

Intermediate Study Guide

FPPTA Fall Trustee School

October 5 - 8, 2025

Sawgrass Marriott Golf Resort & Spa



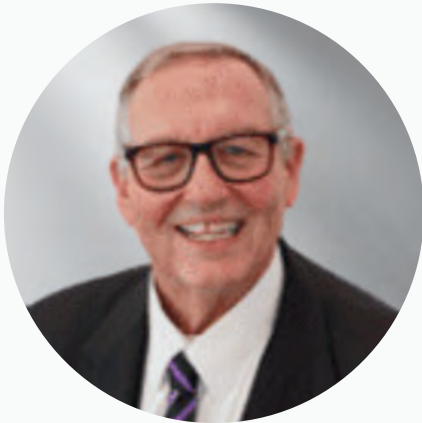
Florida Public Pension Trustees Association

FPPTA CPPT Education Committee

Basic



Gee Cowan



Norris Park



Steve Aspinall

FPPTA CPPT Education Committee

Intermediate



Lynn Bernstein



Katie Byrne



Bill Maxwell

FPPTA CPPT Education Committee

Advanced



Kurt Vroman



Kerry Richardville



Stefanie Leverette

Monday

8:00 – 10:00 AM	Bamboo Farmer Mindset Greg Bell <i>Thought Leader, Business Consultant, Leadership Coach</i>
10:00 – 10:30 AM	Morning Break
10:30 – 11:00 AM	Fundamental Equation of Pension Plan Financing Pension Formula: $C + I = B + E$ Doug Lozen <i>Foster & Foster Actuaries and Consultants</i>
11:05 – 12:10 PM	Chapter 112 – 175 – 185 Adam Levinson <i>Klausner, Kaufman, Jensen, & Levinson P.A.</i> (60 minutes)
12:10 – 1:30 PM	Lunch Break
1:30 – 2:30 PM	Advancing Ethics & Professionalism Caroline Klancke <i>Florida Ethics Institute</i> (60 minutes)
2:35 – 3:10 PM	Behavioral Governance – Leadership Don Trone <i>Behavioral Governance Institute</i>
3:10 – 3:30 PM	Afternoon Break
3:30 – 4:30 PM	Asset Allocation Tyler Grumbles <i>Mariner</i>

Tuesday

8:30 – 9:00 AM	The Investment Manager Search Process Scott Owens <i>Graystone Consulting</i>
9:05 – 9:35 AM	Equity Managers Meeting Report Megan Anderson <i>Nuveen</i>
9:40 – 10:10 AM	Fixed Income Managers Report Ryon Acey <i>Agincourt Capital Management</i>
10:10 – 10:30 AM	Morning Break
10:30 – 11:00 AM	Real Estate Performance Report Maya Packer <i>Barings</i>
11:05 – 12:10 PM	The Actuarial Report Sara Carlson <i>Foster & Foster Actuaries and Consultants</i>
12:10 – 1:30 PM	Lunch Break
1:30 – 2:00 PM	Rebalancing Your Portfolio Aaron Lally & Shawn Bowen <i>Meketa Investment Group</i>
2:05 – 2:35 PM	Understanding Non-Traditional Assets Beth Bowen <i>Asset Consulting Group</i>
2:40 – 3:10 PM	Understanding Wall Street Dr. Mary Kelly
3:10 – 3:30 PM	Afternoon Break
3:30 – 4:30 PM	Intermediate Program Review

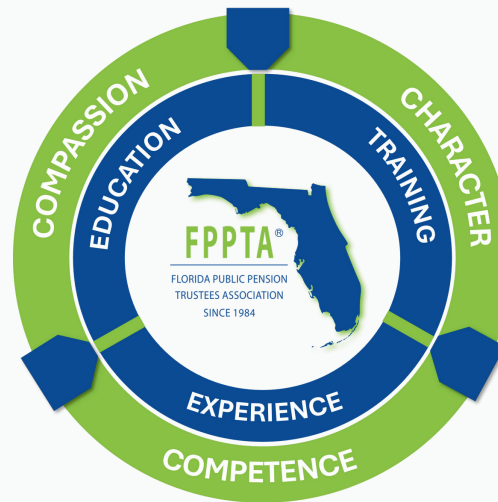
Program Agenda

Wednesday

8:00 - 10:00
AM

Electronic CPPT Testing

(Participants are expected to bring a wifi capable device to their exam)



