.5%, which was widely trailed and expected but market turmoil and Presidential criticism called the move into question. However, the Chair also mentioned in a November speech that policy was moving close to neutral and that future moves would be more data dependent.

We expect the tailwind of fiscal impulse to fade and growth to slow from its current pace towards its long term trend of around 2% over the next few years.

Retail sales slowed over Q4

Source: Factset

Headline inflation eased while the Fed hiked in December

Source: Factset

Non-US Economy

Economic growth continued to weaken over the second half of 2018, with inflation trends also moderating. Japanese GDP growth was particularly hurt by natural disasters. In Europe, UK political turmoil intensified as the March 2019 deadline approached, whilst a deal was reached on the Italian budget with the EU. The prospects for the EAFE region will continue to be dominated by politics and driven by the strength of global trade.

Non-US developed world economic activity continued on its broadly weaker trend over Q3 and Q4, although the spread of data was quite wide. UK GDP growth continued its rebound from a very weak Q1 with growth of 2.5% in Q3 while Japan suffered its second quarterly, albeit non-consecutive, contraction in output in the same quarter. The latter was attributed largely to a series of major natural disasters, which disrupted the exports and retail sectors, and the expectations are for a rebound in the Q4 data. We expect broad trend growth in the major EAFE countries over the medium term.

On the political front, the Italian budget negotiations and Brexit continued to make the headlines outside of the US – the first seemingly reaching a resolution whilst the second far from it. The transition deal agreed between the UK Prime Minister and the EU has yet to be voted on in the UK Parliament with all the signs pointing to failure when the vote is eventually held. If this occurs, the future path is highly unpredictable. Meanwhile, the Italian budget was finally agreed with the EU. Protests in France and the consequent increase in government spending may have played a role in persuading the EU to reach a compromise with Italy.

In terms of monetary policy, the main development was the end to the European Central Bank's Quantitative Easing programme in December. Moderating growth and inflation imply that EAFE central banks will remain broadly on the sidelines, at least in the early months of 2019.

Slowdown in European activity is widespread

Source: Factset

Inflation seems to have peaked recently

Source: Factset

EM Economy

Emerging market growth continued to be broadly positive over the quarter, and there were few indications that the US-China trade dispute is beginning to have an adverse impact, at least in terms of the macroeconomic data. The near-term outlook is volatile given the indeterminate current trajectory of US yields and the dollar. In contrast, superior demographics, catch-up productivity dynamics and the emergence of a middle class consumer, especially in Asia, keep us positive on EM economic performance over the medium term.

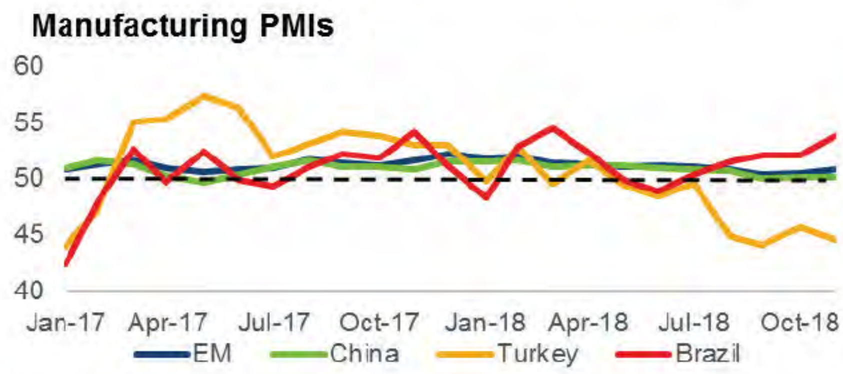
Despite several challenges to emerging economy growth performance, activity remained positive and stable in many countries. These major challenges included the trade war rhetoric between the US and China, and sharply fluctuating oil prices. In terms of the former, Chinese GDP growth slowed to 6.5% in Q3, the weakest in a decade, but we cannot say that new tariffs have had much of an impact as yet.

Oil prices have been on a rising trend for most of 2018 but they dived sharply in Q4. As a result, the economic impact on the prominent resource exporting countries, such as Russia and Brazil, was not apparent as the year came to a close. Persistently lower prices will likely create an additional headwind to these economies.

One positive development is that the currency crises of Turkey and Argentina have been largely contained with limited spillover to other emerging market countries. Furthermore, while market turmoil is not necessarily conducive to emerging market performance, lower US Treasury yields are helpful for the externally indebted countries. We think yields will trend moderately higher but downside risks have clearly increased.

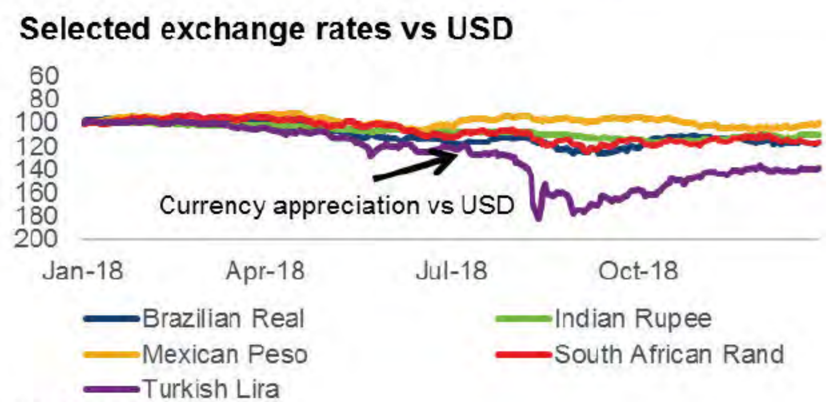
We think near term volatility and stronger headwinds to the key EM economies, not least China, are quite possible. Despite these headwinds, the long-term advantages of Emerging Markets remain in place and are unlikely to go away soon.

Turkey's crisis stands out but resilience elsewhere



Source: Factset

...the Turkish lira stabilized over Q4, however



Source: Factset

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Investment Views

US Large Cap Equities

MTV	MAI
=	Neutral

Medium-Term View:

A slower U.S. economy has already largely been discounted by financial markets. Going forward, a more dovish U.S. Federal Reserve alleviates some concern of over-tightening while providing some support to equities as financial conditions should not be as prohibitive as previously anticipated. This may partially offset the effects of a fiscal drag. We see the economy slowing to trend growth rather than anything worse, such as an outright recession. There are risks in the near-term given the trade war threat and ongoing Federal government shutdown, both of which is likely to continue to impair sentiment.

Fundamentals remain largely intact. 2019 earnings growth expectations have moderated with lower margin expansion anticipated due to tight labor markets, rising input costs and interest expense. Earnings revisions, despite being on a downward trend, remain positive.

However, following the recent market sell-off and consequent de-rating, U.S. valuation risk looks less striking with the exception of normalized earnings valuation measures such as CAPE where it remains elevated.

Should markets deteriorate from this point, U.S. markets may outperform due to their lower-beta. On balance, competing forces do not present strong rationale to over/under-weight.

Market Aware Implementation:

We are cautious on the U.S. equity market over the near-term amid the signs of stress we are observing in the weak technicals, widening credit spreads and widespread weakness across stocks.

These signs could be a result of technical correction and are likely driven by geopolitical uncertainty.

The economic backdrop remains supportive and we continuously monitor sentiment indicators for signs of support or stress.

U.S. markets are already pricing in economic slowdown

Source: Factset

Our near-term indicators are more cautious now

Near-Term Indicator	+/-	Near-Term Indicator	+/-
Correlation	-	Market Breadth	-
Volatility Skew	+	PMI	+
Volatility Breadth	-	Financial Conditions	-
Volatility Cross	-	Currency	-
Momentum	-	Credit Spreads	-
Valuation Spread	+	Industrial Production Growth	+

Source: Aon, 1/1/2019

US Small Cap Equities

MTV	MAI
=	Negative

Medium-Term View:

Small caps lived up to their high beta nature in the market declines through the tail end of 2018, and rally in early 2019. We continue with a neutral view on small cap stocks for the time being.

Relative valuations are not going to be a deciding factor versus large caps, where both markets have become cheaper.

Looking ahead small cap stocks may continue to be at risk to slowing growth momentum and the Fed hiking cycle. Historically, fed hiking cycles and slowing momentum have not been extremely favorable to small caps. The higher leverage of small caps also makes them riskier than their larger counterparts.

Going forward, we expect small cap performance will be driven by sensitivities to trade policy, and the performance of the equity market more broadly.

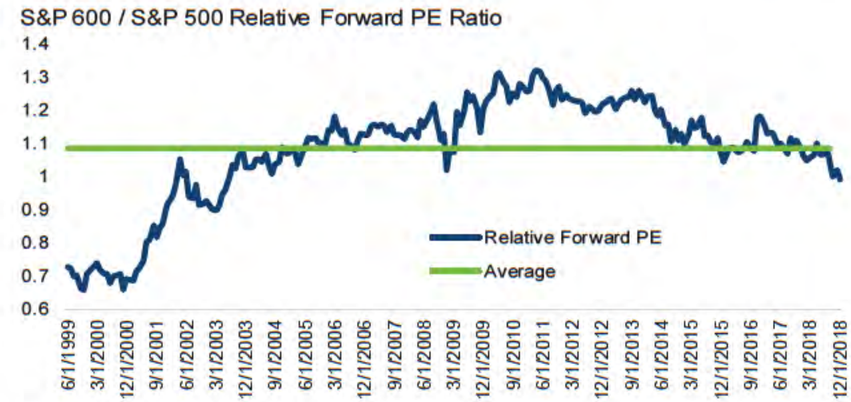
Market Aware Implementation:

Our view on US small cap stocks is relative to the large cap companies. Our fundamental view on the small cap stocks remain unchanged (neutral) from the last quarter.

However, we believe that the vulnerability of small caps to a market correction outweigh the positive traits of small caps at this point in the cycle making us negative in portfolio context.

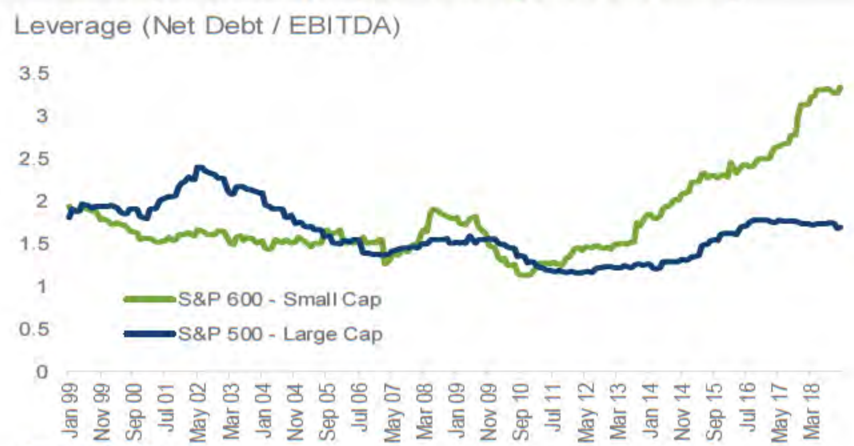
At the same time, it seems that a divergence between large and small cap stocks has reached a critical level and we would not be surprised to see a reversal in relative performance.

Despite heavy falls, valuations remain indecisive



Source: FactSet

Small Caps relatively higher leverage is concerning



Source: FactSet

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Non-US Equities

MTV	MAI
=	Negative

Medium-Term View:

Economic data releases have been disappointing for core European countries – for example, German industrial production fell back significantly, while the France consumer confidence index has started to reflect the recurrent waves of the "gilets jaunes" protest movement. Global trade tensions are having a strong impact on Eurozone economic activity, as highlighted by the declining trade surplus. Furthermore, political risk is still present in Europe with the Brexit deadline approaching and Japanese economic struggles over Q4. Globally, investor and economic sentiments for the Eurozone have deteriorated.

Earnings and margins growth have been slowing over the last 9 months for EAFE companies. However, valuations for EAFE equities still look reasonably attractive, which is an important counterbalance. We maintain a Neutral view over the medium term as we don't believe they will outperform a global benchmark.

Market Aware Implementation:

We remain negative on Non-US developed equity markets as our fundamental and technical indicators display weakness across the spectrum.

These markets also keep showing up on the lower end of our relative strength scores which reinforces our cautious view.

Revisions ratios still in negative territory but stabilizing

Source: Factset, Aon

Near-term indicators have weakened further

Near-Term Indicator	+/-	Near-Term Indicator	+/-
Correlation	-	Market Breadth	-
Volatility Skew	-	Economic conditions	-
Volatility Breadth	-	Financial Conditions	-
Volatility Cross	-	Currency	-
Momentum	-	Credit Spreads	-
Valuation Spread	+		

Source: Aon, 1/1/2019

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EM Equities

MTV	MAI
+	Neutral

Medium-Term View:

Emerging Markets have outperformed since September when world indices peaked. We think that undemanding valuations have been supportive, and should drive outperformance on a 3-year view. A pause in the Fed Funds rate hiking cycle also could be supportive for EM assets.

Shorter-term headwinds remain. We're worried that macroeconomic news out of China continues to get worse before it gets better and that earnings revisions will remain negative.

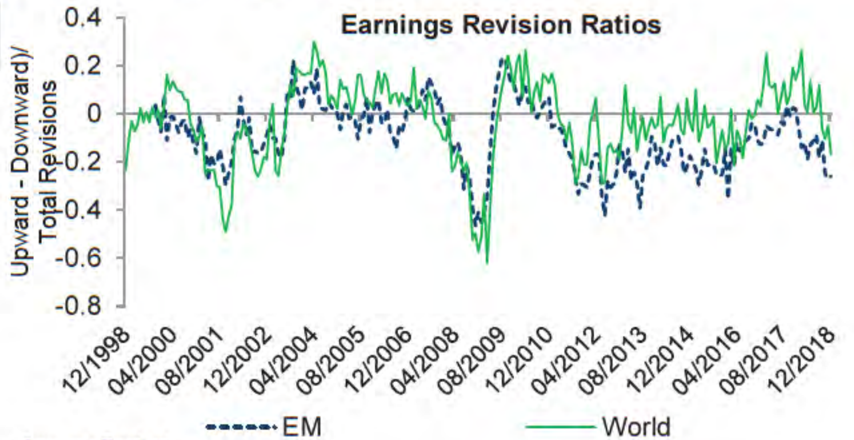
Risks remain though. An aging global cycle poses a risk at a 1-2 year horizon. Emerging markets tend to be higher beta and despite being 'cheaper' could still underperform more expensive but less cyclical markets.

Market Aware Implementation:

Our indicators continued pointing to weakness in both external and internal drivers. Technical, currency, and volatility signals are not supportive over the near-term, but improvements in valuation spreads point to the possibly of short-term reversals.

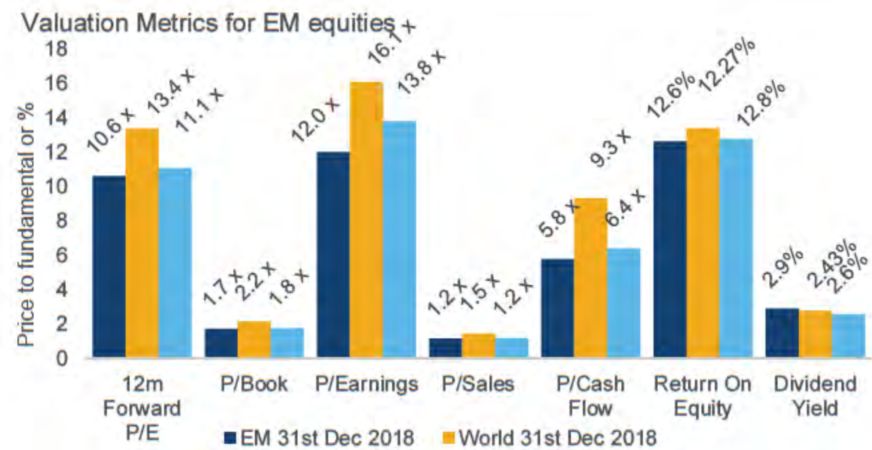
Despite weak fundamental indicators and a low ranking on the relative strength spectrum, we moved EMs to neutral as we think that emerging markets could have been oversold amid uncertainty surrounding the US trade policy developments.

Revisions still negative but DM catching up



Source: Factset

EMs look cheap



Source: Factset

Factor Investing

Medium Term View:

Value: A neutral view on value versus growth over the medium term. Economic growth is supportive in the US but less so elsewhere. It is also increasingly threatened by external risks. We still expect interest rates to rise over the medium term, which should be helpful, but recent falls in yields highlight the increasingly volatile nature of the environment, hence our reticence to take a strong view.

Low. Vol: Positive view. Valuations are less expensive and low vol. equities are more resistant to volatile markets, which we expect to be a more persistent feature. Whilst we think that a sustained downturn in markets and yields may not be imminent, our expected elevated volatility makes it the right time to move to a moderate overweight.

Quality: Positive view on quality stocks. We are aware that there is added risk from high technology exposure but quality stocks should be more resilient in a market downturn, especially now that tech stocks have fallen back recently.

Market Aware Implementation:

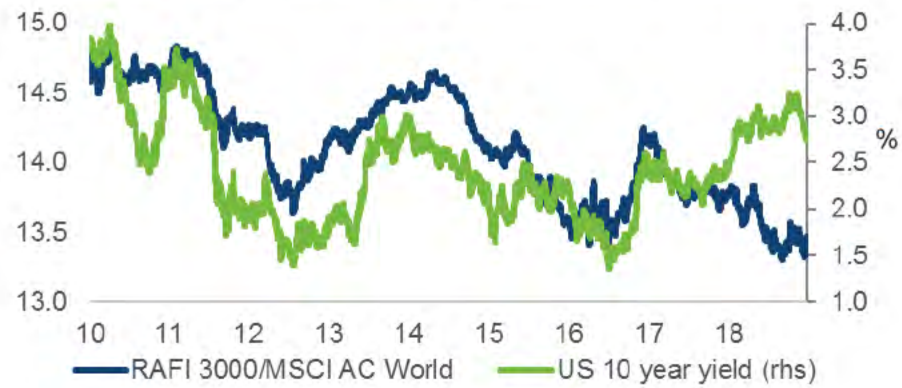
Our short-term factor positioning is driven by diverging views on US and Non-US equities.

Even though we still have cautious views on both regions, we see more clarity in drivers underlying the recent volatility in the US markets and therefor are more comfortable being a bit opportunistic. We are overweight Value as we expect the style to outperform given recent sell-off and extreme divergence between Value and Growth.

We still favor Quality given late cycle dynamics.

Our view on the Non-US developed factor positioning is dictated by the risk-off market environment as well as number of political drivers. We are favoring more defensive exposure and are underweight pro-cyclical styles

Yields fall back in Q4 and RAFI continues to underperform



Source: Factset

Factor Views

Medium Term View			
Low Vol	+	Growth	=
Quality	+	Value	=

	US (LC)	EAFE
Value	positive	positive
Growth	neutral	negative
Quality	positive	positive
Defensive	negative	positive

Source: Aon, 1/1/2019

High Yield Bonds

MTV	MAI
-	Neutral

Medium-Term View:

High yield spreads moved higher through the quarter – moving from 322bps at the start of the quarter to 533bps by year end and falling back to 455bps at 1/11/19.

Spreads moved higher because of the turn in risk aversion and briefly were close to our long-term fair values. Despite the recent improvement in valuations, we are holding on to our negative view on high yield. High volatility is creating a tough environment to capture improved valuations, and more importantly, that many of the excesses in the broad credit environment remain to be worked out of the system and spreads at current levels do not offer compensation for these risks, where the benign credit environment is likely to turn.

The volatility is likely to stay over the medium-term as we progress through the current environment, and the best returns are likely behind us on a longer-term view.

Market Aware Implementation:

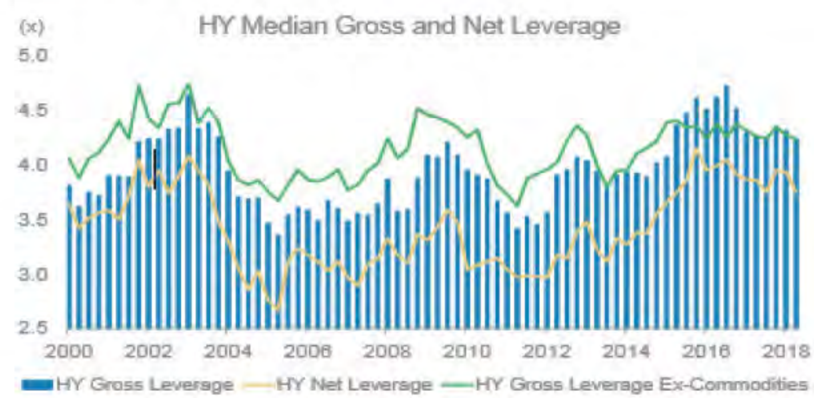
In November we downgraded our MAI view from neutral to negative, and now upgraded back to neutral in January. Our negative outlook had been driven by our credit regime model which suggests caution, a view that we are late in the credit cycle, and the belief earnings would decelerate meaningfully in 2019. However, spreads moved materially wider in December and our outlook on defaults is benign given strong fundamentals, limited upcoming maturities, and a still low probability of recession. While 2019 can offer attractive returns, we recognize the risk/reward trade-off is skewed to the downside longer-term hence our neutral view.

High Yield spreads moved higher but are not cheap

US High Yield Credit Spread

Source: FactSet

Leverage is elevated but not extreme



Source: Morgan Stanley Research, Bloomberg, Capital IQ

US Bank Loans

MTV	MAI
=	Neutral

Medium-Term View:

We downgraded bank loans to neutral in Q3 on the back of full valuations and concern over an over-heated market. These two factors caused the loan market to tumble in the last two months of the year amidst concern over slowing US growth, increasing market expectation that the rate hiking cycle may be drawing to an end and volatile risky asset markets. Q4 losses resulted in a 1.1% overall 2018 return (Credit Suisse Leveraged Loan Index). Losses were exacerbated by retail investor sales and low end-year liquidity, rather than a more fundamental concern over the default outlook. Loan prices and returns have since recovered strongly in January.

Loans outperformed high yield bonds in Q4 and 2018 overall. We are maintaining our preference for loans but continue to suggest that investors do not make new allocations, given the current stage in the credit cycle and loans' reduced credit quality. In line with this view, we continue to also prefer AAA CLOs to other credit sectors.

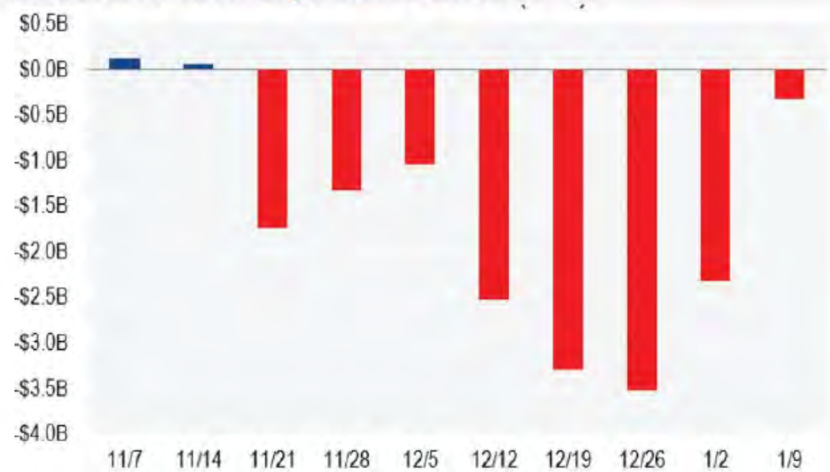
Market Aware Implementation:

A decline in fundamentals, from a surge in loan-only issuance and covenant-lite deals led us to downgrade loans in August 2018 from positive to neutral. The issuer friendly terms will ultimately lead to lower recovery rates than seen historically when the cycle eventually turns. However, with a very benign maturity wall and solid earnings, defaults are expected to remain low and valuations are reasonable and we are not yet at the "end of the cycle". The sell-off in Q4 was largely technical in nature given large retail outflows and limited CLO issuance. However, the weak fundamentals and late cycle dynamics limit our enthusiasm and hence the neutral rating.