Shaping the Future - Trustee by Trustee

Disclaimer

Florida Public Pension Trustees Association Disclaimer

The program and related materials presented by the Florida Public Pension Trustees Association (hereinafter, “FPPTA”) summarize important information including, but not limited to, financial and investment topics. The FPPTA's intent is to educate and not to advise in any way. As a trustee, your decisions should be based upon the specific situations presented by your plan and/or board members. The FPPTA shall not be liable for any decisions made, or actions taken, based upon information provided through this program and materials provided. It is important that you, as trustee, consult an appropriate professional advisor as necessary. The information in this program and related materials, unless otherwise noted, are the property of the individual presenters and is provided for educational purposes only. The information is provided “as is” without warranty of any kind. Copyright 2025 by the FPPTA. All rights reserved. No portion of this material may be reproduced or transmitted in any format, or by any means electronic or mechanical, including, but not limited to, photocopying, recording storage in any retrieval system, or otherwise without the express and written consent of the FPPTA and the individual presenters.

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The Pension Formula: $C+I = B+E$

Doug Lozen

Foster & Foster Actuaries and Consultants

Doug joined Foster & Foster in 1999 and is currently a consulting actuary to over 80 governmental retirement plans in Florida. Doug's experience includes topics such as actuarial valuations, plan redesign studies, Collective Bargaining studies, statutory requirement disclosures, plan experience studies and assumption/method recommendations, actuarial audits, forecasting, and individual retirement benefit calculations. Doug has a Bachelor of Science in Applied Mathematics from Michigan Technological University and a Master of Science in Mathematics Education from Nova Southeastern University. Doug is an Enrolled Actuary under ERISA, and a member of the American Academy of Actuaries.



Pension Formula for the Pension Plan Financing

$$C + I = B + E:$$

Contributions (C) + Income (I) = Benefits (B) + Expenses (E).

Contributions

Income

Benefits

Expenses

Employers and Employees **contribute** to a fund in regular intervals. The fund invests these contributions and earns a return on that investment. Return from investments (fixed income, equity, mutual fund, etc.) are considered **income**. Contributions and Income combine to add to the fund.

Retirement plans pay **benefits** to members who have met plan requirements. Retirement plans also pay **expenses** for maintaining the plan: administrative, investment, auditing, etc. Benefit payments and expenses combine to decrease the amount in the fund.

Chapter 112 - 175 - 185

Adam Levinson

Klausner, Kaufman, Jensen, & Levinson, PA

Adam Levinson is a partner with the law firm of Klausner, Kaufman, Jensen & Levinson.

Upon graduation from the University of Miami School of Law, Mr. Levinson clerked for Chief Judge Alan R. Schwartz at the State of Florida Third District Court of Appeal. After completing his judicial clerkship, Mr. Levinson worked as a commercial litigator in one of Florida's oldest and largest law firms. Since joining the law firm of Klausner, Kaufman, Jensen & Levinson, Mr. Levinson has specialized in the representation of public sector pension plans, with an emphasis on plan drafting, board counseling, and fiduciary responsibility in the area of pension investing. Mr. Levinson is a frequent speaker at the Florida Public Pension Trustees Association.

He is a member of the Florida and California Bars and is admitted to practice before the United States District Court, Southern and Middle Districts, and the United States Court of Appeals, Eleventh Circuit.

Mr. Levinson graduated Magna Cum Laude from the University of Michigan receiving a Bachelor of Arts degree in history and political science. Mr. Levinson received his Juris Doctorate from the University of Miami School of Law, where he graduated Magna Cum Laude and served as an articles and comments editor for the University of Miami Law Review.

Adam is married to Leslie Adler Levinson and is the proud father of Max, Mira and Maya Levinson. Adam is the founder of a website focusing on American legal history, including the history of retirement systems dating back to the American Revolution: www.statutesandstories.com.



Adam Levinson, Esq.
Klausner, Kaufman, Jensen & Levinson, P.A.

Intermediate Course:
“How to Comply with Chapters 112-175-185”
Short Answer – Ask Questions

Presentation Overview

In light of the breadth and depth of this subject, the goal of this presentation is to explore:

- 1) how are the statutes organized
- 2) what topics are covered by the statutes;
- 3) issue spotting (where to look and what to look for)

Statutes can be viewed by using the Legislature's Online Sunshine website:
www.leg.state.fl.us

The Division of Retirement also has a useful website: www.frs.myflorida.com

Chapter 112 – Overview

CHAPTER 112 applies to “PUBLIC OFFICERS AND EMPLOYEES”

- Chapter 112 is a patchwork of statutory provisions governing public officers/employees (including pension trustees) and their benefits (including pension);
- Compliance with Chapter 112 is mandatory;
- You comply with Chapter 112 every meeting;
- Trustees cannot rely solely on duties set forth in your pension ordinance

Chapter 112 – Overview

- Establishes minimum standards for operation and funding of all FL public pensions.
- Chapters 175 & 185 establish additional minimum standards for police and fire plans.
- Portions of Ch. 112 apply to general employee, police and fire pension plans, pension trustees, active members and retirees.
- Common misunderstanding: Many wrongly assume Ch.112 doesn't govern police or fire.
- Sections 175.121(2) & 185.10(2) require compliance with 112 Part VII.

Chapter 112 – Organization

- Chapter 112 is divided into 8 loosely related parts:

Part I: **Conditions of employment; retirement; travel**

(112.011-112.218)

Part III: **Code of ethics for public officers & employees**

(112.311-112.326)

Part VII: **Actuarial soundness of pensions**

(112.60-112.67)

Chapter 112 – Organization

- **Parts I, III and VII** will be discussed today.
- How much time do we have to cover this “topic”? FPPTA has separate courses covering Chapter 112 topics in more detail.
- Division of Retirement’s authority to regulate pensions flows from 112.665.
- As a general rule, disputes with the Division of Retirement involve administrative law, litigated before the Division of Administrative Hearings (DOAH).

112 Part I - Conditions of employment; retirement

- **112.042**: prohibits discrimination based on race, color, national origin, sex, handicap, or religion
- **112.043**: prohibits discrimination solely based on age
- **112.0515**: protects employees after a transfer, merger or consolidation of public employers
- 112.0515 applies during a “merger”. Each employee gets to vote whether to remain in plan or transfer to new employer’s plan.
- The pension rights of all public employees are “fully protected.” No consolidation/merger shall “diminish or impair the rights” of any public employee in a plan which existed at the date of consolidation...nor shall merger result in “any impairment or reduction in benefits or other pension rights”.

112 Part I - Conditions of employment; retirement; travel expenses

- **112.18**: “Heart Lung Bill” for public safety creates rebuttable presumption for heart disease & hypertension. Same presumption also in 175 & 185.
- **112.181**: Communicable diseases (hepatitis, meningitis, or tuberculosis) for public safety
- **112.19**: Police death benefits (not pension)
- **112.191**: Firefighter death benefits (not pension)

Lump sum payments are available (\$50,000 to \$150,000) for accidental/intentional criminal acts, plus educational and insurance expenses.

112 Part III – Code of Ethics

- **112.313**: Standards of conduct
- **112.3135**: Nepotism
- **112. 3143**: Voting conflicts
- **112.3144**: Disclosure of financial interests (Form 1 due by July 1)
- **112.3173**: Forfeiture of pension (for specified offenses involving breach of public trust); forfeiture is mandatory & heavily litigated
- **112.320**: Commission on Ethics

112 Part VII - Overview

- Florida Protection of Employee Retirement Benefits Act. Applies to all public DB (and for limited purposes DC) plans.
- Establishes minimum standards (not minimum benefits) for operation and funding of public plans.
- Valuation by enrolled actuary at least every 3 years. Impact statements shall be provided to Division prior to second reading of pension ordinance.
- 30 year amortization of unfunded liabilities for amendments; changes in assumptions, changes in funding methods, or actuarial losses.