US loans performed badly in November and December

Source: Credit Suisse

There have been large retail outflows



Source: Lipper

USD EMD

MTV	MAI
-	Positive

Medium-Term View:

Pressure on EMD credit spreads continued up until the end of 2018 as global growth concerns resulted in a broad credit sector sell-off. However, Emerging debt held up relatively well compared to other credit sectors in spite of disappointing Chinese economic data and commodity weakness. Falling US treasury yields from November also supported USD EMD returns, although USD EMD still underperformed local EM debt.

Our sanguine view on Emerging markets and view that the US Federal Reserve will pause hiking interest rates this year are supportive of USD EMD returns. We are less negative on USD EMD than back in January when we first turned negative in advance of the move up in credit spreads. However, we remain cautious on the global economic and credit environment so we are maintaining a small underweight allocation.

Market Aware Implementation:

The sell-off in USD EMD in 2018 appears overdone, creating attractive valuations for the asset class. EM yields are still attractive relative to the developed world. EMD USD is heavily driven by US rates, but spreads are elevated relative to both history and fundamentals. A more dovish Fed and strong EM currencies should be supportive in 2019, while the potential for trade war escalation limits our enthusiasm. (Re)convergence of global growth will be critical for further upside (we are expecting the EM growth differential to widen over DM over the next 12 months).

EMD credit spreads widened in 2018

EMD impact of rising US treasury yields expected to fade

Case ID: 210601197

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Local EMD

MTV	MAI
=	Positive

Medium-Term View:

It is tempting to move more positive in local EMD as we take the view that the threat from rising US interest rates and a stronger US dollar has retreated.

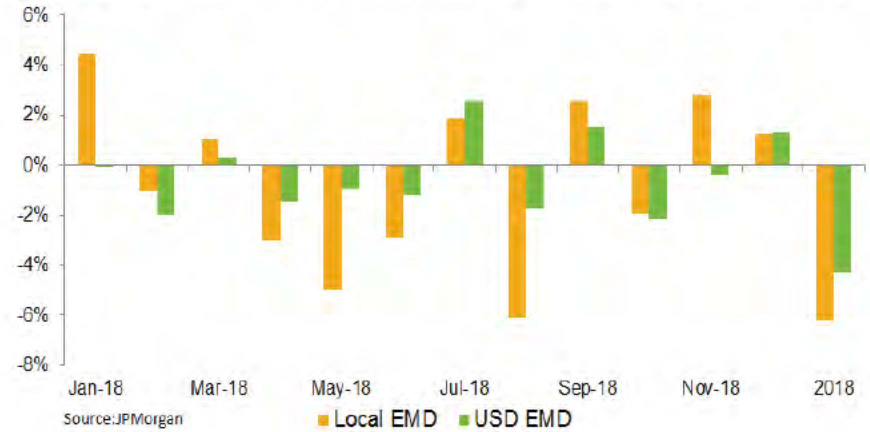
Local denominated EMD fell by 6.2% over 2018, underperforming USD EMD as a result of weak EM currencies. However, local EMD returned 2.1% in Q4, outperforming USD EMD, despite developed equity market turmoil, as both local EM bond and currency markets were stable.

Nevertheless, there remain plenty of global risks in 2019, such as trade tensions and slowing global growth, which could hurt local EMD and prevents us from taking an overweight allocation. Our positive view on EM fundamentals is instead reflected in our continued preference for local EMD over USD EMD as we think that EM currencies are undervalued.

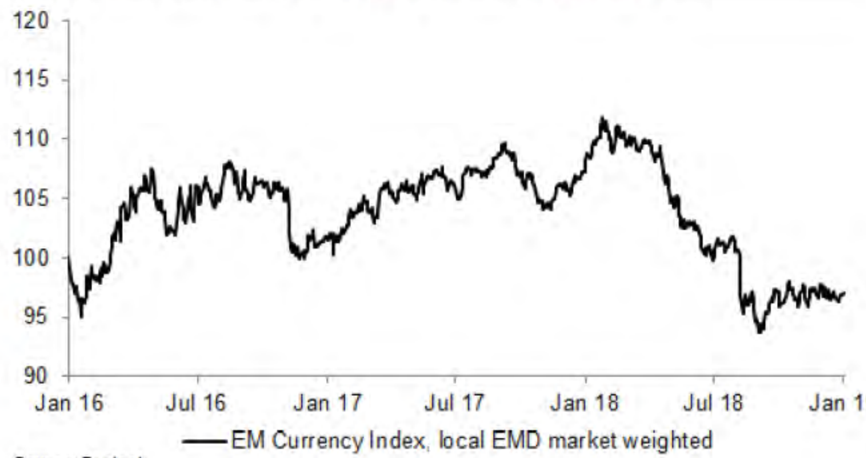
Market Aware Implementation:

The sell-off in local EMD in 2018 appears overdone, creating attractive valuations for the asset class. EM yields remain attractive relative to the developed world. A more dovish Fed and strong EM currencies should be supportive in 2019, while the potential for trade war escalation limits our enthusiasm. (Re)convergence of global growth will be critical for further upside (we are expecting the EM growth differential to widen over DM over the next 12 months). Our positive view on local EMD is primarily driven by the view of stronger EM currencies in 2019.

Local EMD outperformed USD EMD in Q4..but not over 2018



Major EM currencies appear to have stabilized



Source: Factset

Commodities

MTV	MAI
=	N/A

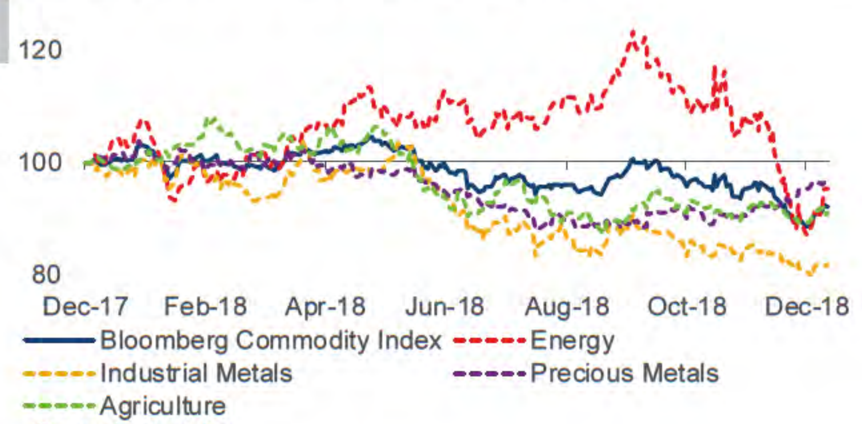
Medium-Term View:

During the first three quarters of the year commodities were the best performing asset class, but Q4 has seen a particularly sharp collapse in prices. The sell-off started with oil prices. Since their peak in October, the WTI and Brent indexes have fallen by 32% and 30% respectively. These falls have been driven by a combination of factors: (1) the U.S. unexpectedly granted eight Iranian oil importers waivers from the sanctions, at least for another six months (2) U.S. inventories rose faster than expected and faster than the range of the last 5-years on the back of large U.S. production and (3) the oil price's slide has also coincided with a sharp selloff in equity markets, which in turn has coincided with mounting fears over the U.S.-China trade war, rising interest rates, the strong dollar and fears that the expansion is over and we're close to recession.

While some of the factors above indicate that the current environment is more fragile than a few months ago, we believe they do not justify current prices. Globally, fundamentals are still relatively strong, with decent growth expectations for the biggest oil consumers (US, Europe, China and India). Furthermore, in December, OPEC members and Russia agreed to cut their production by 1.2 million barrels per day in order to balance the market.

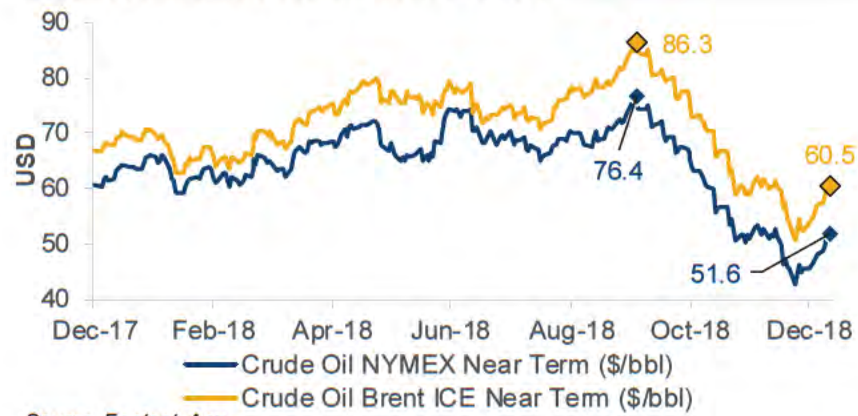
Even if we think that current oil prices, and by extension global commodities, are relatively attractive and could offer some short term outperformance, we maintain a neutral view over the medium term.

Energy prices fell sharply during Q4 2018



Source: Factset, Aon

Oil prices are back to attractive levels



Source: Factset, Aon

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Hedge Funds

Sector	MTV	MAI
Non-directional	+	=
Directional	-	=

Medium-Term View:

Volatility and bouts of risk aversion are very likely to punctuate markets over the coming couple of years and selected hedge fund strategies are well placed to profit. Performance has picked up on a relative basis during the sharp equity market falls of Q4, which attests to our longstanding view. We see merit in certain non-directional strategies, such as Global Macro / Managed Futures (CTAs) as effective risk mitigation tools but we cannot expect strong participation should equity markets rally. Additionally, investors should take care to choose managers whose philosophy and targets align with their aims.

Market Aware Implementation:

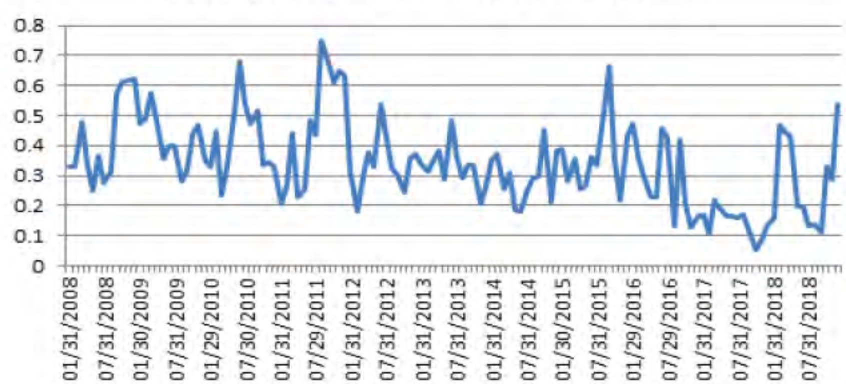
Stock correlations increased in late 2018, reducing the near-term appeal of equity market-neutral strategies. We continue to like other low-directional strategies such as global macro. Discretionary managers find opportunities in directional rate trades or relative value rate ideas between regions or across the US curve. CTAs tend to do well in high-volatility environments, and while risk declined post year-end, it is still elevated, and we continue to like CTAs for their diversifying impact.

We remain less constructive on equity long-short and event-driven strategies. In high-yield, we saw yield approach 8% in December, but it has come back in since. Despite low default expectations, we think it is early to increase exposure to event-driven credit, as risk to yields is to the upside.

Market volatility spikes sharply higher in Q4

Source: Factset

Pairwise correlations have also risen sharply recently



Source: Bloomberg, Aon

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US Corporate Bonds

MTV	MAI
-	Negative

Medium-Term View:

Both long-credit and intermediate-credit spreads moved higher over the quarter, driven by the risk aversion affecting most markets late in 2018. Intermediate spreads are close to fair value, and long spreads are above fair value.

Despite improvements in valuations, we are not yet ready to move to a more positive view on credit. Despite a balanced near-term outlook, aggressive re-leveraging trends, elevated issuance, along with M&A activity that tends to correspond to late credit cycle behavior are causes for concern. Excesses remain in the corporate credit system, and current valuations do not offer compensation for them.

Spreads will be susceptible to bouts of volatility as we have seen throughout 2018. We continue to prefer long credit spreads to intermediate credit spreads.

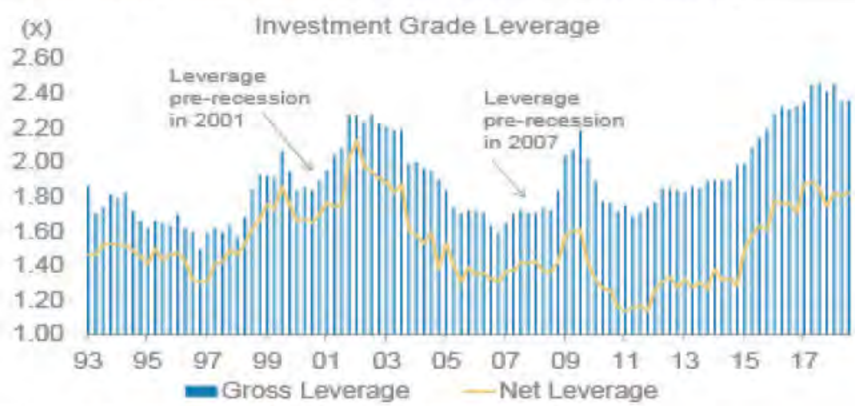
Market Aware Implementation:

We downgraded our view on credit spreads in November 2018. While spreads appear attractive relative to history, leverage remains quite high even after stellar earnings in 2018. Late cycle dynamics, where both volatility and spreads rise from low levels is our biggest cause of concern, as evidence suggests we may have entered Phase 3 of the Credit Clock.

Spread valuations have improved

Source: FactSet

Leverage has remained high and this is concerning



Source: Morgan Stanley Research, Bloomberg

US Government Bonds

Sector	MTV	MAI
Treasuries	-	Negative
TIPS	=	Negative

Medium-Term View:

Q4 2018 was a quarter of two halves for US Treasury yields. Yields rose through the first half hitting multi-year highs, only to fall dramatically in the second half and give a large amount of gains through 2018. The fall in yields was caused by a turn in risk appetite in investment markets and the fear that the Fed had overdone tightening at a time when other stresses, ignored for much of the year, came to the surface. The market is now pricing in zero rate hikes for 2019, compared to 2 hikes at the beginning of November 2018. We believe that the market has become a little too pessimistic on the path of interest rates, although the Fed is likely to be on pause for some time before resuming hiking rates. Breakeven inflation has fallen, meaning that TIPS are now better priced relatively – real rates are now neutral in our view so have upgraded our view on the asset class.

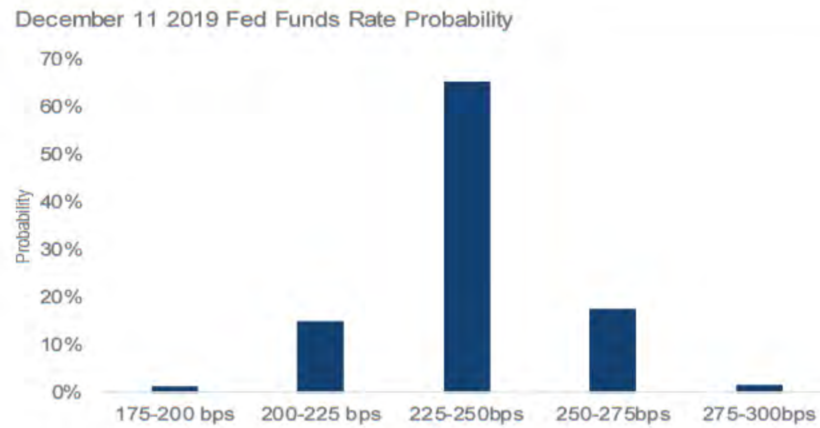
Market Aware Implementation:

We upgraded our view on Treasuries from Negative to Neutral in early November (although still modestly negative on long Treasuries). The front-end of the curve now offers decent risk-adjusted return potential. Negative technicals resulting from expansionary fiscal policy being conducted late in the cycle is a cause for caution and inflationary forces are likely to increase modestly from here—as the labor market continues to show exceptional strength, and the oil market stabilizes. High quality government debt should continue to perform well during "risk-off" periods.

Q4 2018 – A quarter of two halves

Source: FactSet

Market pricing is for zero hikes in 2019



Source: CME, 1/13/2019

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US Dollar

MTV	MAI
-	N/A

Medium-Term View:

The 11% US dollar rebound in 2018 recovered two thirds of its previous year's depreciation against the euro. Against a broader basket of currencies (DXY), the dollar gained 10%. USD/EUR is currently back to key 2015/16 levels around $1.15. The dollar (vs € and DXY) remains in its 10-year uptrend but may be at a key juncture after this length of time, in our view.

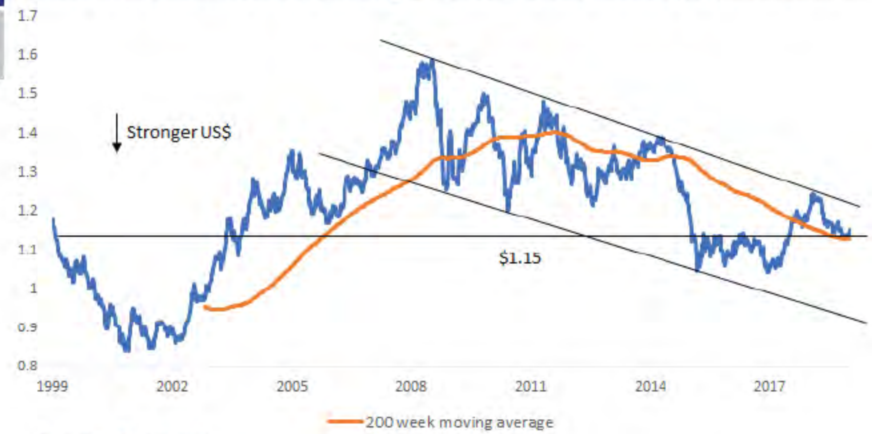
The US Fed's lowering in December of its 2019 rate projections and its long-term neutral rate from 3 to 2.75% as well as a weaker US economy in Q4 2018 call into question whether the dollar can continue to appreciate. Much higher US interest rates have failed to provide much support for the dollar and our view is that the US rate premium over the Eurozone may start to shrink.

That is not to say that we expect Eurozone policy rate hikes for a while as the Eurozone economy is weak. Furthermore, political concerns in the US are matched with Eurozone existential concerns, highlighted by Italy's budget and Brexit.

However, taking into consideration that the US suffers from twin deficits and a somewhat expensive currency valuation (based on purchasing power parity vs € and yen), we have decided to move from neutral to a weak negative dollar stance against major currencies.

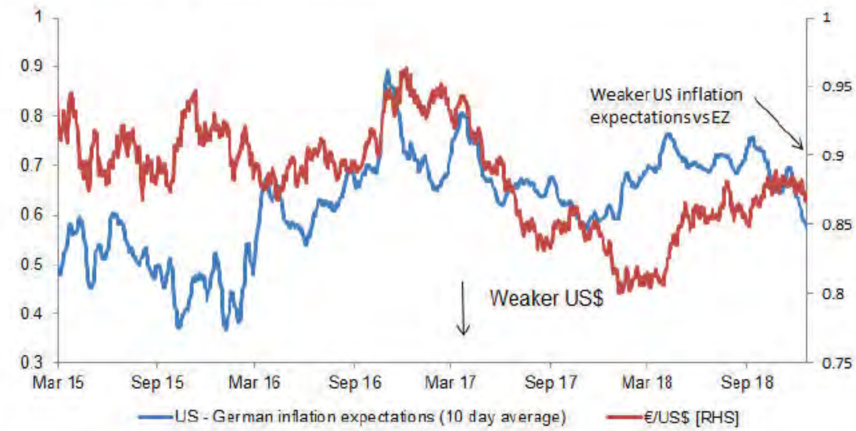
The dollar appreciated against the yen for most of 2018 before the yen staged a recovery in Q4 and we expect that the yen could continue to have a positive bias, supported by the Japanese current account and some dollar strength. EM currencies are cheap and we also think they are likely to appreciate, after standing up well in recent market volatility.

The US dollar vs euro longer-term trend looks precarious



Source: Bloomberg

US inflation expectations have fallen relative to Eurozone



Source: Bloomberg

Appendix:
Investment View Framework

Investment View		
Fundamental	**Valuation**	**Market Awareness**
Analyze the core economic and underlying drivers of an asset class. For example: ▪ Economic Growth ▪ Earnings Growth ▪ Default Risk	Establish if the asset class is cheap or expensive given our fundamental outlook. For Example: ▪ P/E Ratio ▪ Credit Spreads ▪ Yield Levels	Establish if near-term drivers for the asset class are positive or negative. For Example: ▪ Technical Indicators ▪ Sentiment Surveys ▪ Futures/Options Positioning

Appendix:
Medium-Term Views (MTV) vs. Market Aware Implementation (MAI)

	Medium-Term Views	Market Aware Implementation
Investment Time Horizon	1 to 3 years	Less than 1 year
Coverage	Most Assets Classes	Liquid Asset Classes
Governance Structure	Typical Client	Fast Moving / Enhanced Governance
Update Schedule	Monthly	Weekly

- Market Aware Implementation is not applicable in all client circumstances.
- Market Aware Implementation is not a substitute for Medium-Term Views. They are complementary.

Appendix:
Using Medium-Term and Market Aware Implementation Together

The table below is an example of how MTVs and Market Aware Implementation can work together.

Stand alone MTV action / MTV +STV action		**Medium-Term View: Negative**	**Medium-Term View: Neutral**	**Medium-Term View: Positive**
Market Aware Implementation	**Positive**	Underweight / Delay Implementation or Reduce Underweight	Neutral / Move Overweight	Overweight / Extend Overweight
	Neutral	Underweight	Neutral	Overweight
	Negative	Underweight / Extend Underweight	Neutral / Move Underweight	Overweight / Delay Implementation or Reduce Overweight

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Appendix:
Index Definitions

MSCI All Country World Index - A capitalization-weighted index of stocks representing approximately 46 developed and emerging countries, including the U.S. and Canadian markets.

MSCI Emerging Markets Index - A capitalization-weighted index of stocks representing 22 emerging country markets.

MSCI US - A market capitalization-weighted index that is designed to measure the equity market performance of stocks in the USA.

JPM EMBI Global Diversified – Comprised of dollar-denominated Brady bonds, traded loans and Eurobonds issued by emerging market sovereign and quasi-sovereign entities. The Diversified version limits the weights of the index countries by only including a specified portion of those countries' eligible current face amounts of debt outstanding, providing for a more even distribution of weights within the countries in the index.

JPM GBI-EM Global Diversified - Designed to provide a comprehensive measure of local currency denominated, fixed-rate, government debt issued in emerging markets.

BofA Merrill Lynch High Yield - A market capitalization-weighted index that tracks the performance of U.S. dollar-denominated, below investment grade corporate debt publicly issued in the U.S. domestic market.

Trade weighted US Dollar (Federal Reserve) - A weighted average of the foreign exchange value of the U.S. dollar against a broad index currencies that circulate widely outside the country of issue.

VIX Index – Tracks the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options.

MSCI World Index - A free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets, representing 24 developed market country indices.

Russell 1000 Index - An Index that measures the performance of the largest 1,000 stocks contained in the Russell 3000 Index.

Russell 2000 Index - An Index that measures the performance of the smallest 2,000 stocks contained in the Russell 3000 Index.

MSCI EAFE Index - A capitalization-weighted index of stocks representing 22 developed countries in Europe, Australia, Asia, and the Far East.

HFRI Fund Weighted Composite Index – The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of $50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

S&P/LTSA Leveraged Loans Index – The S&P/LSTA Leveraged Loan Index is the first index to track the investable senior loan market. This rules-based index consists of US loan facilities in the syndicated leveraged loan universe.

Bloomberg Barclays Corporate Bond Index - An unmanaged index considered representative of fixed-income obligations issued by U.S. corporates.

Bloomberg Barclays Credit Index - An unmanaged index considered representative of fixed-income obligations issued by U.S. corporate, specified foreign debentures, and secured notes.

ML MOVE Index - The Merrill lynch Option Volatility Estimate (MOVE) Index is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options which are weighted on the 2, 5, 10, and 30 year contracts

ISM Purchasing Managers Index - The PMI® is a composite index based on the diffusion indexes of five of the indexes with equal weights: New Orders (seasonally adjusted), Production (seasonally adjusted), Employment (seasonally adjusted), Supplier Deliveries (seasonally adjusted), and Inventories. Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change and the scope of change.

Appendix:
Index Definitions

HFRI Macro (Total) Index – Macro: Investment Managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top down and bottom up theses, quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ RV techniques, Macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both Macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposes to EH, in which the fundamental characteristics on the company are the most significant are integral to investment thesis.

HFRI Macro: Systematic Diversified Index – Systematic: Diversified strategies have investment processes typically as function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. Strategies which employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Strategies typically employ quantitative process which focus on statistically robust or technical patterns in the return series of the asset, and typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies. Although some strategies seek to employ counter trend models, strategies benefit most from an environment characterized by persistent, discernible trending behavior. Systematic: Diversified strategies typically would expect to have no greater than 35% of portfolio in either dedicated currency or commodity exposures over a given market cycle.

Citi Economic Surprise Indexes - The Citigroup Economic Surprise Indices are objective and quantitative measures of economic news. They are defined as weighted historical standard deviations of data surprises(actual releases vs Bloomberg survey median).

FTSE RAFI 3000 - The FTSE RAFI™ All World 3000 Index is a measure of the largest 3,000 companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value), across both developed and emerging markets.

MSCI Value - The MSCI World Value Index captures large and mid cap securities exhibiting overall value style characteristics across 23 Developed Markets (DM) countries*. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield

MSCI Growth - The MSCI World Growth Index captures large and mid cap securities exhibiting overall growth style characteristics across 23 Developed Markets (DM) countries*. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.

MSCI Minimum Volatility - The MSCI World Minimum Volatility (USD) Index aims to reflect the performance characteristics of a minimum variance strategy applied to the MSCI large and mid cap equity universe across 23 Developed Markets countries*. The index is calculated by optimizing the MSCI World Index, its parent index, for the lowest absolute risk (within a given set of constraints). Historically, the index has shown lower beta and volatility characteristics relative to the MSCI World Index.

MSCI Quality - The MSCI World Quality Index is based on MSCI World, its parent index, which includes large and mid cap stocks across 23 Developed Market (DM) countries*. The index aims to capture the performance of quality growth stocks by identifying stocks with high quality scores based on three main fundamental variables: high return on equity (ROE), stable year-over-year earnings growth and low financial leverage. The MSCI Quality Indexes complement existing MSCI Factor Indexes and can provide an effective diversification role in a portfolio of factor strategies.

S&P 500 - The Standard & Poor's **500**, often abbreviated as the **S&P 500**, or just the **S&P**, is an American stock market index based on the market capitalizations of **500** large companies having common stock listed on the NYSE or NASDAQ. The **S&P 500**index components and their weightings are determined by **S&P** Dow Jones Indices.

S&P 500 Buyback Index - The S&P 500® Buyback Index is designed to measure the performance of the top 100 stocks with the highest buyback ratios in the S&P 500.

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Aon Hewitt Investment Consulting, Inc.
200 E. Randolph Street
Suite 1500
Chicago, IL 60601
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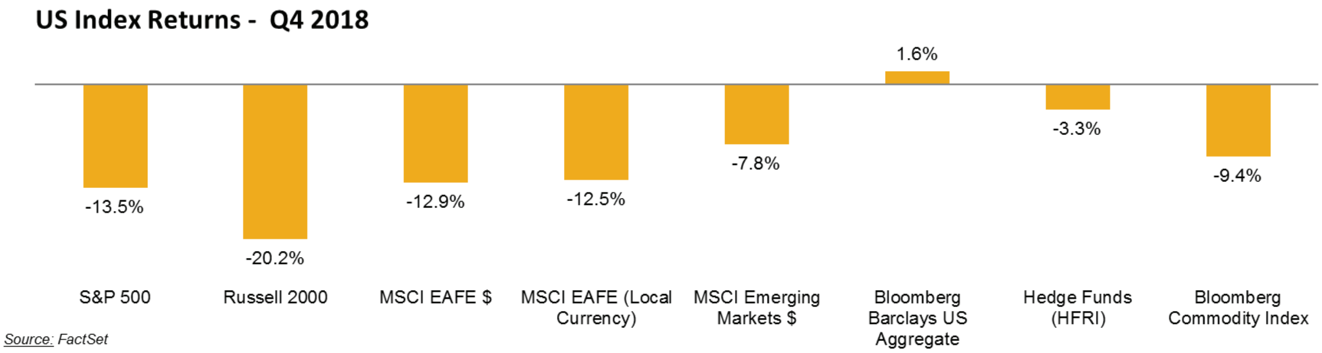
F. Quarterly Investment Outlook – January 2019

Quarterly Investment Outlook

January 2019

January 25, 2019



Source: *FactSet*

Indices cannot be invested in directly. Unmanaged index returns assume reinvestment of any and all distributions and do not reflect fees or expenses. **Past performance is no guarantee of future results**

Summary

- ‘Late cycle’ worries will keep coming back. Market volatility is correctly reading the several threats to the current economic expansion.
- The Federal Reserve is caught between headwinds for economic growth and late cycle pressures of limited capacity, pulling opposite ways. This makes a policy mistake more likely.
- Though US bond yields overshot on the way down towards the end of last year, our view is that they have very likely already peaked for the current economic cycle.
- Credit still faces daunting headwinds. Spreads have moved higher, but the rises have been modest by historic standards.
- Better high yield prices are not a buying opportunity given the effects of high leverage, weaker covenants and testing economic conditions.
- We now see the US dollar turning down sooner rather than later. Emerging market currencies are a probable beneficiary.
- Valuations are better, but we are inclined to continue seeing equity market rebounds as mainly an opportunity to reduce risk. ‘Buying the dip’ will no longer work.
- Low yielding government bonds could still be necessary protection in these volatile times. Private markets offer selective shelter too.
- The tendency for volatility expectations to run ahead of realized market volatility is potentially creating some opportunities.

A dreadful quarter for equities

Equity markets were beset by worries near the year end. Perceptions of economic conditions worsened drastically, much more so than underlying news-flow would suggest. As the Eurozone and Chinese economies softened, markets worried that a similar fate awaited the US. There were also concerns about more US interest rate rises going into a slowdown. Virtually all equity markets fell very sharply, and for once, the US was not spared. Equity market falls also echoed in credit where spreads over government bonds widened and commodity prices fell. Only government bonds held their own.

‘Late cycle’ worries

We have discussed the advanced age of the US business expansion before; in a few months, it will become the longest since records began. This may be one reason why ‘late cycle’ worries abound in markets now. Expansions used to end because of

Case ID: 210601197

higher interest rates or other policy tightening in response to higher inflation. However, the last two recessions (in 2001 and 2007/8) were different, as worsening financial market conditions ended the expansions. What is it to be this time? The current business cycle does have some unique features. Policy is tightening, but different to previous cycles, we also have a major liquidity reversal going on as central banks rein back the massive excess money creation, particularly in US dollars ($3 trillion extra liquidity) seen after the global financial crisis. Given this is quite unprecedented, there is no route map for how this should work, but there is little doubt that it has already been a major stress for markets in 2018. Economic and geopolitical stresses are also present – more protectionism (also not seen for many decades), difficulties in China, and European tensions from Italian politics/Brexit and the broader drift away from the political center globally. Collectively, if not on their own, these can indeed halt the expansion.

So far, the economic slowdown is not suggesting an outright decline in output but rather a slowdown of the kind seen in early 2016 (see chart). When might a bigger and broader economic rollover come? This is hard to call given all the imponderables above. Even if we avoid recession in 2019, we cannot be confident that the market will not fall on fears that a recession will happen sooner or later. Overall, we think that late cycle anxieties will stay in financial markets. Key uncertainties will come back, maintaining high volatility and a defensive bias to markets.

A Fed 'pause' or a peak?

Seeing domestic economic conditions soften after the fiscal stimulus effects had passed through and considerable market volatility, the US Federal Reserve made plain late last year that it was putting interest rates on hold. This has given markets some support, but the big question is whether this is a temporary halt or whether interest rates have peaked. The answer will of course depend on how much softening is seen in US data through early 2019. The Federal Reserve faces a tricky dilemma. The complex effects of financial market volatility, earlier interest rate rises, and higher tariffs will be working to slow the economy. Yet, it is also clear that with such a low unemployment rate, labor market pressures are building, going by the evidence of a wage tracker index that picks up the higher wage growth that is being earned by those changing jobs (see chart). It is possible that the US economy slows at a time when inflation is still firm or even rising, putting pressure on the Fed to resume raising rates.

This is the dilemma that markets are concerned about – that faced with these two opposing trends, the Federal Reserve makes a mistake, either 'overtightening' and increasing recession risk for the economy, or not raising interest rates sufficiently to keep inflation to target. A slowdown with rising inflation and the Fed under pressure will not be well received in the markets.

US bonds – yields may have already peaked for this cycle

It was no surprise that a period of sharp market sell-offs should see US treasury bonds doing well as in Q4. If the economy's path slows only to about what we should expect as trend or underlying growth rates – i.e. around 2%, the sharp fall in yields at year end should continue to reverse in the way we have seen through January which may well have been an overshoot. We do expect some more by way of yield recovery near-term, but we do not see it likely that yields will recoup the last peak seen in early November of last year when yields were about 50 bps higher than at present. In other words, yields may have already peaked for this cycle.

Why would this be? The answer is that looking ahead, even if we are talking 2020 and not this year, the risks to the economy are still tilted to the downside and this is bound to be reflected in bond yields. The yield curve has flattened noticeably in a way that has almost always signaled much slower growth to come. Though inversion, with long duration yields falling behind short-dated has yet to happen, it is still sending an unambiguous signal of much weaker growth to come. A move to outright inversion would strongly signal a recession to come (on average a year ahead), but the key message is that regardless of the technicalities of inversion, yields now have limited room to rise, and in a year or two's time could be rather lower than at present.

The problem with credit

Credit market valuations have improved. The question is whether this should now prompt a change of view. As markets price in risks that we have discussed earlier, is this not sufficient to improve the credit return outlook? The answer is not quite. For one thing, compared with previous sell-offs in credit markets, the back-up in spreads in the US investment grade market is very modest by historic standards, more of a hiccup to the strong trend of falling spreads since 2011 rather than a reversal (see chart below).

More of an issue is that rising corporate debt levels become more of a concern given the onset of weaker economic conditions. We need to remember that leverage ratios for US companies (excluding banks) are at an all-time high and suggest that vulnerabilities are very much with us. Overall, pricing improvement notwithstanding, credit headwinds will likely continue. Better buying opportunities should come later.

Leverage and covenant slippage hurt high yield more

With US corporate leverage so high and the slippage of covenant standards over many years, concerns about sub-investment grade bonds and loans could easily intensify in this economic environment. Yes, with much of the rise in interest rates now behind us, pressures on issuers may be bearable, but it will not be easy looking ahead. Recently lower prices show the market trying to take less attractive conditions into account. If the broader environment improved, these lower prices would make a different story, but this is unlikely. Also, though the effect of looser covenants is unknown it probably carries risks for bond holders. Overall, even with better prices, we do not see current conditions to be a buying opportunity. Loans are in a better place than high yield bonds, but both are at best a 'hold' today.

US dollar weaker sooner – emerging currencies to benefit?

The US economic slowdown that began late last year and the effects of the government shutdown appear to have led the US Federal Reserve to halt interest rate rises for now. This suggests that earlier US dollar appreciation is now more likely to reverse. Previously, we had expected the US dollar to weaken on a two to three-year horizon rather than near-term. It is now possible that creeping dollar weakness could begin soon. This could be helpful for currencies that had retreated earlier on dollar strength. Emerging market currencies should benefit, helping local currency emerging market debt. The currency component of the standard JP Morgan local emerging market debt index is still about 13% below its five-year average. Furthermore, creeping dollar weakness should support returns in non-US markets (assuming unhedged). It even looks possible that dollar softness will give the Brexit-beleaguered pound some help.

Equity valuations better but we remain wary

Much like credit, equity market valuations have improved. Even the relatively expensive US market's twelve-month forward Price to Earnings ratio is now down to a more reasonable 15x against highs of close to 19x early last year. Longer-term and 'deeper' valuation measures like the Cyclically Adjusted Price-Earnings Ratio (CAPE) have also corrected, though at 28x this is still very elevated. An improvement is also indicated by a rise in our long-term equity return assumptions. Yet, the medium-term outlook for equities is still very cloudy. Late cycle economic conditions carry all kinds of risks for equity markets. Higher bond/cash yields might weaken demand from risk-averse investors. Also, US corporate profit margins are liable to be squeezed. An indication of pressure is already evident in sharp downward revisions to earnings estimates recently (see chart).

How to deal with portfolio risk – more conservatism and looking differently at bonds

What to do with equities in these challenging conditions is not a 'one size fits all' solution. For already well buffered and diversified portfolios, there is no strong rationale for reducing equity allocations substantially, if only because there is no competing asset class that is much more attractive to hold instead. Other portfolios more reliant on equity risk to drive return have more to do and should use market rebounds to lower risk. Overall, we see the lower rewards for risk typical of such market environments indicating a need for more portfolio conservatism. This includes lower risk strategies in equities and credit. It also implies seeing government bonds differently. Yes, yields are at quite low levels especially outside the US. Yet, the December 2018-type event of bonds being the only 'performing' asset everywhere could all too easily recur.

Diversifiers and a volatility opportunity

Bonds aside, there remains scope to diversify some equity risk away. Private markets can do this for those with spare liquidity available, though selectivity is essential given overcrowding in some areas. Diversification into less directional absolute return strategies is another possibility. Finally, this higher volatility environment can make funds that use option-writing strategies more attractive. Returns come from the tendency for the market's expectation of volatility to run ahead of realized volatility. Our investment manager research team have fund ideas in all these areas.

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Aon plc/Aon Hewitt Limited
Registered office
The Aon Center
The Leadenhall Building
122 Leadenhall Street
London
EC3V 4AN

Aon Hewitt Investment Consulting, Inc.
200 E. Randolph Street
Suite 1500
Chicago, IL 60601
USA

Aon Hewitt Inc./Aon Hewitt Investment Management Inc.
225 King Street West, Suite 1600
Toronto, ON
M5V 3M2
Canada

Appendix: Index Definitions

S&P 500 Index – The market-cap-weighted index includes 500 leading companies and captures approximately 80% of available market capitalization.

Russell 2000 Index - The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000® Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. The Russell 2000 is constructed to provide a comprehensive and unbiased small-cap barometer and is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true small-cap opportunity set.

MSCI EAFE Index $ - The MSCI EAFE Index is designed to measure the performance of the large and mid-cap segments of developed European Australasian and Far East Markets. The index covers approximately 85% of the free float-adjusted market capitalization and is measured in USD dollar terms.

MSCI EAFE Index (Hedged) - The MSCI EAFE hedged Index is designed to measure the performance of the large and mid-cap segments of developed European Australasian and Far East Markets. The index covers approximately 85% of the free float-adjusted market capitalization and is measured in hedged dollar terms.

MSCI Emerging Markets Index – The MSCI Emerging Markets Index captures large and mid-cap representation across Emerging Markets (EM) countries. The index covers approximately 85% of the free float-adjusted market capitalization in each country and is measured in USD terms.

Bloomberg Barclays Capital Aggregate Index - The Barclays U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

HFRI: The Hedge Fund Research, Inc. Monthly Indices (HFRI) are fund-weighted (equal-weighted) indices. Unlike asset-weighting, the equal-weighting of indices presents a more general picture of performance of the hedge fund industry. Any bias towards the larger funds potentially created by alternative weightings is greatly reduced, especially for strategies that encompass a small number of funds. All single-manager HFRI Index constituents are included in the HFRI Fund Weighted Composite, which accounts for over 2000 funds listed on the internal HFR Database.

Contact Information

Tapan Datta
Aon Hewitt
Retirement and Investment
Global Asset Allocation Team
+44 (0)20 7086 9076
tapan.datta@aonhewitt.com

About Aon

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance. For further information on our capabilities and to learn how we empower results for clients, please visit http://aon.mediaroom.com.

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Registered office: The Aon Centre | The Leadenhall Building | 122 Leadenhall Street | London | EC3V 4AN

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G. AHIC’s Code of Ethics

Aon Hewitt Investment Consulting, Inc.

Standards of Business Conduct and Code of Ethics

Effective July 1, 2016

As Amended August 22, 2017

Issued: July 2016

Last Amended: August 2017

SECTION 1
STANDARDS OF BUSINESS CONDUCT AND OVERSIGHT

Aon Hewitt Investment Consulting ("AHIC") provides investment consulting services and manages assets for its clients as an investment adviser registered with the U.S. Securities and Exchange Commission ("SEC"). AHIC also acts as a Commodity Pool Operator ("CPO") and Commodity Trading Adviser ("CTA") registered with the Commodity Futures Trading Commission ("CFTC"), and is a member of the National Futures Association ("NFA").The nature of particular client assets also subjects AHIC, at certain times, to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

In these roles, AHIC and its employees and any other persons deemed to be subject to AHIC's supervision (collectively "Covered Persons") are fiduciaries and owe clients the utmost duty of care and loyalty. AHIC expects all Covered Persons to demonstrate the highest standards of conduct for continued employment or engagement with AHIC. Additionally, AHIC is an indirect, wholly owned subsidiary of Aon plc ("Aon") and, as such, all AHIC Covered Persons are employees of Aon. Therefore, in addition to being subject to AHIC's Code of Ethics, AHIC Covered Persons are also subject to Aon's Code of Conduct, both of which may be amended from time to time.

AHIC takes the issue of regulatory compliance seriously and places great value on ethical conduct. Covered Persons must act with integrity at all times, in a manner that upholds the best interests of clients and in accordance with regulatory requirements and these Policies and Procedures ("Policies and Procedures").

These Policies and Procedures provide guidance regarding the:

- Standards of conduct that apply while employed or engaged by AHIC;
- Practices and procedures that have been implemented by AHIC; and
- Framework for oversight and supervision within AHIC for compliance with federal securities regulation and other applicable laws.

Covered Persons are encouraged to seek the advice of AHIC's Chief Compliance Officer ("CCO") or another member of AHIC Compliance for any questions about these Policies and Procedures or how they apply to individual circumstances. Covered Persons should also understand that compliance with these Policies and Procedures is a high priority and that failure to abide by these Policies and Procedures may expose AHIC and/or you to significant consequences, including disciplinary actions, termination, regulatory sanctions, and/or civil and criminal penalties.

STANDARDS OF BUSINESS CONDUCT/CONFLICTS OF INTEREST

These Policies and Procedures are designed to establish standards of behavior and implement controls that reduce conflicts of interest and promote fair and equitable treatment of clients. It is the responsibility of each Covered Person to:

- Understand and operate in keeping with fiduciary standards;
- Place the interests of clients first, before those of AHIC and before your own personal interests or gain;
- Avoid conflicts of interest in the course of serving clients,
- Act in accordance with internal procedures, and
- Report inappropriate actions and violations, whether perceived or actual, to the CCO or another member of AHIC Compliance, in a timely manner.

REGULATORY REQUIREMENTS

As a registered investment adviser under the Investment Advisers Act of 1940 ("Advisers Act") and a Commodity Pool Operator and Commodity Trading Adviser under the Commodity Exchange Act ("CEA"), AHIC is subject to a large variety of regulatory requirements. To help ensure compliance with federal securities regulation and in keeping with Rule 206(4)-7 under the Advisers Act and National Futures Association ("NFA") Compliance Rule 2-9 and 2-36, these Policies and Procedures and Code of Ethics ("Code") are designed to prevent and detect violations of regulatory requirements and are comprised of various sections, each governing different areas of compliance. These Policies and Procedures emphasize AHIC's fiduciary duty to its investment advisory clients and the obligation of the firm's personnel to uphold that fundamental duty.

These Policies and Procedures and Code apply to all AHIC *Covered Persons*. For the purposes of AHIC's investment adviser operations, Covered Persons shall include all AHIC employees and any other person who provides investment advice on behalf of AHIC and is deemed to be subject to AHIC's supervision and control.

Further, Rule 206(4)-7 requires that each SEC registered adviser:

- Adopt and implement written policies and procedures reasonably designed to prevent violation of Federal Securities Laws;
- Review, on at least an annual basis, the adequacy and effectiveness of these Policies and Procedures of the investment adviser;
- Designate a Chief Compliance Officer who is responsible for administrating the Policies and Procedures; and
- Maintain records of the Policies and Procedures and annual reviews conducted to determine their effectiveness.

AHIC and all of its *Covered Persons* are bound to obey all applicable federal securities laws, and any other laws and regulations that govern AHIC's investment adviser operations and activities. Rule 204A-1 of the Advisers Act defines "federal securities laws" as: "the Securities Act of 1933, the Securities Exchange Act of 1934, the Sarbanes-Oxley Act of 2002, the Investment Company Act of 1940, the Advisers Act, Title V of the Gramm-Leach-Bliley Act, any rules adopted by the SEC under any of these statutes, the Bank Secrecy Act as it applies to registered investment companies and advisers, and any rules adopted thereunder by the SEC or the Department of the Treasury."

Elements of AHIC's compliance program include the designation of a chief compliance officer, adoption and annual review of these Policies and Procedures, training, and recordkeeping. These Policies and Procedures are reviewed and updated on a periodic basis to be current with AHIC's business practices and regulatory obligations.

Every *Covered Person* of AHIC *is* expected to fully understand and actively comply with these Policies and Procedures. These Policies and Procedures also incorporate the Aon Code of Conduct, and govern the activities of all Covered Persons who work with or for AHIC. A copy of the Aon Code of Conduct is located on Aon Avenue or upon request from Aon Corporate Compliance.

FRAMEWORK FOR OVERSIGHT AND SUPERVISION

Each Covered Person is charged with knowing, understanding, and abiding by these Policies and Procedures. AHIC's Investment Executive Committee ("USIEC") is responsible for setting a culture of compliance within AHIC and for ensuring adherence to these Policies and Procedures across the firm. As an affiliate of Aon plc and its family of affiliated firms, Covered Persons report through various corporate structures and firms for purposes of oversight and supervision. At all times, persons providing investment advice on behalf of AHIC are supervised by an AHIC employee.