112 Part VII – Actuarial & administrative requirements (112.63 - 112.64 -112.661)

- Actuarial reports must contain actuary's certification: report is complete & accurate; assumptions are reasonable and comply with Ch. 112.
- Division required to acknowledge receipt of actuarial reports within 21 days, but only required to review on a 3 year basis.
- Valuation reports must: describe actuarial assumptions, contain amortization schedule of unfunded liability, comparative review of salary & investment history over prior 3 years
- For each valuation, Board shall determine "the total expected annual rate of return for the current year, for each of the next several years, and for the long term thereafter." Must be provided to Division, plan sponsor and actuary. 112.661(9)

112 Part VII – Limitation of benefits

(112.65)

- Maximum benefit: Normal retirement benefits shall not exceed 100 % of average final compensation for employees hired after January 1, 1980.
- Double dipping: Not allowed to receive a pension benefit which is in part or in whole based upon any service with respect to which the member is already receiving, or will receive in the future, a retirement benefit or pension from a different employer's retirement plan.

112 Part VII – Fiduciary duties

(112.656 & 112.66)

- Each plan shall have one or more named fiduciaries. “However, the plan administrator, and any officer, trustee, and custodian, and any counsel, accountant, and actuary of the retirement plan who is employed on a full-time basis, shall be included as fiduciaries.” (so specify duty in the contract)
- May purchase insurance to cover liability or losses incurred by reason of act or omission of the fiduciary.
- Any contract provision attempting to relieve fiduciary from responsibility is void against public policy.

112 Part VII – Fiduciary duties (112.656 & 112.66)

- A fiduciary shall discharge duties “solely in the interest of the participants and beneficiaries for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the plan.”

112 Part VII - General plan administrative requirements (112.66)

- Plan provisions shall be summarized in a written summary plan description (SPD), published every 2 years, in a manner calculated to be understood by the average member and sufficiently accurate and comprehensive to apprise of rights and obligations.
- Shall include a report of pertinent financial and actuarial information on plan solvency and actuarial soundness.

112 Part VII - General plan administrative requirements (112.66)

- Such SPD shall be furnished to a members upon initial employment and with each new biennial publication.
- The administrator shall publish the SPD not later than 210 days after the end of the plan year in which publication is required. For years when a complete SPD is not published, the administrator shall publish a supplement of changes.

112 Part VII - Investment policies

(112.661)

- Investments must be consistent with Board's **written investment policy**.
- Investment policies shall be structured to “maximize the financial return...consistent with the risks incumbent in each investment and shall be structured to establish and maintain an appropriate diversification of plan assets”.
- The policy shall describe Board's **investment objectives** and shall specify appropriate **performance measures/benchmarks**.

112 Part VII - Investment policies

(112.661)

- Investment policy must specify that the Board shall comply with the fiduciary standards set forth in ERISA [29 USC s. 1104(a)(1)(A)-(C)].
- Shall list authorized investments.
- Investments not listed in the policy are prohibited.

Chapters 175 and 185 – Overview

- For this presentation, Chapters 175/185 are basically identical (except where statutes provide otherwise).
- Overseen by Steve Barden of the Municipal Police & Fire Trust Fund Office in Tallahassee.
- 175/185 establish minimum benefits & minimum standards for police and fire.

Chapters 175 and 185 – Premium taxes

- Voluntary program to encourage cities to provide pensions for public safety officers who protect life and property thereby benefiting insurance companies.
- Participation **does not** increase taxes for residents.
- 175 is funded by a 1.85% premium tax on casualty insurance (homeowners/fire).
- 185 is funded by a .85% premium tax on property insurance (auto, fidelity bonds, burglary, plate glass).
- Checks are distributed in July/August every year.
(supplemental checks for 175 plans paid in October)

Chapters 175 & 185 – Requirements

- Annual reports are required to be submitted by March 15 for “Local Law plans”, January 1 for “Chapter plans”.
- Untimely reporting results in withholding of premium taxes.
- If the plan has not been approved by 9/30, it wont be able to include the year’s premium taxes on the Annual Report. Deficiency will have to be paid by employer, with interest.

Chapters 175 & 185 – Requirements

- The Division interprets Sections 175.091 & 185.07 to prevent employee contributions from being increased without consent of the membership, to provide “greater benefits”.
- Sole and exclusive responsibility for administration and proper operation of plan is vested in the Board.
- Each board must be given authority to invest up to 25% of the portfolio in foreign securities (but can’t invest in scrutinized companies doing business with Iran/Sudan).