RESPONSIBILITY FOR POLICIES AND PROCEDURES

The applicable AHIC business line is responsible for implementation of the Policies and Procedures that apply to its business area. The CCO or his/her designee is responsible for updates to these Policies and Procedures and for implementation and execution of a program for oversight of business supervisory functions on a regular basis.

MAINTENANCE OF RECORDS

AHIC Compliance will maintain and preserve at a minimum an electronic copy of these Policies and Procedures and any amendments.

SECTION 2
INSIDER TRADING POLICY AND CODE OF ETHICS

AHIC is required to adopt a Code in accordance with Rule 204A-1 under the Advisers Act. Additionally, Section 204A of the Advisers Act requires all registered investment advisers to have policies and procedures to detect and prevent insider trading. AHIC has adopted a Code in compliance with the requirements of the Advisers Act.

AHIC also is registered as a CTA and CPO with the CFTC, and is a member of the NFA. While there is no specific CFTC or NFA rule that addresses insider trading, that type of activity is covered generally under the provisions of NFA Rule 2.4, which requires observance of high standards of commercial honor and just and equitable principals of trade in the conduct of a member's commodity futures business activity.

This Code sets forth standards of conduct expected of Covered Persons and is designed to, among other items, govern personal securities trading in the accounts of Covered Persons, immediate family/household accounts and accounts in which a Covered Person has a beneficial interest. Furthermore, this Code is designed to help each Covered Person understand his/her obligations to comply with the highest ethical standards maintained by Aon and AHIC.

At the time of joining AHIC or being deemed a Covered Person, and subsequently thereafter, each Covered Person is required to:

1. **Acknowledge** receipt of this Code through AHIC's electronic personal trading platform within 10 calendar days;
2. **Certify** annually that you have read, understand, and will comply with this Code;
3. **Retain** a copy of the Code or know where to locate the Code;
4. **Seek** advice of AHIC's CCO and/or another member of AHIC Compliance for any questions about these Policies and Procedures or how they apply to individual circumstances.

This Code is to be referenced in conjunction with Aon's global policies and procedures and the Aon Insider Trading Policy which are available on *Aon Avenue*. In situations in which there is inconsistency and more restrictive provisions exist in this Code than in Aon's global policies and procedures, ***the provisions of this Code shall prevail***.

A BREACH OF THIS CODE, INCLUDING AON'S GLOBAL CODE OF CONDUCT AND INSIDER TRADING POLICY, IS CAUSE FOR DISCIPLINARY ACTION, UP TO AND INCLUDING, TERMINATION OF EMPLOYMENT.

PROHIBITION AGAINST INSIDER TRADING

Covered Persons may not pursue any benefit from non-public information including trading, either personally or on behalf of others (including AHIC-managed accounts), while in possession of material, non-public information. Covered Persons also may not communicate material, non-public information to others.

While the law concerning insider trading is not clearly defined for all circumstances, it is generally understood that the law prohibits:

- Trading by an insider, while in possession of material, non-public information;

- Trading by a non-insider, while in possession of material, non-public information; in which the information either was disclosed to the non-insider in violation of an insider's duty to keep it confidential or was misappropriated;
- Communicating material, non-public information to others.

In the course of your employment at Aon, you may have access to or become aware of inside information regarding Aon or other companies, including our clients. Specifically when performing AHIC business, AHIC and its Covered Persons may have access to various types of material, non-public information about issuers, securities, investment managers, and/or the potential effects of AHIC's own securities recommendations and client securities holdings and transactions.

Confidentiality of Client Information/Proprietary Business Information

Material non-public information is not the only type of confidential information. Covered Persons may become aware of confidential information about clients and their business affairs when typing documents, faxing reports, filing papers, delivering opened mail, overhearing office conversation, and/or other activities. Regardless of the manner in which such information is obtained, confidential information must remain confidential. Confidentiality rules extend beyond the laws and regulations around insider trading and tipping. Confidential information can be learned about companies that are not reporting issuers or about individuals. The same onus of confidentiality applies to the latter as to the former.

Any information about a client or the investment activities of AHIC that has been obtained in the course of business must be held in the strictest confidence. Such information includes,

i. financial holdings or interests of AHIC, its affiliates, or a client;
ii. information relating to investment objectives, strategies or constraints of AHIC, its affiliates, or a client, to the extent not already publicly available; and/or
iii. client information (personal information relating to a client or former client).

Determination of Insider Status

Who is an Insider?

The concept of an "insider" is broad. It includes officers, directors, and employees of a company. Additionally, a person can be a "temporary" insider if he or she enters into a special confidential relationship in the conduct of a company's affairs and as a result is given access to information solely for that company's purposes. A temporary insider can include, among others, a company's attorneys, accountants, consultants, bank lending officers, and the employees of such organizations.

AHIC itself may become a temporary insider of a company if it advises the company or its principals and/or fiduciaries.

What is Material Information?

Information is material when there is a substantial likelihood that a reasonable investor would consider it important in making his or her investment decision. Generally, this includes any information that will have a substantial effect on the price of an issuer's securities. Material information does not need to only relate to a company's business. The SEC's position is that material non-public information relates not only to issuers, but also, among other items, to AHIC's recommendations, client securities holdings, and transactions.

What is "Inside" or "Non-Public Information?

"Inside information" is non-public information that has not been disseminated or communicated publicly in writing, by release to the media or delivered through other appropriate means of communication, including but not limited to, a news service, a national newspaper or a filing of corporate disclosure documents, such as a prospectus, proxy statement, or Form 10K/10Q. Inside information may involve information about a security or issuer of publicly-held securities from an internal or external source that is material to a determination as to whether to buy, sell, or hold the security.

For example, Covered Persons may receive information about a publicly traded company while engaged in providing investment advisory services to a public company or when a research analyst is conducting due diligence on a manager related to a manager's securities offerings, its lending activities, or other business activities. Safeguards may include information barriers to thwart access to non-public information.

You may, at some point, be uncertain about the application of the insider trading or other rules contained in this Code. Often, a single question can avoid disciplinary action or complex legal problems. Please contact AHIC's CCO if you have any questions about this Policy or if you have any reason to believe that a violation of this Code has occurred or is about to occur.

Identifying Inside Information

Before executing any trade for yourself or others, including funds or segregated accounts managed or advised AHIC ("Client Accounts"), you must determine whether you have access to material, non-public information. If you think that you might have access to material, non-public information, take the following steps:

- Ask yourself:
  - Is the information material?
    - Is this information that an investor would consider important in making his/her own investment decisions?
    - Will the information substantially affect the market price of the securities if generally disclosed?

  - Is the information non-public?
    - To whom has this information been provided?
    - Has the information been effectively communicated to the market by being placed on Bloomberg, The Wall Street Journal, a regulatory filing or other publications of general circulation, or some other widely recognized public source?

If after consideration of the above, the Covered Person believes that the information is or may possibly be material and non-public, or if questions remain about whether the information is material and non-public, the following steps should be followed:

- Report the information immediately to the CCO or a member of AHIC Compliance;
- Do not purchase or sell the securities on behalf of yourself or others, including Client Accounts;
- Do not communicate the information inside or outside the firm, other than to compliance;
- After the CCO has reviewed the issue, the firm will determine whether the information is material and non-public, and if so, what action the firm will take.

<u>PERSONAL INVESTING POLICY</u>

Persons employed in the financial services industry are subject to regulatory restrictions on the purchase and sale of securities for their own accounts. AHIC allows Covered Persons to maintain brokerage accounts and trade Reportable Securities (defined below) provided such trading in the accounts is consistent with AHIC's fiduciary duty to its clients and is consistent with regulatory requirements. As part

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of its obligations under the securities laws, AHIC is required to maintain information about the personal securities trading activity of its personnel. These restrictions and reporting requirements are imposed by the SEC and other regulators on the assumption that industry employees have a greater opportunity for access to material non-public information than do employees in other types of businesses, and, therefore, a greater potential to misuse that information.

Who is considered a Covered Person?

For purposes of this Code, in addition to all AHIC employees and any other person who provides investment advice on behalf of AHIC (e.g., Participating Affiliates and/or certain other affiliated employees who may have access to non-public information regarding any clients' portfolios and/or is involved in making securities recommendations to clients or has access to such recommendations) and is deemed to be subject to AHIC's supervision and control; categories of Covered Persons subject to the limitation on personal securities transaction in this Code include:

Related Persons generally include persons or accounts with a personal or financial relationship with a Covered Person of which a Covered Person has *Beneficial Ownership or Control*.

In general, a person has beneficial ownership of a security if such person has or shares (a) voting or dispositive power with respect to such security and (b) a direct or indirect pecuniary interest in such security, including through any contract, arrangement, understanding, relationship or otherwise. A person is presumed to be the beneficial owner of securities held by immediate family members sharing a person's household (which includes any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including adoptive relationships, domestic partnership (registered or unregistered) or civil union). The term includes:

- Accounts in your name, in whole or part, including any joint account, family account and self-directed account, that hold securities;
- Accounts in the name of your spouse, domestic partner, and minor children living in your household;
- Accounts of any other member of your household for which you exercise control or substantial influence;
- Accounts of any other relatives of you, your spouse, or domestic partner for which you exercise control or substantial influence;
- Trust accounts and similar arrangements for which you act as trustee or otherwise exercise substantial influence, such as UGMA/UTMA accounts for your children;
- Trust accounts and similar arrangements which benefit you directly or indirectly (but excluding accounts for which you do not substantially influence investment policy or other decisions, directly or indirectly);
- Corporate accounts controlled, directly or indirectly, by you, such as corporate pension, benefit or investment accounts; and
- Accounts in the name of unrelated third parties, such as a civic or religious organization or investment club, if you make investment decisions for those accounts.

Under the federal securities laws, relationships or accounts that fall into these categories are "Related Persons" and are subject to the same restrictions on trading as AHIC Covered Persons. **You are responsible for ensuring that your Related Persons comply with the provisions of the Code.**

HOLDINGS REPORTING REQUIREMENTS

Every Covered Person must file periodic Holdings Reports for each Reportable Security in which he/she has any Beneficial Ownership or Control. Reportable Securities are defined as, but not limited to, the following:

Reportable Securities

- Equity securities and bonds (e.g., IBM, Microsoft, Apple – both equity and debt);
- Initial and secondary public offerings;
- Private placement and limited offerings, including hedge funds;
- Interests in all registered investment companies, including both open-ended and closed-ended funds;
- Exchange traded funds (“ETFs”);
- Purchases made as part of a voluntary tender election; and
- Any option, future, forward contract, or other obligation involving a security or index of securities, including an instrument for which value is derived or based on any of the above.

This Code treats all securities as Reportable Securities, with the following exceptions designed to exclude securities that appear to present little opportunity for improper trading.

Non-Reportable Securities

- Transactions and holdings in direct obligations of the Government of the United States.
- Money market instruments — bankers' acceptances, bank certificates of deposit, commercial paper, repurchase agreements, and other high quality short-term debt instruments.
- Shares of money market funds.
- Transactions in units of a unit investment trust if the unit investment trust is invested exclusively in unaffiliated mutual funds.
- Securities held in accounts over which the access person has no direct or indirect influence or control (e.g., managed account).
- Shares of Aon, plc (or Related Persons’ company stock) obtained within a deferred compensation package or an employee stock option purchase plan.

Every Covered Person must disclose any account that holds, or could hold, Reportable Securities for the Covered Person’s direct or indirect benefit (“Reportable Securities”). However, the following accounts are not considered Reportable Accounts:

- 401(k) plans (or other similar plan) held with a current or previous employer, except that if a self-directed brokerage account or other similar capability is activated in the 401(k) plan or other such plan, then the exception does not apply and the account is required to be reported; and
- 529 plans.

Initial Holdings Report and Certification Requirements
Every Covered Person must file an Initial Holdings Report that discloses the following information for each Reportable Security in which he/she has any Beneficial Ownership or Control:

- The title and type;
- The exchange ticker symbol or CUSIP number (as applicable) for each *Reportable Security*;
- The number of shares or principal amount (as applicable) of each *Reportable Security*;
- The name of any broker, dealer, bank, or other entity with which the Covered Person maintains a *Reportable Account*; and
- The date the Initial Holdings Report is submitted by the Covered Person.

This Initial Holdings Report is due to AHIC Compliance within ten (10) calendar days after the person becomes a Covered Person and the information must be current as of a date no more than forty-five (45) calendar days prior to the date the person became a Covered Person.

A Covered Person must submit with his or her Initial Holdings Report a certification that he or she: (i) has read and understands the Code; (ii) recognizes that he or she is subject to the Code; (iii) will comply with the Code requirements; and (iv) has disclosed or reported all required Reportable Securities holdings and Reportable Accounts.

Quarterly Transaction Report and Certification Requirements
Every Covered Person must file a Quarterly Transaction Report that discloses the information below, about each *Reportable Security* transaction in which he/she has acquired or given up *Beneficial Ownership or Control* during the quarter.

In the absence of an electronic brokerage feed, monthly or quarterly account statements with the details of such statements entered manually into Schwab Technologies by the Covered Person, can be used to satisfy the Transaction Report disclosure requirements, provided the account statement(s) includes all transactions effected during the period and includes at a minimum, all of the following:

- The date of the transaction ("trade date");
- The title of the *Reportable Security*;
- The exchange ticker symbol or CUSIP number (as applicable);
- The interest rate and maturity date (as applicable);
- The number of shares or principal amount (as applicable);
- The nature of the transaction (i.e., purchase, sale, or any other type of acquisition or disposition);
- The price at which the transaction was effected;
- The name of any broker, dealer, bank, or other entity with or through which the transaction was effected;
- The date the Quarterly Transaction Report is submitted by the Covered Person.

Each Covered Person's Quarterly Transaction Report is due to AHIC Compliance through Schwab Technologies within thirty (30) calendar days after the end of each calendar quarter which includes all transactions made during the previous quarter. Each Covered Person's Quarterly Transaction Report must also include a certification that the submitted Quarterly Transaction Report includes all information required to be reported as identified above.

If no transactions in any securities required to be reported were effected during a quarterly period by a Covered Person, such Covered Person shall submit to AHIC via Schwab Technologies a quarterly transaction certification within the time-frame specified above stating that no reportable securities transactions were effected.

Private Securities transactions that are not effected through a broker-dealer or bank (e.g., purchases or sales of interests in a private investment fund) must also be reported.

Annual Holdings Report and Certification Requirements
Every Covered Person must file an annual holdings report, with the details of such statements entered manually into Schwab Technologies by the Covered Person, disclosing the following information:

- The title and type of each *Reportable Security* in which he/she have *Beneficial Ownership or Control*;
- The exchange ticker symbol or CUSIP number (as applicable) for each *Reportable Security*;
- The number of shares or principal amount (as applicable) of each *Reportable Security*;
- The name of any broker, dealer, bank, or other entity with which the Covered Person maintains a *Reportable Account*; and
- The date the Holdings Report is submitted by the Covered Person.

Each Covered Person's holdings report is due to AHIC Compliance through Schwab Technologies within thirty (30) calendar days after the end of each calendar quarter and must be current as of a date no more than forty-five (45) calendar days prior to the date this information is filed.

With respect to the Annual Holdings Report, please note that securities holdings that were not acquired through a broker-dealer or bank (e.g., interests in a private investment fund) must also be reported through Schwab Technologies.

Exception to Reporting Requirements

Automatic Investment Plans: Holdings and Transaction Reports are not required with respect to securities held in accounts over which the Covered Person has no direct or indirect influence or control, or with respect to transactions pursuant to automatic investment plans (e.g., 401(k) plan, ESOPP).

Third-Party Manager Discretionary Authority: For purposes of this provision, **full investment discretion** means that the Covered Person is prevented from:

- Suggesting purchases or sales of investments to the trustee or third-party discretionary manager;
- Directing purchases or sales of investments within the account; or
- Consulting with the third-party manager or trustee as to the particular allocation of investment to be made in the account.

Accounts over which the Covered Person has granted full investment discretion to an outside third-party manager or trustee ("Discretionary Manager") adhering to the following procedure will not be required to complete transactions or holdings reports to Compliance, *but these accounts are still required to be disclosed* to Compliance:

1. Notify the CCO of the account's existence at the time of becoming a Covered Person or when the account is opened and annually thereafter;
2. Provide the CCO with a *"Certification of Managed Accounts"* Letter which has been executed by the Covered Person as well as the Discretionary Manager explaining the manager's relationship with Covered Person and Discretionary Manager. This letter will be prepared by AHIC Compliance and delivered to the Covered Person to provide to the Discretionary Manager;
3. Obtain from the CCO a written approval exception, relating to the account through the Schwab Technologies brokerage approval request; and
4. Complete a "Managed Account Quarterly Certification" in Schwab Technologies affirming that the Covered Person did not exercise direct or indirect influence or control over a Discretionary Manager account during the previous quarter.

Duplicate Account Statements and Confirmation Statements
All Covered Persons must direct their brokers to provide AHIC Compliance duplicate copies of their brokerage accounts and confirmation statements. When available, this requirement will be collected electronically through Schwab Technologies.

Method of Periodic Reporting
Every Covered Person should submit all holdings and transaction reports through the Schwab Technologies system unless notified otherwise. Further, AHIC Compliance will review and maintain reports through this same electronic system unless hardcopy statements are provided to Compliance.

Notice of Account Openings
Each Covered Person shall notify AHIC Compliance of any desire to open new accounts prior to opening a securities account for the direct or indirect benefit of such Covered Person. The notification can be completed through Schwab Technologies.

PRE-CLEARANCE OF TRANSACTIONS

Transactions in Covered Securities (as defined below) by Covered Persons **must be approved in advance by AHIC Compliance** as outlined below and executed in accordance with the pre-clearance procedures contained in this Code. Each approval, unless otherwise indicated, shall be effective for ***one (1)*** trading day after approval is granted. These preclearance requirements apply to all direct or indirect acquisitions or sales of Covered Securities, whether by purchase, sale, tender, stock purchase plan, gift, inheritance, or otherwise. Certain exceptions to this requirement are set forth below.

Clearance to trade is effective until the close of business on the day following the day on which clearance to trade is obtained. Open orders including stop loss orders, are generally not allowed due to the short pre-clearance effective period (unless such orders are terminated within the allotted time span). It is necessary to repeat the pre-clearance process for transactions not executed within the pre-clearance effective period.

Covered Securities
This pre-clearance requirement applies to the following securities, whether held long or short, and whether publicly or privately traded ("Covered Securities"), including but not limited to:

- Equity Securities and Bonds (e.g., IBM, Microsoft, Apple – both equity and debt)
- Initial and secondary public offerings,
- Private placement and limited offerings, including hedge funds,
- Interests in registered investment companies for which AHIC, or an AHIC affiliate, provides advisory services,
- Closed-ended funds,
- Exchange traded funds ("ETFs") other than those based on a broad index,
- Purchases made as part of a voluntary tender election, and
- Any option, future, forward contract, or other obligation involving a security or index of securities, including an instrument for which value is derived or based on any of the above.[1]

Securities or Instruments Not Classified as Covered Securities
The pre-clearance requirements of this Code do not apply to the following types of securities ("Non-Covered Securities"):
- Direct obligations of the Government of the United States (U.S. treasury bills, notes, and bonds);
- High quality (investment grade) debt instruments with a remaining term to maturity of one year or less;
- Money market instruments, such as certificates of deposit, bankers' acceptances, repurchase agreements, and commercial paper
- Shares of open-end registered investment companies (i.e., mutual funds) not advised or managed by AHIC or an AHIC affiliate;
- Shares of unit investment trusts that are invested exclusively in one or more open-end funds (none of which are advised or managed by AHIC or its affiliates);
- Physical commodities (including foreign currencies) or any derivatives thereof;
- Derivative transactions whose underlying value is based on an index as identified in Appendix A;

[1] Trading in put and call options, or short sales of securities, may raise unique issues. If the purchase or sale requires pre-clearance under the Code, it is highly likely that the closing of such positions also will require pre-clearance. In some circumstances, closing such a position may not be approved, and you could sustain losses.

- Sales made pursuant to odd lot tender offers where acceptance of the tender is discretionary on the part of the issuer. Purchases made as part of an odd lot tender election are subject to the Code (see "**Exceptions and Exemptions to the Pre-Clearance Requirement**" below); or
- Shares of Aon plc, (or Related Persons' company stock) purchased within an employee stock ownership purchase plan or as part of a deferred compensation package.

Pre-Clearance Procedures for Certain Aon plc Directors and Executive Officers related to transactions in Aon securities
In addition to the personal trading requirements outlined within AHIC's Code of Ethics, any current Aon Directors or Aon executive officers who are required to file reports under Section 16 of the Securities Exchange Act (each, an "Aon Section 16 Reporting Officer") and other members of Aon's Executive Committee (each, an "Aon EC Member") deemed to be AHIC Covered Persons must also ensure their adherence to ***Aon plc's Global Code of Conduct***. Any questions regarding that policy should be directed to Aon plc Corporate Compliance.

Pre-Clearance for Participation in IPOs. No Covered Person shall acquire any beneficial ownership in any securities in an initial or secondary public offering for his or her account without the CCO's prior written approval, after providing full details of the proposed transaction, including written certification that the investment opportunity did not arise by virtue of the Covered Person's activities on behalf of a client, and, if approved, will be subject to continuous monitoring for possible future conflicts. In deciding whether that approval should be granted, consideration will be given to whether the investment opportunity should be reserved for clients and whether the opportunity has been offered because of the person's relationship with AHIC, its affiliates, or its clients.

Pre-Clearance for Private or Limited Offerings. No Covered Person shall acquire any beneficial ownership in any securities in a private or limited offering for his or her account without the CCO's prior written approval, after providing full details of the proposed transaction, including written certification that the investment opportunity did not arise by virtue of the Covered Person's activities on behalf of a client, and, if approved, will be subject to continuous monitoring for possible future conflicts. In deciding whether that approval should be granted, consideration will be given to whether the investment opportunity should be reserved for clients, is on equal terms to that of the client, and whether the opportunity has been offered because of the person's relationship with AHIC, its affiliates, or its clients.

Participation in Investment Clubs. No Covered Person shall participate in an Investment Club without the prior written consent of the CCO.

Types of Transactions Exempt from the Pre-Clearance Requirements

- Purchases or sales that are non-volitional on the part of the Covered Persons, including mergers, recapitalizations, or similar transactions;
- The acquisition of securities through stock dividends, dividend reinvestments, stock splits, reverse stock splits, mergers, consolidations, spin-offs, or other similar corporate reorganizations or distributions generally applicable to all holders of the same class of securities;
- Exercise of an option or a single transaction to satisfy an option obligation, as long as the original option transaction was properly pre-cleared;
- Purchases effected upon the exercise of rights issued by an issuer pro rata to all holders of a class of securities to the extent such rights were acquired from such issuer, and sales of such rights so acquired;
- Purchases made as part of a 529 Plan. Rebalancing of investment alternatives in a 529 Plan, which can occur only once a year, also are exempt;
- Regularly scheduled and matching contributions to and withdrawals from a mutual fund or collective trust in a benefit plan;
- Periodic purchases and reinvestments in and withdrawals from a dividend reinvestment plan when the transactions are not subject to the discretion of the buyer or seller (in other words, the

transactions are periodic and automatic, and require no decision on the part of the buyer or seller);

- Acquisition of securities by gift or inheritance, although transactions in such securities after their acquisition are covered;
- Bona fide gifts of securities by you, unless you have reason to believe the recipient intends to sell the securities while possessing Material Non-public Information;
- Acceptance or vesting and any related stock withholding (for so-called "cashless exercises") of stock options, restricted stock, restricted stock units, phantom stock units, or other grants issued under incentive compensation plans; and
- Rebalancing or changes in allocation to an Aon Savings Plan (e.g., 401(k) plan) except in the case of security transactions in a self-directed brokerage account or other similar structure within the aforementioned plan.

Prohibited Transactions

Transactions with Clients. No Covered Person shall sell to or purchase from a client any security or other property.

Blackout Periods. AHIC reserves the right to impose trading blackouts from time to time on specified groups of its personnel, agents, or consultants when, in the judgment of the CCO, a blackout period is warranted. AHIC Compliance will notify those affected by such a blackout of when the blackout begins and when it ends. Those affected should not disclose to others the fact of such trading suspension.

No Liability for Losses

AHIC will not be liable for any losses incurred or profits avoided by any *Covered Person* resulting from the implementation or enforcement of the Code. *Covered Persons* must understand that their ability to buy and sell securities may be limited by this Code.

Hardships

Under unusual circumstances, such as a personal financial emergency, application for an exemption to make a transaction may be made to the CCO, which application may be denied or granted. To request consideration of an exemption, submit a written request containing details of your circumstances, reasons for the exception, and exception requested. A hardship exemption will not be granted after the fact.

The CCO may, in unusual circumstances, approve exceptions from the Code applicable to an individual, based on the unique circumstances of such individual and based on a determination that the exceptions can be granted (i) consistent with the individual's fiduciary obligations to Clients and (ii) pursuant to procedures that are reasonably designed to avoid a conflict of interest for the individual. Any such exceptions shall be subject to such additional procedures, reviews, and reporting as determined appropriate by the CCO in connection with granting such exception. Any such exceptions will be reported to AHIC's USIEC.

Review of Transactions

AHIC Compliance will review personal securities transactions and holdings of all Covered Persons periodically, but no less than quarterly.

PENALTIES FOR TRADING VIOLATIONS

Violations of the Code of Ethics may result in disciplinary action based on the perceived severity of the issue. The table below presents specific remedies for certain Code violations. However, extenuating circumstances may result in modifications to the indicated penalties.

CODE VIOLATION	PENALTY
Insider Trading	Up to termination after review of facts and circumstances
Personal Securities Transactions (within a rolling 12-month period) – Failure to pre-clear personal security transactions – Failure to complete quarterly transaction and/or annual certification reporting within 30 days. *Note: Required reports are time stamped when received.*	**1st violation -** written warning maintained in Compliance files and reported to the USIOC **2nd violation** – written warning with notification to NA Head of Investment Consulting maintained in the Compliance files, reporting to the USIOC, and consideration of additional sanctions as defined below. **3rd violation -** a written warning included in Compliance files and HR personnel file, reporting to the USIOC, and additional sanctions deemed appropriate as defined below. Additional sanctions also may be imposed including censures, monetary fines, disgorgement of profits, temporary suspensions of trading rights or other limitations regarding a Covered Person's authority to trade, negative reflection on individual risk assessments, termination of employment, and/or other penalty determined by Senior Management in consultation with the CCO. ***Note:*** *Subsequent consecutive violations may result in actions, additional warnings, and/or more stringent penalties depending upon the frequency and severity of the violation and other factors.*

REPORTING VIOLATIONS OF THE CODE

Any *Covered Person* who knows or has reason to believe that the Code has been or may be violated must bring such actual or potential violation to the immediate attention of the CCO. It is a violation of the Code for a *Covered Person* to deliberately fail to report a violation or deliberately withhold relevant or material information concerning a violation of the Code, unless doing so conflicts with a legal or regulatory right afforded to the *Covered Person.* No person will be subject to penalty or reprisal for reporting in good faith suspected violations of the Code by others.

RESPONSIBILITY FOR POLICY

The Chief Compliance Officer of AHIC, or his/her designee, is responsible for this Policy and for implementation and execution of a program for oversight on a regular basis.

H. Sample Investment Policy Statement

Investment Policy Statement Template

(Defined Benefit Pension Plan)

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CONTENTS

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I. OVERVIEW AND PURPOSE

General

The Board of Trustees of <Company name> is authorized and responsible to administer a Defined Benefit Plan (the “Plan”) for its employees. Funding for benefits under the plan is provided by **(employee and employer contribution/ or employer contributions)** and earning on the investment of contributions.

This Investment Policy Statement (“Policy”) defines the investment objectives, policies and procedures that have been established by the Board of Trustees (the “Board”). The objectives, policies and procedures outlined in this document were created as a framework for the management of the Plan and the statements contained in this document are intended to allow for sufficient flexibility in the investment process to capture opportunities, yet ensure prudence and care are maintained in the execution of the investment program. This Policy is intended to:

- Provide a mechanism to establish and review the Plan’s investment objectives;
- Set forth an investment “structure” for managing assets. This structure includes various asset classes and investment styles that, in aggregate, are expected to produce a prudent level of diversification and investment return over time;
- Provide a single document identifying the roles of those responsible for selecting, monitoring, and reviewing the Plan’s investments;
- Identify the criteria that may be used for selecting the investment funds (a collective reference as to investment managers, pooled investment funds and investment fund organizations);
- Establish measurement standards and monitoring procedures to be used in evaluating the performance of investment funds; and
- Establish procedures for evaluating investment funds.

The Board has arrived at this Policy through careful study of the returns and risks associated with the investment strategies in relation to the current and projected liabilities. This Policy has been chosen as the most appropriate policy for achieving the financial objectives of the Plan. The Board has adopted a long-term investment horizon such that the chances and duration of investment losses are carefully weighed against the long term potential for appreciation of assets. The assets will be invested in a manner that provides the safeguards and diversity that a prudent investor would adhere to.

II. INVESTMENT PHILOSOPHY

The following statements represent the investment principles and philosophy governing the investment of assets held by the Plan. These statements describe the core values and beliefs that will form the basis for investment decisions.

These commonly held fundamental investment beliefs are:

- One of the most important decisions that the Board makes is to determine the long-term asset allocation decision;

- The Board, with the aid of the Investment Consultant, will define a long-term strategic asset class allocation and rebalance to those allocations within specific ranges;

- The achievement of long-term investment goals is the result of sound strategic decisions and consistency in implementation. Ad-hoc asset or manager allocations are likely to result in poor outcomes;

- It is necessary to use long time frames and appropriate benchmarks to fairly evaluate active manager performance. Performance differences in asset classes, strategies, styles, and market capitalizations will have multi-year cycles. Therefore, even the most capable investment managers may have periods of under- and outperformance relative to their benchmarks;

- Investment implementation should be cost and resource effective; and

- Active investment management should be applied in asset classes and strategies where evidence of favorable value added potential exist. Otherwise, passive investment management will be applied.

III. ROLES AND RESPONSIBILITIES

- The **Board** will select investments based upon the criteria and objectives set forth in this Investment Policy Statement. The Board, in consultation with its independent investment consultant, is responsible for the selection and monitoring of the investments and service providers of the Plan. The Board is entitled to use the services of an investment consultant to assist in carrying out its responsibilities.

- With the approval of the Board, **staff** will recommend professional service providers to assist the Board in implementing investment policy. Staff, with the aid of the Investment Consultant, will also monitor and evaluate investment managers and establish effective communication and review procedures among the external service providers and the Board.

- The **Investment Consultant** will advise the Board on the management of the Plan's assets. This includes, but is not limited to, recommending appropriate strategic policy and implementation structure, conducting manager due-diligence, and assisting with manager searches and selection. The Investment Consultant will also aid the Board in adhering to the guidelines of the Investment Policy Statement and making recommendations regarding changes should they need to be made.

- **Investment Managers** have the responsibility for managing the underlying assets by making reasonable investment decisions consistent with its stated approach, and reporting investment results.

- The Board recognizes that accurate and timely completion of custodial functions is necessary to effectively monitor investment management activity. The **custodian's** primary function will be to hold in custody all the securities that each of the investment managers manage in their portfolios, except for commingled funds or mutual funds, which may be held elsewhere.

IV. INVESTMENT OBJECTIVES

The primary objective of Plan is to make investments for the sole interest of the participants and beneficiaries of the Plan. The Board receives advice from its investment consultant in selecting investments for the Plan. The Board reserves the right to close, add or change investments at any time at its discretion.

Time Horizon

The Board acknowledges that fluctuating rates of return characterize the securities markets, particularly during short-term time periods. Accordingly, the Board views interim fluctuations with an appropriate perspective.

Diversification

The Board believes that the likelihood of realization of the investment objectives is enhanced through diversification. The Board, with the aid of the Investment Consultant, will aim to diversify assets among various asset classes and investment managers to maintain acceptable risk levels and enhance long-term investment returns.

Fees and Expenses

The Board, with the aid of the Investment Consultant, will closely monitor fees and expenses associated with its investment activities and will strive to maintain fees at acceptable levels. From time to time, the Board will compare expenses with appropriate benchmarks of other defined benefit plans.

V. ASSET ALLOCATION GUIDELINES

It is not the intention of the Board to become involved in day-to-day investment decisions. Therefore, the assets will be allocated to professional investment managers in a manner consistent with the Policy's objectives. The guidelines for the allocation of assets to investment managers are as follows:

	Lower Limit	Target	Upper Limit
U.S. Equities			
Non-US Equities			
Global Equities			
U.S. Market Fixed Income			
Alternative			

BENCHMARKS AND PEER GROUPS

The primary benchmark for evaluating the performance of the total investment program is a Target Index consisting of broad market indexes for each asset class combined according to the asset-allocation targets.

Total Fund

U.S. Equity		
Non-U.S. Equity		
Global Equities		
Fixed Income		
Alternatives		

Rebalancing Guidelines

The asset allocation ranges established by this Policy represent the Board's appetite for risk and the Board's judgment of a portfolio mix that provides the greatest risk/return value.

Because the asset classes do not normally move in concert, deviations from the normal commitments will occur through normal market activity. The Upper and Lower Limits define the ranges within which market activity will be allowed to shift the allocations. The ranges are designed to allow for a reasonable period of time to elapse before rebalancing the portfolio.

Should actual allocations depart from the prescribed ranges, additions to funds will first be made to asset classes and individual manager portfolios that are below their respective target commitments. Withdrawals will first be made from asset classes and individual managers that are above their respective target commitments.

The Board / Staff will review the asset allocations periodically and rebalance to within the target asset allocation range at least quarterly if necessary.

Performance Objectives and Monitoring

Performance objectives have been established for the total fund and each asset class and investment fund in order to perform proper due diligence in monitoring and evaluating and it is clearly understood that these objectives are to be viewed over the long term. Rates of return will be compared with (1) the risk and return of an appropriate market index (2) the return of an appropriate style benchmark, where applicable, and (3) the returns of a universe of comparable funds or investment managers, where applicable. The Board, with the help of Staff and the investment consultant, will monitor these on a quarterly basis. The asset classes and investment fund types that fall under this purview can be found in the tables that follow.

Asset Classes and Investment Managers (customized)

Investment Style	**Index Benchmark**	**Peer Group**
Domestic Equity		
Large Cap		
Small Cap		
International Equity		
Large Cap		
Small Cap		
Emerging Markets		
Global Equity		
Fixed Income		
Real Estate		
Opportunistic		

VI. INVESTMENT GUIDELINES

General

All investments shall comply with all applicable guidelines governing the investment of the pension funds.

All securities transactions shall be executed by reputable broker/dealers or banks (including any bank acting as custodian) and shall be at a best price and best execution basis.

Investments shall possess value and quality corroborated by accepted techniques and standards of fundamental economic, financial and security analysis.

Proxy Voting

Retained investment managers will vote all proxy proposals on an individual basis. The manager's process in dealing with proxy issues should be both thorough and reasonable, and oriented toward achieving maximum long-term shareholder value. The manager is expected to discharge expected fiduciary duty by use of proxy voting policies and procedures solely in the interest of the participants and beneficiaries. To act prudently in the voting of proxies, the manager should consider those factors that would affect the value of the plan's investment and act solely in the interest of, and for the exclusive purpose of, providing benefits to participants and beneficiaries. The manager will not subordinate the interest of participants and beneficiaries in their retirement income to unrelated objectives. Managers will review and vote all proxies that are received. At the beginning of each proxy season the manager should notify the custodial bank of their responsibility to forward all proxy material. An ongoing review should be done to see that all expected proxies have been received, and if not, the bank should be directed to vote any proxy it receives in conformance with the manager's instruction.

On an annual basis, investment managers should send a report of its proxy voting activities. A brief explanation of votes against management, votes on controversial issues, and votes on issues that may be deemed to be of importance to the BOARD should be prepared and forwarded upon written request.

Commissions and Trading Costs

The Board understands its fiduciary responsibility with respect to transactions and hereby instructs its investment managers to seek best execution when conducting all trades.

VII. SELECTION AND MONITORING OF INVESTMENT MANAGERS

Pre-Selection

Criteria will be established for each manager search undertaken on behalf of the Board, and will be tailored to the specific needs of such a search. At a basic level, each manager hired by the Board should exhibit *skill*. From a qualitative standpoint skill includes, but is not limited to, uniqueness in the strategy or the ability of the manager, their process or philosophy, and their ability to analyze and process information. The Investment Consultant should identify the skill factor associated with a manager being considered for addition to the Plan, and should have conviction that the specific skill attributes will provide the manager with the ability to outperform their benchmarks over the long-term.

Investments selected shall have a reasonable fee level within their peer group. Past performance should be evaluated with the right perspective. Past performance should be analyzed relative to the risk undertaken and should be geared at evaluating the manager's potential to add value on a risk-adjusted basis, net of all fees. Further, in evaluating past performance, it should be ensured that the same team that generated a certain track record remains with the organization. Investment management should be a focus of the organization and should be evidenced by the allocation of resources towards the area. The organizational structure should ensure that the manager's interests are aligned closely with those of investors. The firm and its people should be reputable and firms with outstanding litigation should be subject to more thorough due-diligence if being considered.

In general, the minimum due diligence process for an investment manager's selection shall include, but not be limited to:

- **Regulatory oversight**: Each investment manager should be a regulated bank, an insurance company, a mutual fund organization, or a registered investment advisor.

- **Assets under management**: The product should have a sufficient and appropriate asset base.

- **Performance relative to assumed risk**: Competitive returns of investment options as compared to appropriate benchmark data at an acceptable level of volatility.

- **Consistency of holdings with style**: History of reasonable adherence to investment objectives.

- **Stability of the organization**: Established investment firm (experience and reputation of reliability).

- **Performance relative to peer groups**: The product's performance should be evaluated against the peer group's returns for the trailing 1-, 3- and 5- year cumulative periods; past performance should not, however, be the sole basis for selecting investment managers.

Post-Selection Review of Investment Managers

The Board, with the aid of the Investment Consultant, will monitor the performance of each manager quarterly, while retaining a long-term focus. Monitoring the performance relative to benchmarks will be an ongoing activity. The focus of the ongoing evaluation shall include:

- Assets under management (track substantial changes in total assets).
- Material changes to investment policy and objectives.
- Performance relative to assumed risk (benchmark comparison over five years).
- Holdings consistent with style.
- Stability of the organization and personnel turnover.
- Performance relative to peer group(s) (peer group comparison over three years).

Terminations

The Board retains the discretion to terminate an investment manager for any reason. Grounds for investment manager termination may include, but are not limited to:

- Failure to comply with stated guidelines.
- Significant deviation from the manager's stated investment philosophy and/or process.
- Loss of key personnel.
- Evidence of illegal or unethical behavior by the investment management firm.
- Loss of confidence by the Board and / or Consultant in the investment manager.
- Failure to achieve performance objectives specified in the manager's guidelines over reasonable measurement periods.
- A change in the Board's asset allocation policy that necessitates a shift of assets to a different investment style.

VIII. REVIEW AND AMMENDMENT OF THE POLICY

The Board, with the aid of the Investment Consultant, shall review this Policy at least annually to ensure that it continues to reflect the Board's objectives and meet the needs of the Plan's participants. The Policy may be modified, in whole or in part, by the Board at any point in time.

I. Sample Asset-Liability Study

SAMPLE REPORT

Asset-Liability Study Results

Client XYZ
Month 20XX

The information presented is for illustrative purposes only and should not be considered advice. None of the information presented has been calculated using the recipient's portfolio information.

Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc., an Aon Company.

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Empower Results®

Executive Summary

Executive Summary

Summary and Conclusions

Portfolio Analysis

- The current portfolio is well-diversified
- The expected return assumption for the current portfolio is 6.80% over the next 30 years
- XYZ should consider its desired balance between funding and investment returns in order to determine the ideal investment portfolio

Asset-Liability Projection Analysis

- Longer time horizons are expected to reward higher levels of risk; shorter time horizons are not
- The funded ratio is projected to trend toward full funding over the course of the projection period
- Adverse market experience could significantly impact the funded status of the Plan over the projection period

Liquidity Analysis

- The current asset allocation has sufficient liquidity in all economic scenarios modeled

Expected returns are using AHIC Capital Market Assumptions. Assumptions do not include fees/expenses. All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees. Expected returns presented are models and do not represent the returns of an actual client account. Not a guarantee of future results. See capital market assumptions disclosure pages beginning on page 33.

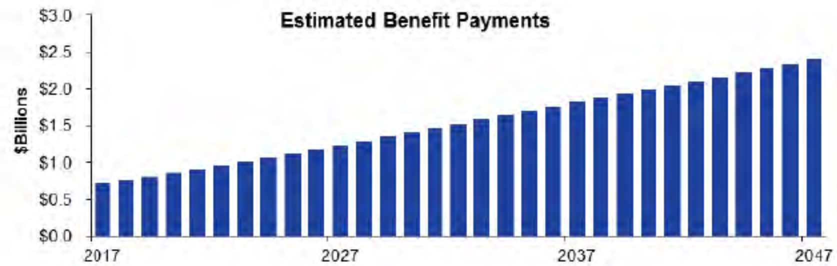
Analysis

- Current State

Current State Asset-Liability Profile
As of June 30, 20XX

SAMPLE REPORT

Asset-Liability Snapshot as of 6/30/20XX		
Metric ($, Billions)	**Value**	**Fund %**
Market Value of Assets	$11.4	76.4%
Actuarial Value of Assets	$11.6	77.5%
Liability Metrics		
Actuarial Liability (AL) - Funding	$14.9[1]	



Asset-Liability Growth Metrics			
Metric ($, Billions)	**Value**	**% Liability**	**% Assets**
AL Discount Cost	$1.08	7.3%	9.5%
AL Normal Cost	$0.34	2.3%	3.0%
Total Liability Hurdle Rate	**$1.42**	**9.6%**	**12.5%**
Expected Return on Assets[2]	$0.78	5.2%	6.8%
Total Contributions	$0.68	4.6%	6.0%
Total Exp. Asset Growth	**$1.46**	**9.8%**	**12.8%**
Hurdle Rate Shortfall / (Surplus)	**-$0.04**	**-0.3%**	**-0.3%**
Est. Benefit Payments	$0.73	4.9%	6.4%

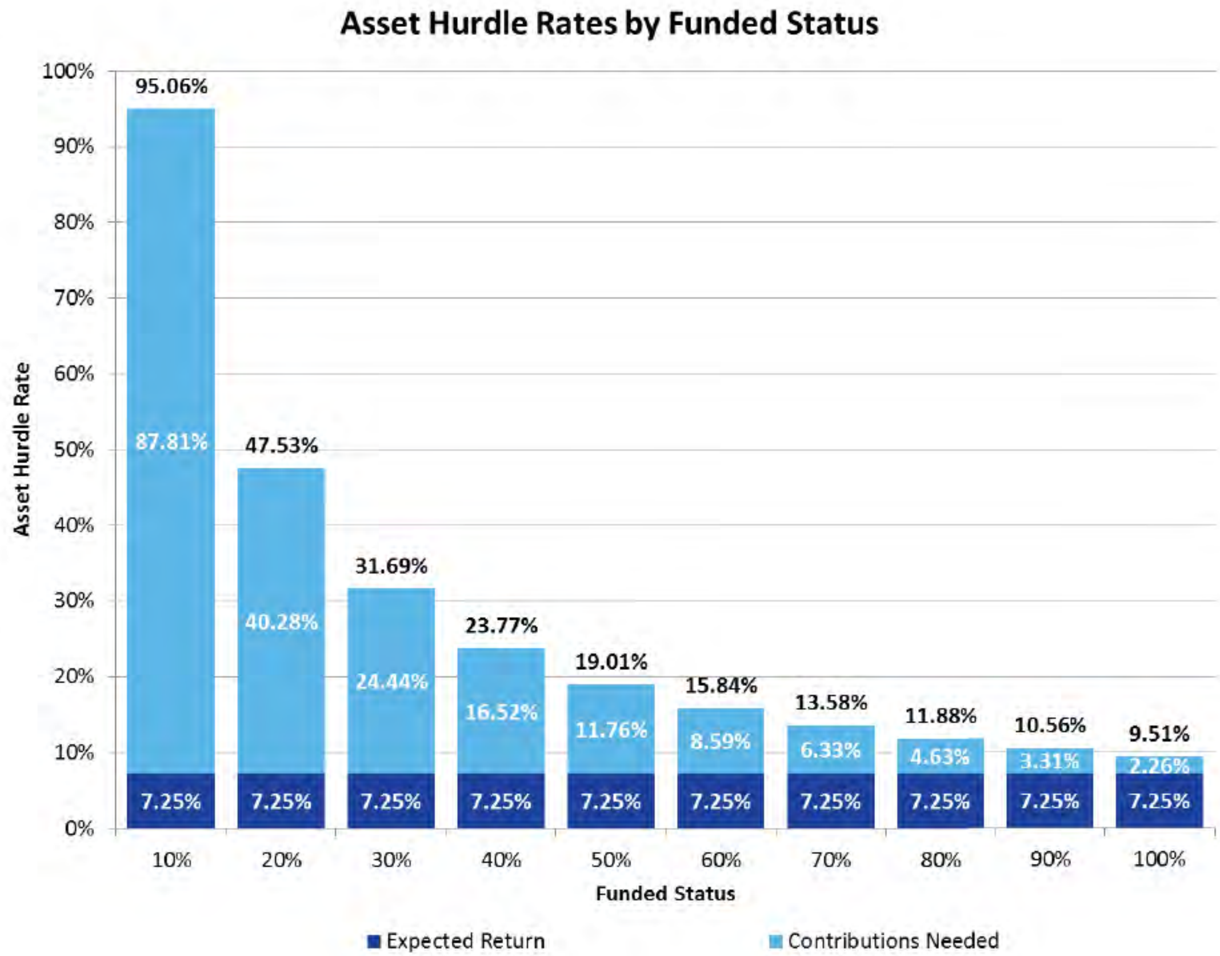
Target Asset Allocation as of 6/30/20XX		
Metric ($, Billions)	**Value**	**Alloc %**
Return-Seeking		
- U.S. Equity	$2.1	18%
- International Equity	$2.7	24%
- Global Equity	$0.3	3%
- Private Equity	$0.9	8%
- Real Estate	$1.0	9%
- Opportunistic	$0.9	8%
- Real Assets	$0.7	6%
- High Yield Bonds	$0.7	6%
- Total	$9.4	82%
Risk-Reducing		
- Intermediate Duration Fixed Income	$2.1	18%
- Total	$2.1	18%
Total	$11.4	100%

[1]Based on a 7.25% discount rate consistent with the June 30, 2017 valuation results.
[2]Using AHIC Q1 2018 30 year capital market assumptions

Expected returns are using AHIC Capital Market Assumptions. Assumptions do not include fees/expenses. All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees. Expected returns presented are models and do not represent the returns of an actual client account. Not a guarantee of future results. See capital market assumptions disclosure pages beginning on page 33.

Asset Hurdle Rate

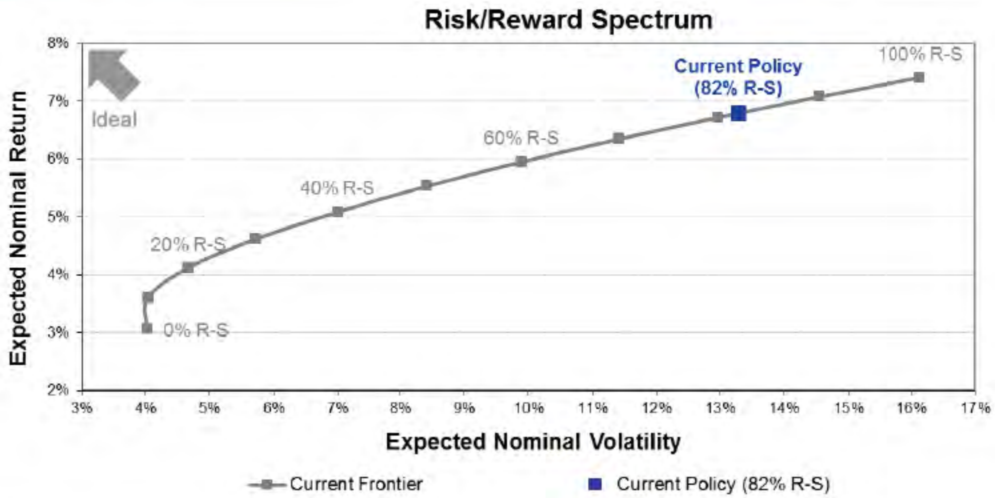
- **Asset Hurdle Rate** is the level of asset growth needed to keep pace with the growth of the Plan liabilities
  - Assets must grow at this rate or more in order to maintain or reduce the existing funding shortfall
- Assets can grow via:
  - Investment performance, and/or
  - Funding contributions
- Asset hurdle rates increase as funded ratio declines, as shown in the chart to the right



Analysis

- Portfolio Analysis

Portfolio Analysis
Risk/Reward Spectrum



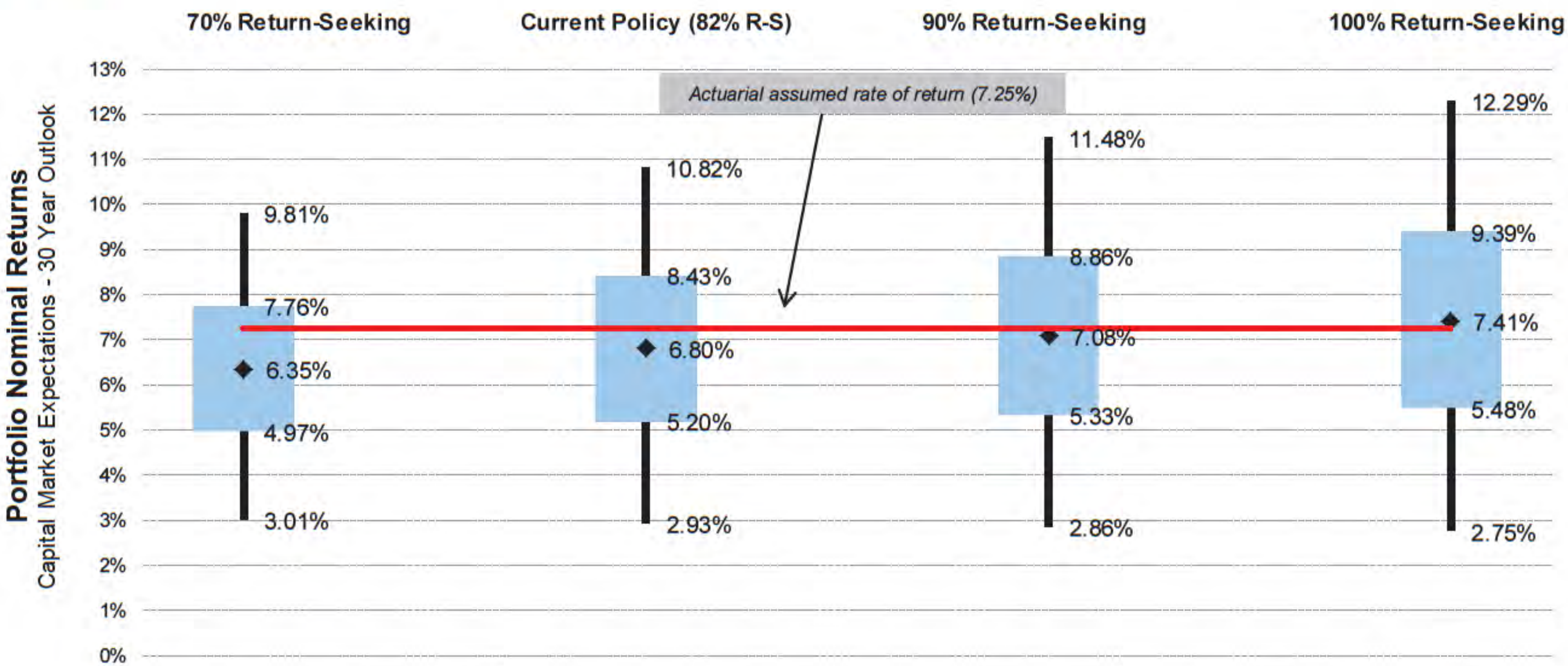
Key Takeaways:
- The current portfolio is well-diversified
  - Return-seeking assets are broadly diversified
  - Risk-Reducing asset allocation should withstand stressed markets

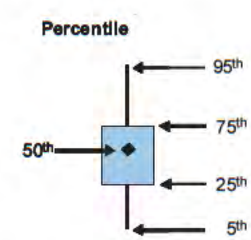
	Expected Nominal Return	Expected Nominal Volatility	Sharpe Ratio	Return-Seeking: U.S. Equity	Non-U.S. Equity	Global Equity	High Yield Bonds	Real Estate	Real Assets	Opportunistic	Private Equity	Risk-Reducing: Interm. Duration Gov't Bonds	Interm. Duration Credit
Current Policy (82% R-S)	6.80%	13.28%	0.331	18%	24%	3%	6%	9%	6%	8%	8%	9%	9%
Current Frontier													
0% Return-Seeking	3.06%	4.02%	0.165	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%
10% Return-Seeking	3.61%	4.03%	0.299	2%	3%	0%	1%	1%	1%	1%	1%	45%	45%
20% Return-Seeking	4.13%	4.67%	0.370	4%	6%	1%	1%	2%	1%	2%	2%	40%	40%
30% Return-Seeking	4.62%	5.72%	0.388	7%	9%	1%	2%	3%	2%	3%	3%	35%	35%
40% Return-Seeking	5.09%	7.00%	0.384	9%	12%	1%	3%	4%	3%	4%	4%	30%	30%
50% Return-Seeking	5.53%	8.41%	0.373	11%	15%	2%	4%	5%	4%	5%	5%	25%	25%
60% Return-Seeking	5.96%	9.89%	0.359	13%	18%	2%	4%	7%	4%	6%	6%	20%	20%
70% Return-Seeking	6.35%	11.42%	0.346	15%	20%	3%	5%	8%	5%	7%	7%	15%	15%
80% Return-Seeking	6.73%	12.97%	0.334	18%	23%	3%	6%	9%	6%	8%	8%	10%	10%
90% Return-Seeking	7.08%	14.55%	0.322	20%	26%	3%	7%	10%	7%	9%	9%	5%	5%
100% Return-Seeking	7.41%	16.13%	0.311	22%	29%	4%	7%	11%	7%	10%	10%	0%	0%

Expected returns are using AHIC Capital Market Assumptions. Assumptions do not include fees/expenses. All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees. Expected returns presented are models and do not represent the returns of an actual client account. Not a guarantee of future results. See capital market assumptions disclosure pages beginning on page 33.

Portfolio Analysis
Range of Nominal Returns

SAMPLE REPORT



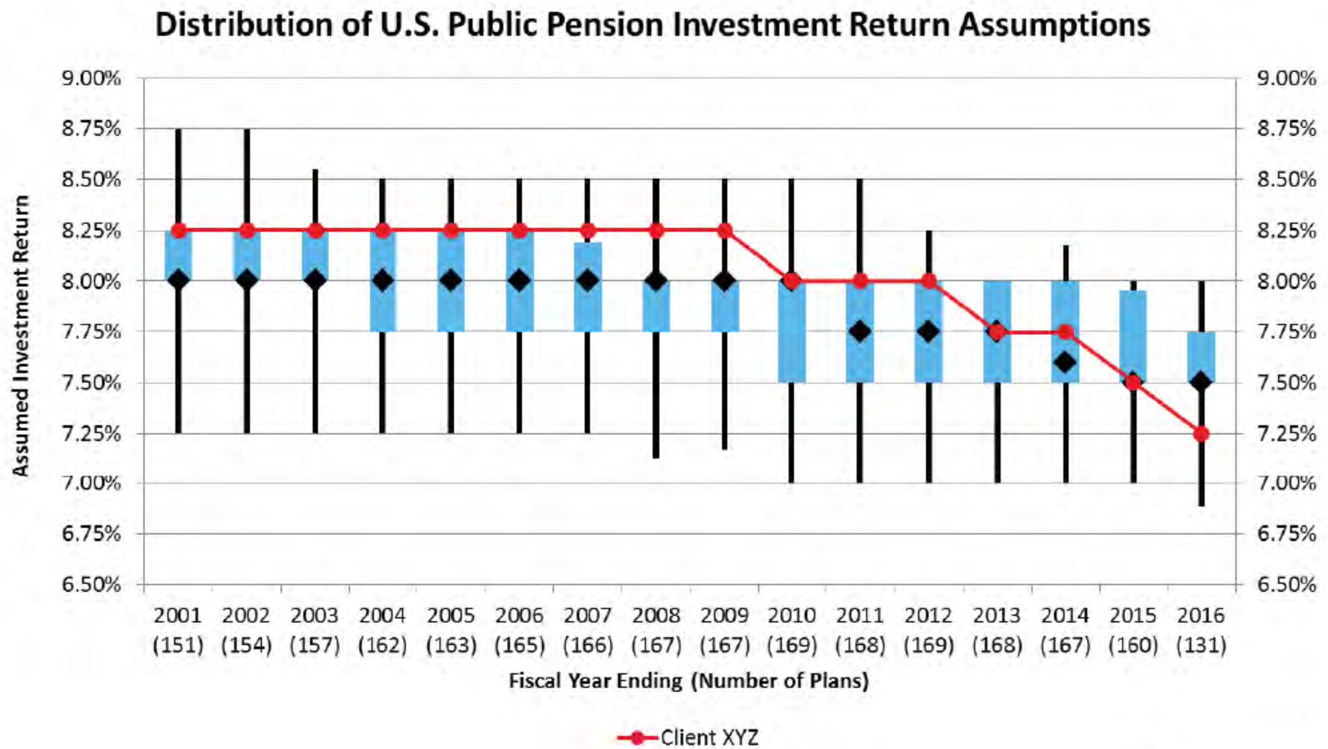


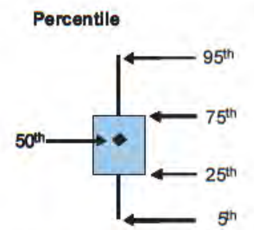
Key Takeaway:

- Median expected returns for all policies below 100% return-seeking assets are projected to trail the actuarial assumed rate of return (7.25%) with higher risk portfolios trending closer to that assumption

Expected returns are using AHIC Capital Market Assumptions. Assumptions do not include fees/expenses. All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees. Expected returns presented are models and do not represent the returns of an actual client account. Not a guarantee of future results. See capital market assumptions disclosure pages beginning on page 33.

Portfolio Analysis
Expected Return Assumption versus Peers[1]





Key Takeaways:

- The public pension peer median actuarial assumption for investment return has declined from 8.00% in 2001-2010 to 7.50% based on the latest survey data
- XYZ's assumption for FYE 2016 (7.25%) lied below the median relative to its peers
- If XYZ fails to achieve (or exceeds) the actuarial return assumption, higher (or lower) funding will be needed in future years

Expected returns are using AHIC Capital Market Assumptions. Assumptions do not include fees/expenses. All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees. Expected returns presented are models and do not represent the returns of an actual client account. Not a guarantee of future results. See capital market assumptions disclosure pages beginning on page 33.

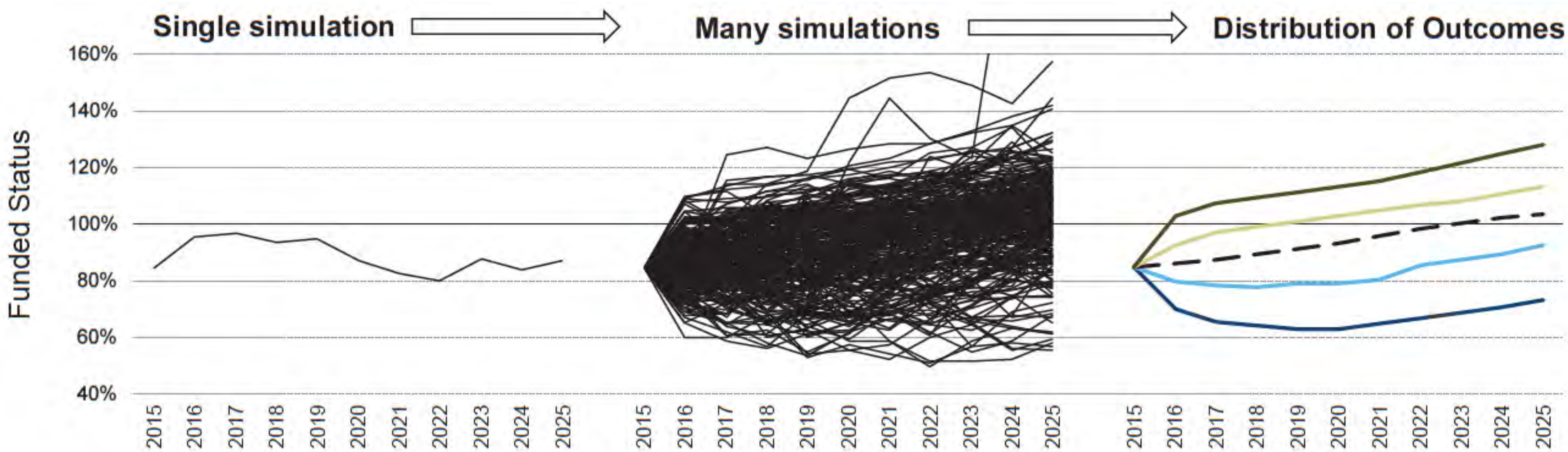
Sources: Public Plans Data (publicplansdata.org) as of July 2017; Expected Returns are the assumptions made by the plans included in the data set.
[1] Peers defined as public funds published within publicplansdata.org as of July 2017; Number of plans per year are shown in parentheses

Analysis

- Asset-Liability Projection Results

Asset-Liability Simulation Overview

- Thousands of simulations plotted in one graph would be impossible to interpret
- Instead, we rank the simulations at each point over the future
- This produces a distribution of outcomes illustrating the degree of uncertainty of a plan's financial position over the projection period
- Different investment strategies will produce different distributions of outcomes



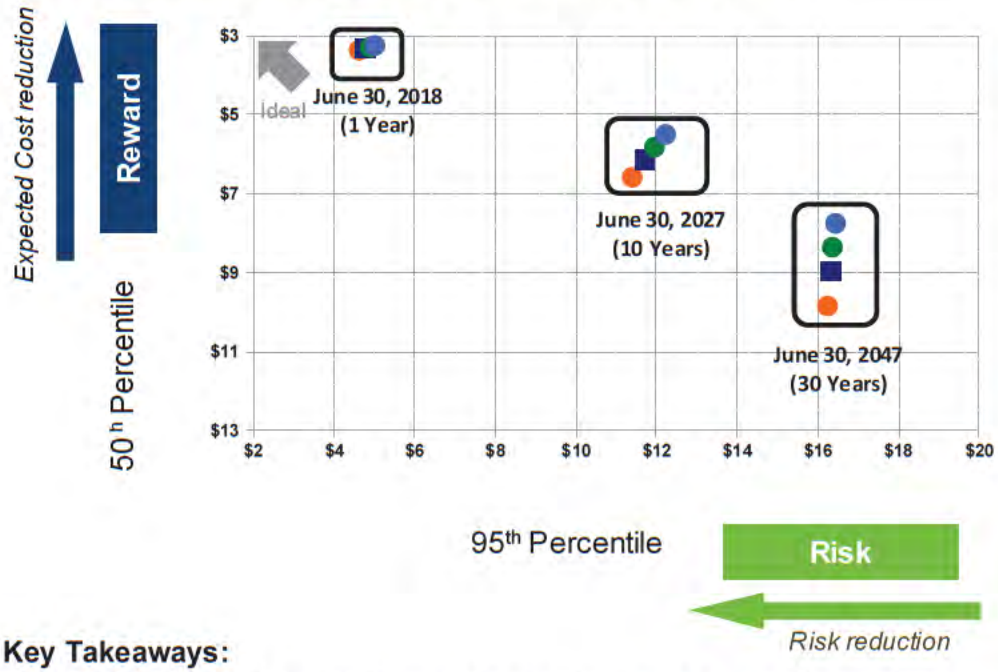
* The path of a given scenario will follow a much less smooth pattern than the distribution suggests, as illustrated above

Asset-Liability Projection Results

Economic Cost Analysis—1-Year, 10-Year, and 30-Year Horizons

Economic Cost

Present Value of Contributions plus AL Funding Shortfall/(Surplus)* at 7.25%, $billions



Strategy ($Billions)	Economic Cost June 30, 2017 Cost	Risk
70% Return-Seeking	$3.4	$4.6
Current Policy (82% R-S)	$3.3	$4.8
90% Return-Seeking	$3.3	$4.9
100% Return-Seeking	$3.3	$5.0

Strategy ($Billions)	June 30, 2027 Cost	Risk
70% Return-Seeking	$6.6	$11.4
Current Policy (82% R-S)	$6.1	$11.7
90% Return-Seeking	$5.8	$11.9
100% Return-Seeking	$5.5	$12.2

Strategy ($Billions)	June 30, 2047 Cost	Risk
70% Return-Seeking	$9.9	$16.2
Current Policy (82% R-S)	$9.0	$16.3
90% Return-Seeking	$8.4	$16.4
100% Return-Seeking	$7.7	$16.4

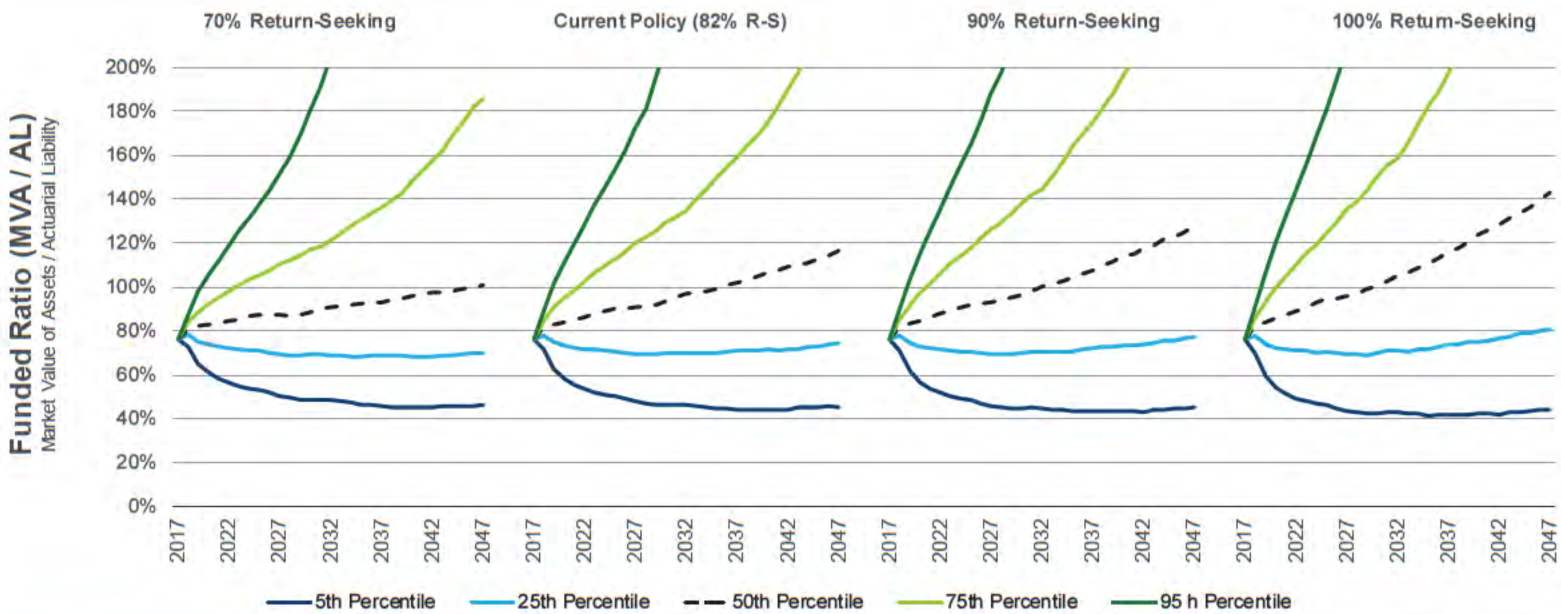
Key Takeaways:

- The magnitude of the risk/reward trade-off changes over a longer-term projection
- Under the Current Policy asset allocation over a 30-year time horizon, the expected Economic Cost is $9.0B and the potential risk is $16.3B
- Adjustments to the portfolio composition may have desirable risk/reward characteristics relative to the Current Policy

* Liability projections assume discount rates of 7.25% for all investment policies studied; Reflects a *utility function:* Excludes 50% of surplus in excess of 120% of Actuarial liability, and includes twice the shortfall below 30% of Actuarial liability, on a market value basis

Asset-Liability Projection Results

Market Value of Assets / Actuarial Liability Funded Ratio



Strategy	70% Return-Seeking			Current Policy (82% R-S)			90% Return-Seeking			100% Return-Seeking		
Year	2027	2037	2047	2027	2037	2047	2027	2037	2047	2027	2037	2047
5 h Percentile	50%	46%	46%	48%	44%	45%	46%	43%	45%	44%	42%	44%
25th Percen ile	69%	69%	70%	70%	71%	74%	70%	72%	77%	69%	74%	81%
50th Percen ile	87%	93%	101%	91%	102%	117%	93%	108%	128%	96%	116%	143%
75th Percen ile	110%	136%	186%	120%	159%	232%	126%	175%	269%	135%	197%	314%
95th Percen ile	151%	287%	622%	172%	345%	787%	188%	392%	939%	208%	467%	1151%
Probability > 100%	36%	46%	51%	42%	52%	60%	45%	56%	64%	47%	59%	67%

Key Takeaways:

- Plan is expected to achieve full funding in the Current Policy
- Higher (or lower) return-seeking strategies adjust the trajectory of the central expectation

* Liability projections assume discount rates of 7.25% for all investment policies studied

Asset-Liability Projection Results

Funded Ratio Analysis (Based on Market Value of Assets)

XYZ is projected to have the following probability of falling below key funded ratio thresholds:

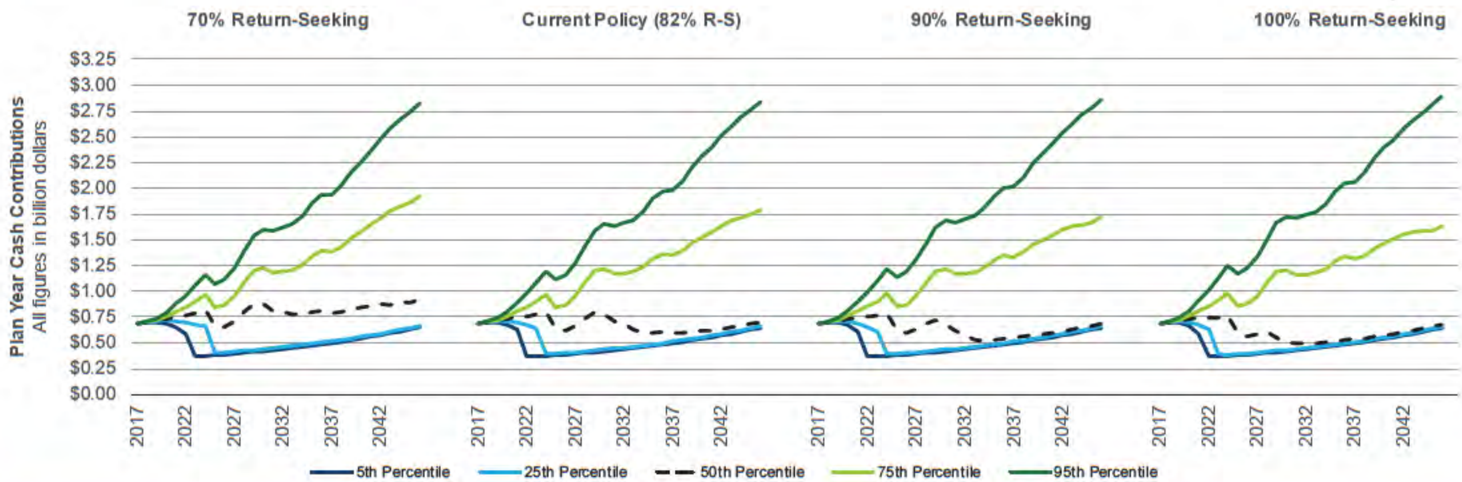
	After 5 Years					After 10 Years					After 30 Years				
Funded Status	20% R-S	40% R-S	60% R-S	Current Policy - 82% R-S	100% R-S	20% R-S	40% R-S	60% R-S	Current Policy - 82% R-S	100% R-S	20% R-S	40% R-S	60% R-S	Current Policy - 82% R-S	100% R-S
100%	100.0%	97.2%	84.6%	71.2%	63.8%	98.3%	88.5%	71.9%	59.4%	53.3%	78.4%	69.6%	56.0%	42.7%	35.2%
90%	99.7%	84.4%	66.7%	55.8%	51.1%	94.6%	75.1%	58.9%	49.1%	44.7%	73.1%	62.9%	48.9%	36.7%	30.0%
80%	79.7%	51.8%	42.6%	38.5%	37.0%	79.6%	55.1%	43.1%	37.9%	35.7%	65.6%	53.6%	40.4%	29.2%	24.6%
70%	13.6%	17.8%	20.4%	22.7%	23.8%	43.8%	30.3%	26.6%	25.4%	25.7%	53.5%	40.3%	28.9%	21.7%	18.7%
60%	0.2%	2.5%	6.0%	10.0%	12.4%	7.4%	9.4%	12.2%	14.4%	16.1%	34.2%	22.8%	17.2%	14.2%	12.9%
50%	0.0%	0.1%	1.0%	3.3%	5.5%	0.0%	1.1%	3.4%	6.3%	8.9%	9.2%	7.6%	7.3%	7.3%	7.4%
40%	0.0%	0.0%	0.0%	0.4%	1.6%	0.0%	0.0%	0.3%	1.7%	3.4%	0.2%	0.7%	1.6%	2.3%	3.5%
30%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.6%	0.0%	0.0%	0.1%	0.4%	0.8%
20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

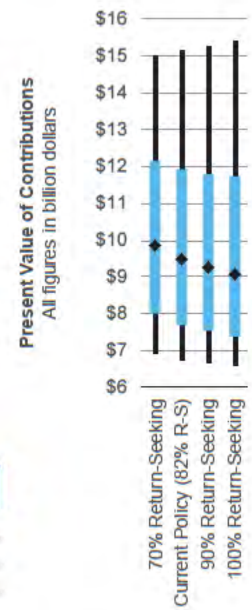
Key Takeaway:

- Higher risk portfolios will have more upside potential over longer periods of time while lower risk portfolios will have higher downside protection in the near-term

Asset-Liability Projection Results

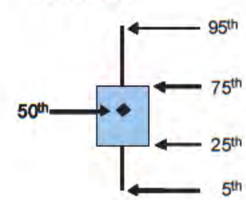
Total Contribution Amount





Strategy	70% Return-Seeking			Current Policy (82% R-S)			90% Return-Seeking			100% Return-Seeking		
Year	2026	2036	2046	2026	2036	2046	2026	2036	2046	2026	2036	2046
5th Percentile	$0.39	$0.48	$0.65	$0.38	$0.48	$0.64	$0 38	$0.48	$0.64	$0.38	$0.48	$0.64
25th Percen ile	$0.41	$0.50	$0.66	$0.40	$0 50	$0.66	$0.40	$0.50	$0.66	$0.40	$0 50	$0.66
50th Percen ile	$0.66	$0.81	$0.92	$0.62	$0.61	$0.70	$0 59	$0.54	$0.69	$0.56	$0 52	$0.68
75th Percen ile	$0.86	$1.39	$1.92	$0.87	$1 36	$1.79	$0 87	$1.35	$1.72	$0.87	$1 33	$1.63
95th Percen ile	$1.12	$1.93	$2.82	$1.16	$1 97	$2.84	$1.19	$2.01	$2.86	$1.22	$2 05	$2.90
Probability > $0.75B	39%	55%	67%	37%	45%	49%	36%	43%	48%	35%	43%	48%

Percentile



Key Takeaway:

- The trajectories of the central expectations (50th percentile outcomes) decline with increased return-seeking allocations while the volatility of those amounts widens

* Liability projections assume discount rates of 7.25% for all investment policies studied

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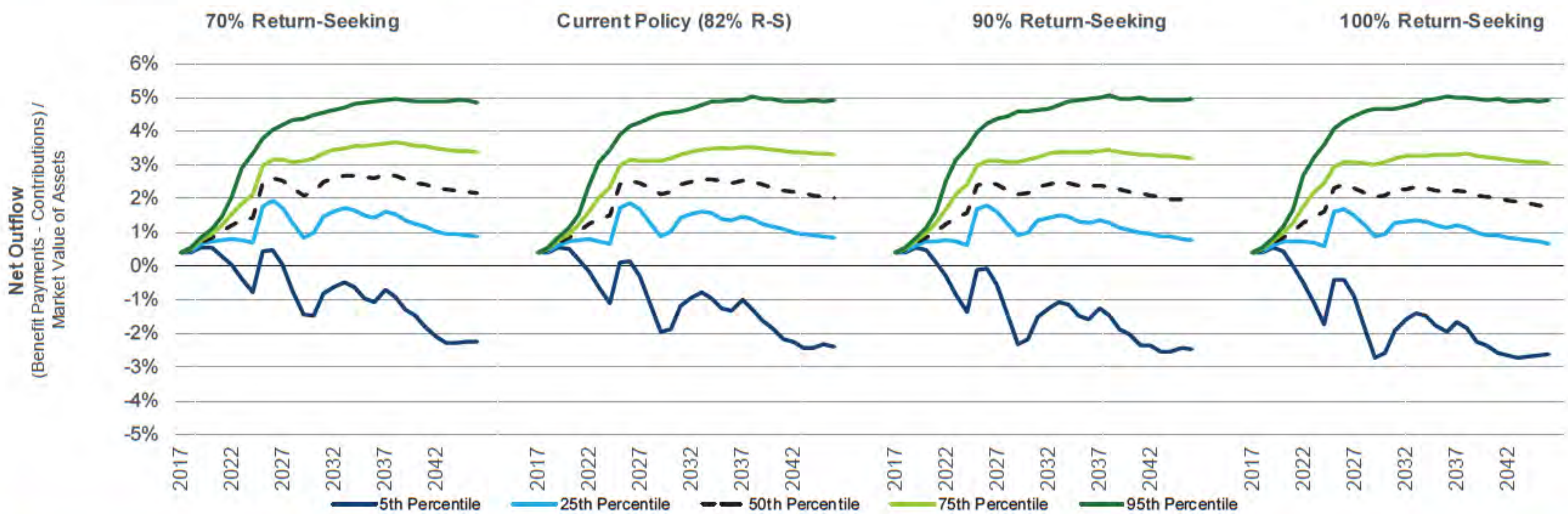
Asset-Liability Projection Results

Net Outflow Analysis: (Benefit Payments less Contributions) / Market Value of Assets



Strategy	70% Return-Seeking			Current Policy (82% R-S)			90% Return-Seeking			100% Return-Seeking		
Year	2026	2036	2046	2026	2036	2046	2026	2036	2046	2026	2036	2046
5th Percentile	0.5%	-1.1%	-2.2%	0.1%	-1.3%	-2.4%	-0.1%	-1.6%	-2.5%	-0.4%	-1.9%	-2.6%
25th Percentile	1.9%	1.4%	0.9%	1.8%	1.4%	0.8%	1.8%	1.3%	0.8%	1.7%	1.1%	0.7%
50th Percentile	2.6%	2.6%	2.1%	2.5%	2.5%	2.0%	2.5%	2.4%	1.9%	2.4%	2.2%	1.8%
75th Percentile	3.2%	3.6%	3.4%	3.1%	3.5%	3.3%	3.1%	3.4%	3.2%	3.1%	3.3%	3.1%
95th Percentile	4.0%	4.9%	4.8%	4.1%	4.9%	4.9%	4.2%	5.0%	4.9%	4.3%	5.0%	4.9%
Probability > 3%	32%	40%	33%	31%	37%	31%	30%	34%	29%	28%	32%	26%

Key Takeaway:

- Net outflow is consistent across the policies modeled with central expectations (50th percentile outcome) in the 1-3% range

* Liability projections assume discount rates of 7.25% for all investment policies studied

Asset-Liability Projection Results
Summary and Conclusions

All Scenarios	30-year Economic Cost		30-year Present Value of Contributions		30-year Ending Funded Ratio (MVA / AL)	
$ billions	Expected[1]	Downside[2]	Expected[1]	Downside[2]	Expected[1]	Downside[3]
Current Policy (82% R-S)	$9.0	$16.3	$9.5	$15.2	117%	45%
0% Return-Seeking	$15.6	$17.4	$13.9	$15.1	61%	45%
10% Return-Seeking	$14.9	$17.0	$13.3	$14.8	64%	47%
20% Return-Seeking	$14.1	$16.7	$12.7	$14.6	68%	48%
30% Return-Seeking	$13.3	$16.5	$12.1	$14.6	72%	48%
40% Return-Seeking	$12.4	$16.4	$11.4	$14.7	77%	47%
50% Return-Seeking	$11.6	$16.3	$10.9	$14.8	83%	48%
60% Return-Seeking	$10.7	$16.3	$10.3	$14.9	91%	47%
70% Return-Seeking	$9.9	$16.2	$9.8	$15.0	101%	46%
80% Return-Seeking	$9.1	$16.3	$9.5	$15.1	114%	46%
90% Return-Seeking	$8.4	$16.4	$9.3	$15.3	128%	45%
100% Return-Seeking	$7.7	$16.4	$9.1	$15.4	143%	44%

Key Findings:

- Plan is expected to achieve full funding in the Current Policy
- Higher return-seeking strategies adjust the trajectory of the central expectation

[1] Expected = 50th percentile outcome or central expectation across all 5,000 simulations
[2] Downside = 95th percentile outcome across all 5,000 simulations
[3] Downside = 5th percentile outcome across all 5,000 simulations

Analysis

- Liquidity Analysis

Overview

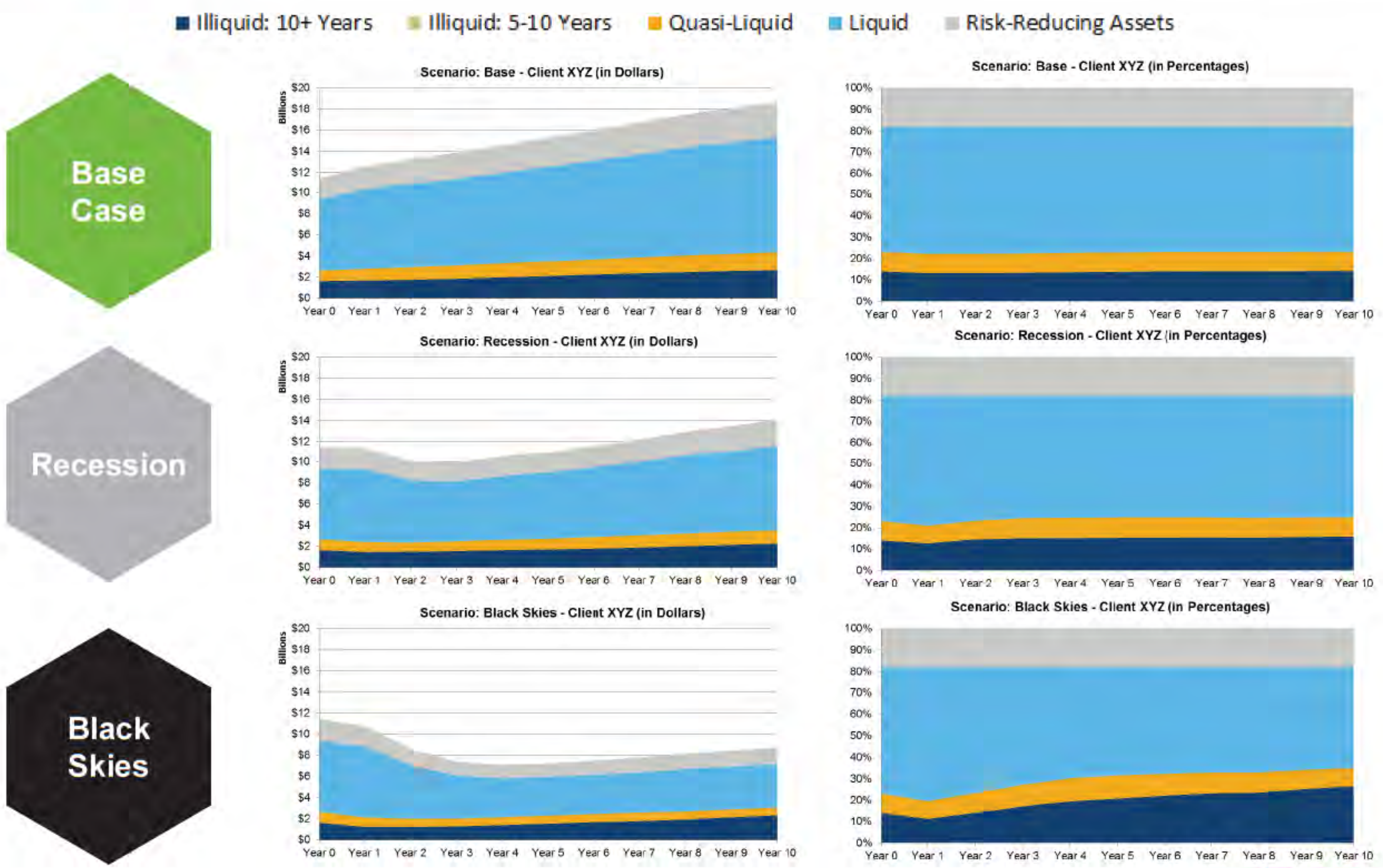
- XYZ's liquidity analysis is performed under its current asset allocation
  - Intended as a stress-testing model, incorporating the profile of the liabilities as well as expected future contributions
  - Uses different scenarios for economic environments and other relevant events
  - Shows how the portfolio's liquidity profile could evolve with a given investment strategy

- We categorized investments by liquidity into four buckets
  - **Liquid:** less than 3 months needed for return of capital (e.g. publicly traded securities)
  - **Quasi-Liquid:** Typical lock-up of 3–12 months. Conservatively, we assumed a 1-year lock-up in most economic environments, 2 years in a Recession scenario, and 3 years in a Black Skies scenario (e.g. many hedge funds, core real estate)
  - **Illiquid: Potential lock-up of 5–10 years**, depending on economic environment (e.g. closed-ended real estate)
  - **Illiquid: Potential lock-up of 10+ years** (e.g. typical private equity)

- This is intended to be a <u>conservative</u> approximation of the actual liquidity properties of the assets

- Not surprisingly, varying economic scenarios would lead XYZ's percentage allocation to alternative assets to differ from its targets due to liquidity differences in asset classes

Liquidity Analysis
Current Policy



Empower Results®

Conclusions

- The Current Policy asset allocation has sufficient liquidity in all economic scenarios modeled
  - We do not foresee potential cash flow issues occurring in the Black Skies scenario, but the allocations in the Black Skies scenario could drift far enough from the targets that XYZ would want to rebalance.

- This analysis is **highly** sensitive to the assumed contributions
  - If XYZ contributes less than assumed, especially in a Black Skies environment, then the liquidity issues could be exacerbated.

Analysis

- Summary and Conclusions

Summary and Conclusions

Portfolio Analysis

- The current portfolio is well-diversified
- The expected return assumption for the current portfolio is 6.80% over the next 30 years
- XYZ should consider its desired balance between funding and investment returns in order to determine the ideal investment portfolio

Asset-Liability Projection Analysis

- Longer time horizons are expected to reward higher levels of risk; shorter time horizons are not
- The funded ratio is projected to trend toward full funding over the course of the projection period
- Adverse market experience could significantly impact the funded status of the Plan over the projection period

Liquidity Analysis

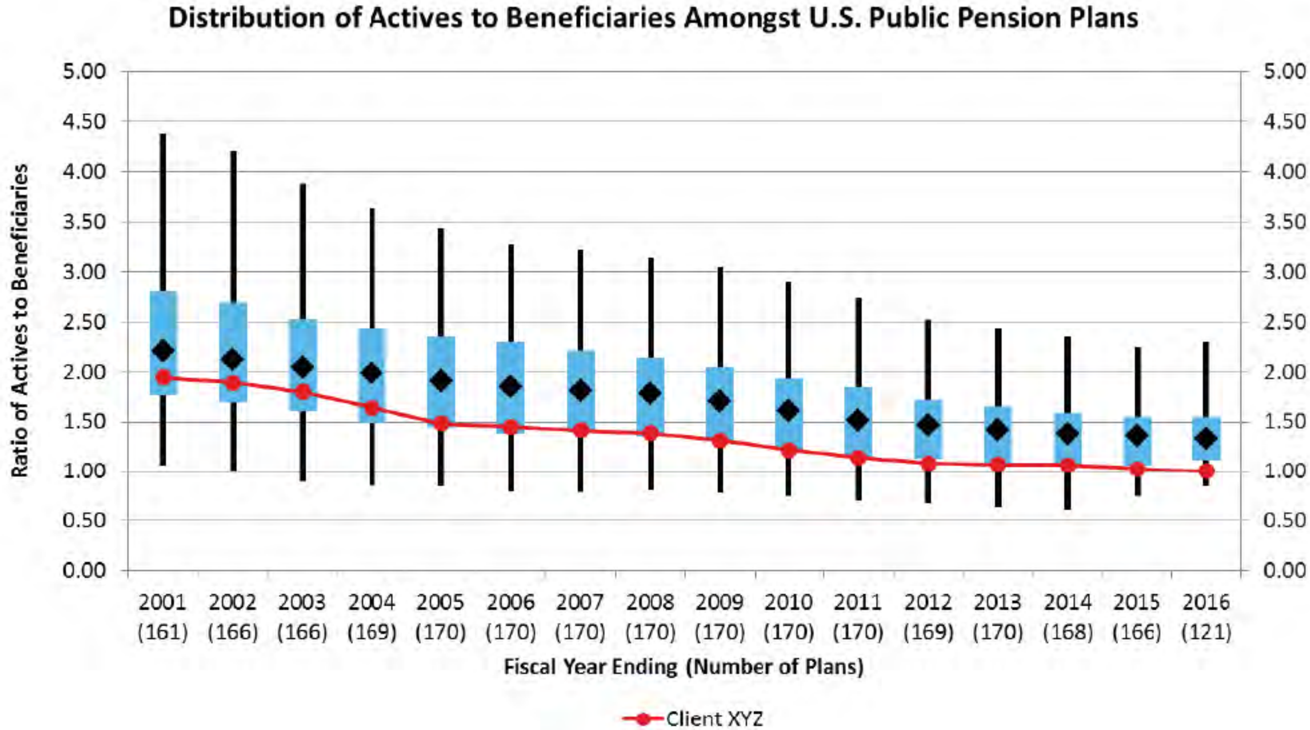
- The current asset allocation has sufficient liquidity in all economic scenarios modeled

Expected returns are using AHIC Capital Market Assumptions. Assumptions do not include fees/expenses. All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees. Expected returns presented are models and do not represent the returns of an actual client account. Not a guarantee of future results. See capital market assumptions disclosure pages beginning on page 33.

Appendix

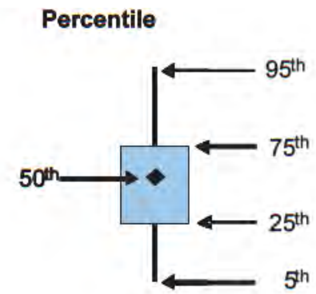
- Peer Comparisons

Client XYZ
Demographic Data versus Peers[1]



Key Takeaways:

- The median ratio of actives to beneficiaries has declined from 2.2 at FYE 2001 to 1.3 at FYE 2016.
- Over that same time frame, XYZ's active to beneficiary ratio has declined from 1.9 to 1.0

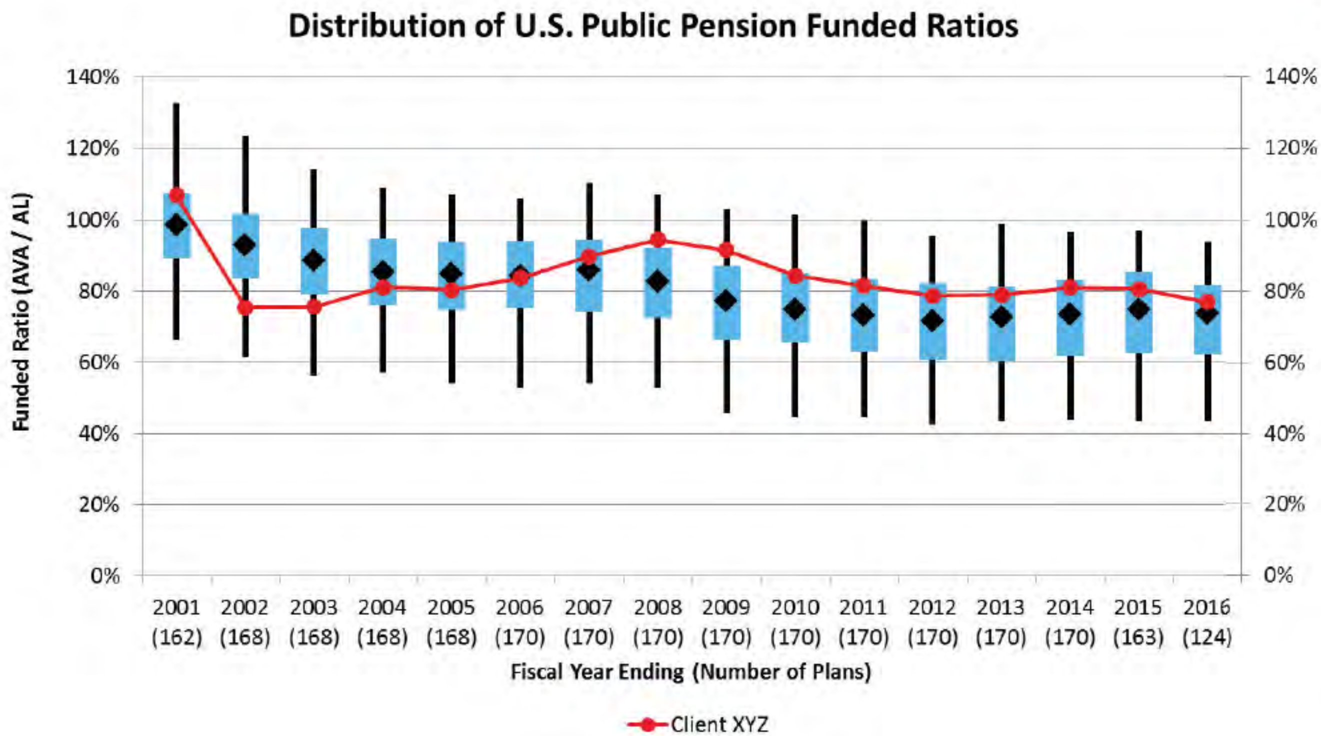


Sources: Public Plans Data (publicplansdata.org) as of July 2017;
[1] Peers defined as public funds published within publicplansdata.org as of July 2017; Number of plans per year are shown in parentheses

Client XYZ

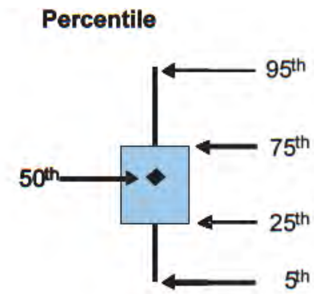
Funded Ratio (Based on Actuarial Value of Assets) versus Peers[1]

SAMPLE REPORT



Key Takeaways:

- The median funded ratio as of FYE 2016 was 74% based on the latest survey data
- XYZ's FYE 2016 funded ratio (77%) lied above the 50th percentile relative to its peers



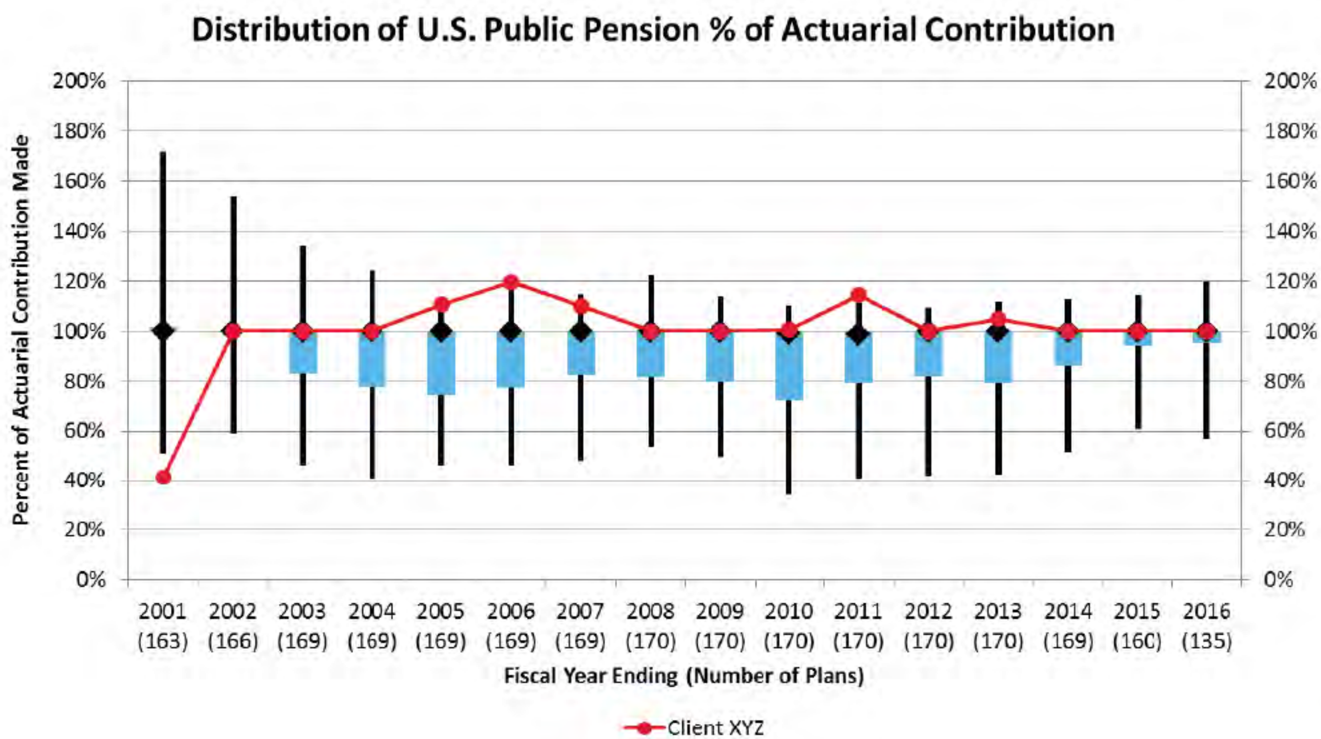
Sources: Public Plans Data (publicplansdata.org) as of July 2017;

[1] Peers defined as public funds published within publicplansdata.org as of July 2017; Number of plans per year are shown in parentheses

Client XYZ

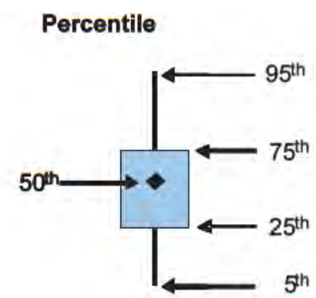
Percentage of Actuarial Contribution Made versus Peers[1]

SAMPLE REPORT



Key Takeaway:

- Contributions, as a percentage of the actuarial amount, have been at least 100% since FYE 2002

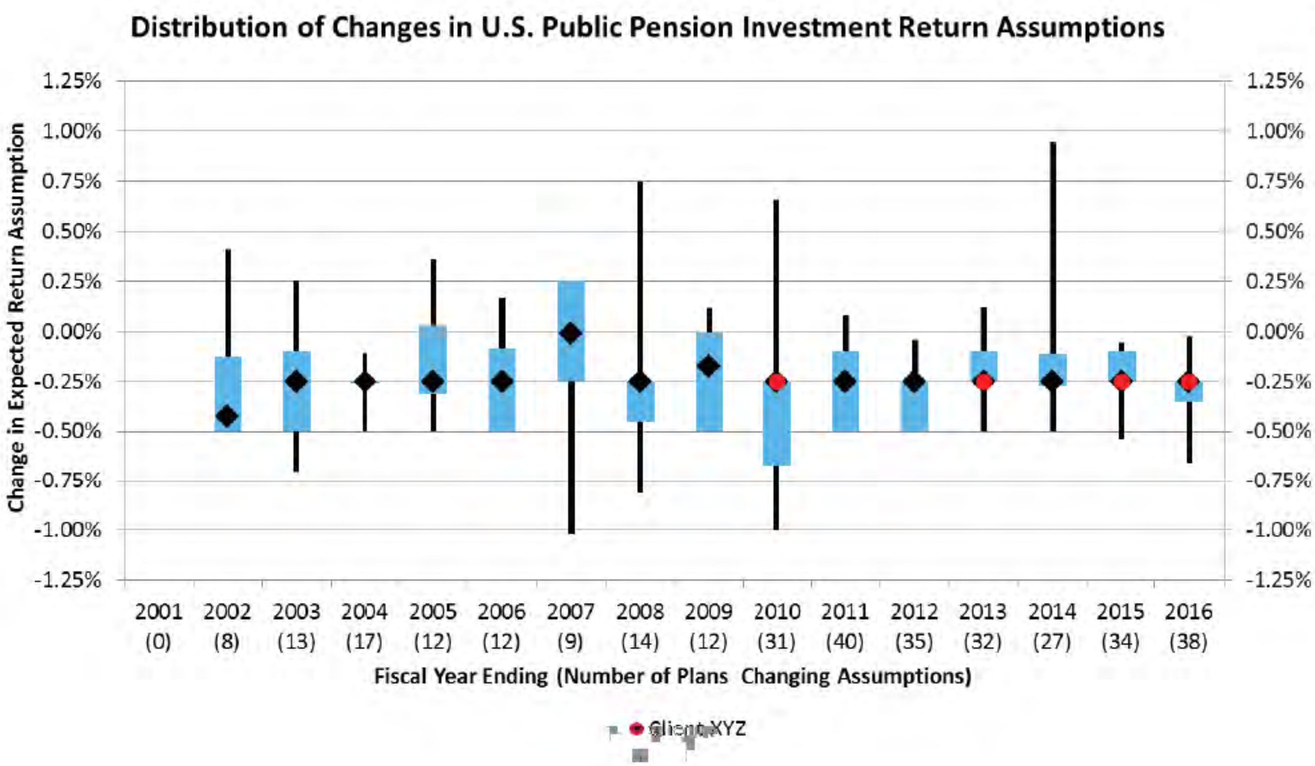


Sources: Public Plans Data (publicplansdata.org) as of July 2017

[1] Peers defined as public funds published within publicplansdata.org as of July 2017; Number of plans per year are shown in parentheses

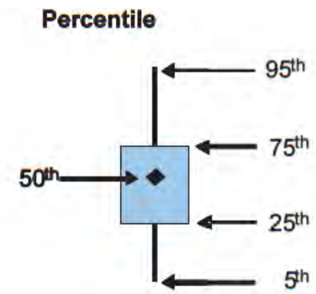
Client XYZ

Magnitude of Expected Return on Assets Assumption Changes versus Peers[1]



Key Takeaway:

- The median change in the investment return assumption, for those plans that made a change, has consistently been a reduction in the 25bps range in recent years



Expected returns are using AHIC Capital Market Assumptions. Assumptions do not include fees/expenses. All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees. Expected returns presented are models and do not represent the returns of an actual client account. Not a guarantee of future results. See capital market assumptions disclosure pages beginning on page 33.

Sources: Public Plans Data (publicplansdata.org) as of July 2017
Peers defined as public funds published within publicplansdata.org as of July 2017; Number of plans per year are shown in parentheses

Appendix

- Actuarial Assumptions and Methods

Actuarial Assumptions and Methods

- Actuarial projections provided by the plan actuary as of June 30, 20XX on an open group basis
- Actuarial assumptions:
  - Valuation Rate of Interest = 7.25%
  - Inflation = 3.00%
  - Payroll Growth = 3.50%
  - Actuarial Value of Assets: determined by recognizing differences between actual and expected investment income over a closed five-year period with no corridor
  - All other assumptions as documented in the Actuarial Valuation Report as of June 30, 2017 unless noted otherwise
- Actuarially Determined Contribution Calculation = Normal Cost plus a level percent amortization of the unfunded liability using a 3.50% salary scale
  - New amortization bases are established each year, creating a layered 20-year amortization base
- Actual asset returns of 7.8% for the period July 1, 2017 – December 31, 2017 were incorporated into the modeling

Appendix

- Capital Market Assumptions

This section does not represent the current CMAs of the company, and the views are subject to change.

AHIC Capital Market Assumptions
As of December 31, 20XX (30 Years)

SAMPLE REPORT

		Expected Real Return[1]	Expected Nominal Return[1]	Expected Nominal Volatility
	Equity			
1	Large Cap U.S. Equity	3.9%	6.3%	17.5%
2	Small Cap U.S. Equity	4.4%	6.8%	23.5%
3	Global Equity IMI	4.8%	7.2%	19.0%
4	International Equity (Developed)	4.7%	7.1%	20.5%
5	Emerging Markets Equity	5.2%	7.6%	27.5%
	Fixed Income			
6	Intermediate Gov't Bonds (4-Year Duration)	0.3%	2.6%	3.5%
7	Intermediate Corporate Bonds (4-Year Duration)	1.2%	3.5%	5.0%
8	High Yield Bonds	2.4%	4.8%	12.5%
	Alternatives			
9	Opportunistic[2]	4.0%	6.4%	13.5%
10	Core Real Estate	3.1%	5.5%	11.5%
11	Real Assets[3]	6.1%	8.5%	24.5%
12	Private Equity	6.1%	8.5%	24.5%
	Inflation			
13	Inflation	0.0%	2.3%	1.5%

[1] All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees.
[2] Opportunistic modeled as 70% Global Equity / 30% Intermediate Aggregate Fixed Income
[3] Real Assets modeled as Private Equity

AHIC Capital Market Assumptions

As of December 31, 20XX (30 Years)

SAMPLE REPORT

	Nominal Correlations	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Large Cap U.S. Equity	**1.00**	0.92	0.95	0.79	0.72	-0.06	0.07	0.61	0.95	0.38	0.69	0.69	0.05
2	Small Cap U.S. Equity	0.92	**1.00**	0.90	0.72	0.67	-0.06	0.06	0.56	0.89	0.36	0.64	0.64	0.04
3	Global Equity IMI	0.95	0.90	**1.00**	0.92	0.84	-0.06	0.07	0.66	1.00	0.39	0.67	0.67	0.07
4	International Equity (Developed)	0.79	0.72	0.92	**1.00**	0.75	-0.06	0.06	0.58	0.91	0.35	0.56	0.56	0.08
5	Emerging Markets Equity	0.72	0.67	0.84	0.75	**1.00**	-0.05	0.08	0.66	0.84	0.32	0.53	0.53	0.06
6	Intermediate Gov't Bonds (4-Year Duration)	-0.06	-0.06	-0.06	-0.06	-0.05	**1.00**	0.78	0.05	0.02	0.04	-0.04	-0.04	0.27
7	Intermediate Corporate Bonds (4-Year Duration)	0.07	0.06	0.07	0.06	0.08	0.78	**1.00**	0.40	0.16	0.09	0.07	0.07	0.21
8	High Yield Bonds	0.61	0.56	0.66	0.58	0.66	0.05	0.40	**1.00**	0.68	0.26	0.45	0.45	0.20
9	Opportunistic	0.95	0.89	1.00	0.91	0.84	0.02	0.16	0.68	**1.00**	0.40	0.66	0.66	0.09
10	Core Real Estate	0.38	0.36	0.39	0.35	0.32	0.04	0.09	0.26	0.40	**1.00**	0.33	0.33	0.10
11	Real Assets	0.69	0.64	0.67	0.56	0.53	-0.04	0.07	0.45	0.66	0.33	**1.00**	1.00	0.06
12	Private Equity	0.69	0.64	0.67	0.56	0.53	-0.04	0.07	0.45	0.66	0.33	1.00	**1.00**	0.06
13	Inflation	0.05	0.04	0.07	0.08	0.06	0.27	0.21	0.20	0.09	0.10	0.06	0.06	**1.00**

AHIC Capital Market Assumptions

Explanation of Capital Market Assumptions—Q1 2018

SAMPLE REPORT

The following capital market assumptions were developed by Aon's Global Asset Allocation Team and represent the long-term capital market outlook (i.e., 30 years) based on data at the end of the fourth quarter of 20XX. The assumptions were developed using a building block approach, reflecting observable inflation and interest rate information available in the fixed income markets as well as Consensus Economics forecasts. Our long-term assumptions for other asset classes are based on historical results, current market characteristics, and our professional judgment.

Inflation – Expected Level (2.3%)

Based on Consensus Economics long-term estimates and our near-term economic outlook, we expect U.S. consumer price inflation to be approximately 2.3% during the next 30 years.

Real Returns for Asset Classes

Fixed Income

- **Cash (0.1%)** – Over the long run, we expect the real yield on cash and money market instruments to produce a real return of 0.1% in a moderate- to low-inflationary environment.
- **TIPS (0.9%)** – We expect intermediate duration Treasury Inflation-Protected Securities to produce a real return of about 0.9%.
- **Core Fixed Income (i.e., Market Duration) (0.9%)** – We expect intermediate duration Treasuries to produce a real return of about 0.3%. We estimate the fair value credit spread (credit risk premium - expected losses from defaults and downgrades) to be 0.6%, resulting in a long-term real return of 0.9%.
- **Long Duration Bonds – Government and Credit (1.1%)** – We expect Treasuries with a duration comparable to the Long Government Credit Index to produce a real return of 0.6%. We estimate the fair value credit spread (credit risk premium - expected losses from defaults and downgrades) to be 0.5%, resulting in an expected real return of 1.1%.

AHIC Capital Market Assumptions

SAMPLE REPORT

Explanation of Capital Market Assumptions—Q1 20XX

- **Long Duration Bonds – Credit (1.5%)** – We expect Treasuries with a duration comparable to the Long Credit Index to produce a real return of 0.6 %. We estimate the fair value credit spread (credit risk premium - expected losses from defaults and downgrades) to be 0.9%, resulting in an expected real return of 1.5%.
- **Long Duration Bonds – Government (0.6%)** – We expect Treasuries with a duration of ~12 years to produce a real return of 0.6% during the next 30 years.
- **High Yield Bonds (2.4%)** – We expect intermediate duration Treasuries to produce a real return of about 0.3%. We estimate the fair value credit spread (credit risk premium - expected losses from defaults and downgrades) to be 2.1%, resulting in an expected real return of 2.4%.
- **Bank Loans (3.2%)** – We expect LIBOR to produce a real return of about 0.5%. We estimate the fair value credit spread (credit risk premium - expected losses from defaults) to be 2.7%, resulting in an expected real return of 3.2%.
- **Non-US Developed Bonds: 50% Hedged (0.5%)** – We forecast real returns for non-US developed market bonds to be 0.5% over a 30-year period after adjusting for a 50% currency hedge. We assume a blend of one-third investment grade corporate bonds and two-thirds government bonds. We also produce assumptions for 0% hedged and 100% hedged non-US developed bonds.
- **Emerging Market Bonds (Sovereign; USD) (2.2%)** – We forecast real returns for emerging market sovereign bonds denominated in USD to be 2.2% over a 30-year period.
- **Emerging Market Bonds (Corporate; USD) (2.1%)** – We forecast real returns for emerging market corporate bonds denominated in USD to be 2.1% over a 30-year period.
- **Emerging Market Bonds (Sovereign; Local) (3.5%)** – We forecast real returns for emerging market sovereign bond denominated in local currency to be 3.5% over a 30-year period.
- **Multi Asset Credit (MAC) (3.8%)** – We assume real returns from beta exposure to high yield, bank loans and emerging market debt to add 2.8% plus 1.0% from alpha (net of fees) over a 30-year period.

AHIC Capital Market Assumptions

Explanation of Capital Market Assumptions—Q1 20XX

Equities

- **Large Cap U.S. Equity (3.9%)** – This assumption is based on our 30-year outlook for large cap U.S. company dividends and real earnings growth. Adjustments are made for valuations as needed.
- **Small Cap U.S. Equity (4.4%)** – Adding a 0.5% return premium for small cap U.S. equity over large cap U.S. equity results in an expected real return of 4.4%. This return premium is theoretically justified by the higher risk inherent in small cap U.S. equity versus large cap U.S. equity, and is also justified by historical data. In recent years, higher small cap valuations relative large cap equity has reduced the small cap premium.
- **Global Equity (Developed & Emerging Markets) (4.8%)** – We employ a building block process similar to the U.S. equity model using the developed and emerging markets that comprise the MSCI All-Country World Index. Our roll-up model produces an expected real return of 4.8% for global equity.
- **International (Non-U.S.) Equity, Developed Markets (4.7%)** – We employ a building block process similar to the U.S. equity model using the non-U.S. developed equity markets that comprise the MSCI EAFE Index.
- **Emerging Market Stocks (5.2%)** - We employ a building block process similar to the U.S. equity model using the non-U.S. emerging equity markets that comprise the MSCI Emerging Markets Index.
- **Equity Risk Insurance Premium Strategies- High Beta (3.7%) –** We expect nominal returns from insurance equity risk premium to average 4.1% plus 2.0% from cash & dividends over the next 30 years.

Alternative Asset Classes

- **Hedge Fund-of-Funds Universe (1.7%)** – The generic category "hedge funds" encompasses a wide range of strategies accessed through "fund-of-funds" vehicles. We also assume the ***median*** manager is selected and also allow for the additional costs associated with Fund-of-Funds management. A top-tier portfolio of funds (hedge fund-of-funds buy-list) could add an additional 1.1% in return at similar volatility based on alpha, lower fees and better risk management.

AHIC Capital Market Assumptions

Explanation of Capital Market Assumptions—Q1 20XX

- **Hedge Fund-of-Funds Buy List (2.9%)** – The generic category of top-tier "hedge funds" encompasses a wide range of strategies accessed through "fund-of-funds" vehicles. We assume additional costs associated with Funds-of-Funds management. To use this category the funds must be buy rated or we advise on manager selection.
- **Broad Hedge Funds (3.1%)** – Represents a diversified portfolio of direct hedge fund investments. This investment will tend to be less diversified than a typical "fund-of-funds" strategy as there will be fewer underlying managers and will not include the extra layer of fees found in a Fund-of-Funds structure.
- **Broad Hedge Funds Buy List (4.4%)** – Represents a diversified portfolio of top-tier direct hedge fund investments. This investment will tend to be less diversified than a typical "fund-of-funds" strategy as there will be fewer underlying managers and will not include the extra layer of fees found in a Fund-of-Funds structure. To use this category the funds must be buy rated or we advise on manager selection.
- **Core Real Estate (3.1%)** – Our real return assumption for core real estate is based on a gross income of about 4.4%, management fees of roughly 1%, and future capital appreciation near the rate of inflation during the next 30 years. We assume a portfolio of equity real estate holdings that is diversified by property type and geographic region.
- **U.S. REITs (4.0%)** – Our real return assumption for U.S. REITs is based on income of 3.9% and future capital appreciation near the rate of inflation over the next 30 years. REITs are a sub-set of the U.S. small/mid cap equities.
- **Commodities (2.8%)** – Our commodity assumption is for a diversified portfolio of commodity futures contracts. Commodity futures returns are composed of three parts: spot price appreciation, collateral return, and roll return (positive or negative change implied by the shape of the future curve). We believe that spot prices will converge with CPI over the long run (i.e., 2.3%). Collateral is assumed to be LIBOR cash 0.5%. Also, we believe the roll effect will be near zero, resulting in a real return of approximately 2.8% for commodities.