175 and 185 - Comparison to 112

- Employee contributions shall be deposited immediately after each pay period (112 requires at least monthly for GE plans); employer contributions at least quarterly;
- Requires annual independent audit by CPA if assets >\$250,000;
- “Professionally qualified” independent investment consultant may not be associated in any manner with the plan’s money managers (best practice anyway).

SB 534 – Amendments to 112.664

- Actuarial and financial disclosure to be reported electronically within 60 days after receipt of certified actuarial report submitted after the close of plan year ending in 2014:
- 1) financial statements must comply with GASB 67/68, using RP-2000 Combined Healthy Participant Mortality Table, by gender with Scale AA projection;
- 2) 2% lower investment assumption;
- 3) “run out date” based on 1 & 2 above, ignoring contributions, investment earnings or premium taxes;
- 4) alternative contributions based on 1 & 2;
- 5) 5 year side by side comparison of returns and assumptions, along with portfolio composition.

HB 3 – 112.664

HB 3 (Chapter 2023-28, Laws of Florida) is 53-page bill that broadly applies to pension, city contracting and other financial services.

Section 112.664 has three primary requirements:

- 1) Boards may only invest based on “pecuniary” factors (risk adjusted return)

The term pecuniary “does not include the consideration of the furtherance of any social, political or ideological interests.”

- 2) Proxies must be voted based only on pecuniary factors

- 3) Boards must submit a “comprehensive report detailing and reviewing” governance policies and adherence to fiduciary standards by December 15, 2023 and every odd-numbered year.

Advancing Ethics & Professionalism

Caroline Klancke

Florida Ethics Institute

Ms. Klancke is an attorney, ethicist, author, and lecturer. She serves as Florida State University's Associate Compliance Officer and Director of Ethics and Integrity Programs, where she also teaches Public Service Ethics.

She is the founder and Executive Director of the Florida Ethics Institute. Ms. Klancke is the former General Counsel and Deputy Executive Director of the Florida Commission on Ethics where she assisted the agency in its constitutional mandate to interpret and enforce the Code of Ethics for Public Officers and Employees. Prior to her tenure with the Ethics Commission, she served as Chief Ethics Officer and Senior Attorney with the Florida Public Service Commission.

She is the author of the Florida Ethics Handbook—the only comprehensive guide to governmental ethics regulations in Florida. As a Certified Compliance & Ethics Professional (CCEP) she has lectured extensively for the Florida Commission on Ethics, the Florida Bar, Florida Association of Counties, and others on ethics, open government, and governmental and corporate compliance requirements.

In 2015, the Florida Government Bar Association selected her as a finalist for Government Attorney of the Year. In 2023 the Florida Association of County Attorneys honored her with the Ethics in Government award. In 2024 Ms. Klancke was appointed by the President of FSU to serve as its representative on the Tallahassee Independent Ethics Board.





Florida Ethics Institute

ADVANCING ETHICS & PROFESSIONALISM

Key Requirements of the State Code of Ethics Applicable to Public Pension Trustees

Presented by
Caroline Klancke, JD, CCEP

Executive Director
Florida Ethics
Institute

GOVERNMENTAL ETHICS IN FLORIDA

Article II, Section 8

- Creates constitutional guarantees concerning ethics in government
- Creates Commission on Ethics

➤ **Amended in 2018!**

Part III, Chapter 112, F.S.

- Protects against conflicts of interest.
- Establishes standards of conduct for public officers and employees on state and local levels of government.
- Promotes public's confidence in public officials and government.

FLORIDA COMMISSION ON ETHICS

- Nine member appointed board that is politically balanced.
- Primarily interpret and administer Art. II, s. 8, Fla. Const., and Part III, Chapter 112, F.S., via the issuance of advisory opinions and the investigation of ethics complaints/referrals.
- Oversees the filing of financial disclosure.



PERSONS SUBJECT TO THE CODE OF ETHICS

- ALL public officers—both state and local elected and appointed (including public pension trustees)
- ALL public employees (state and local)
- Local government attorneys
- Candidates for public office
- Miscellaneous others

COMPLAINTS!

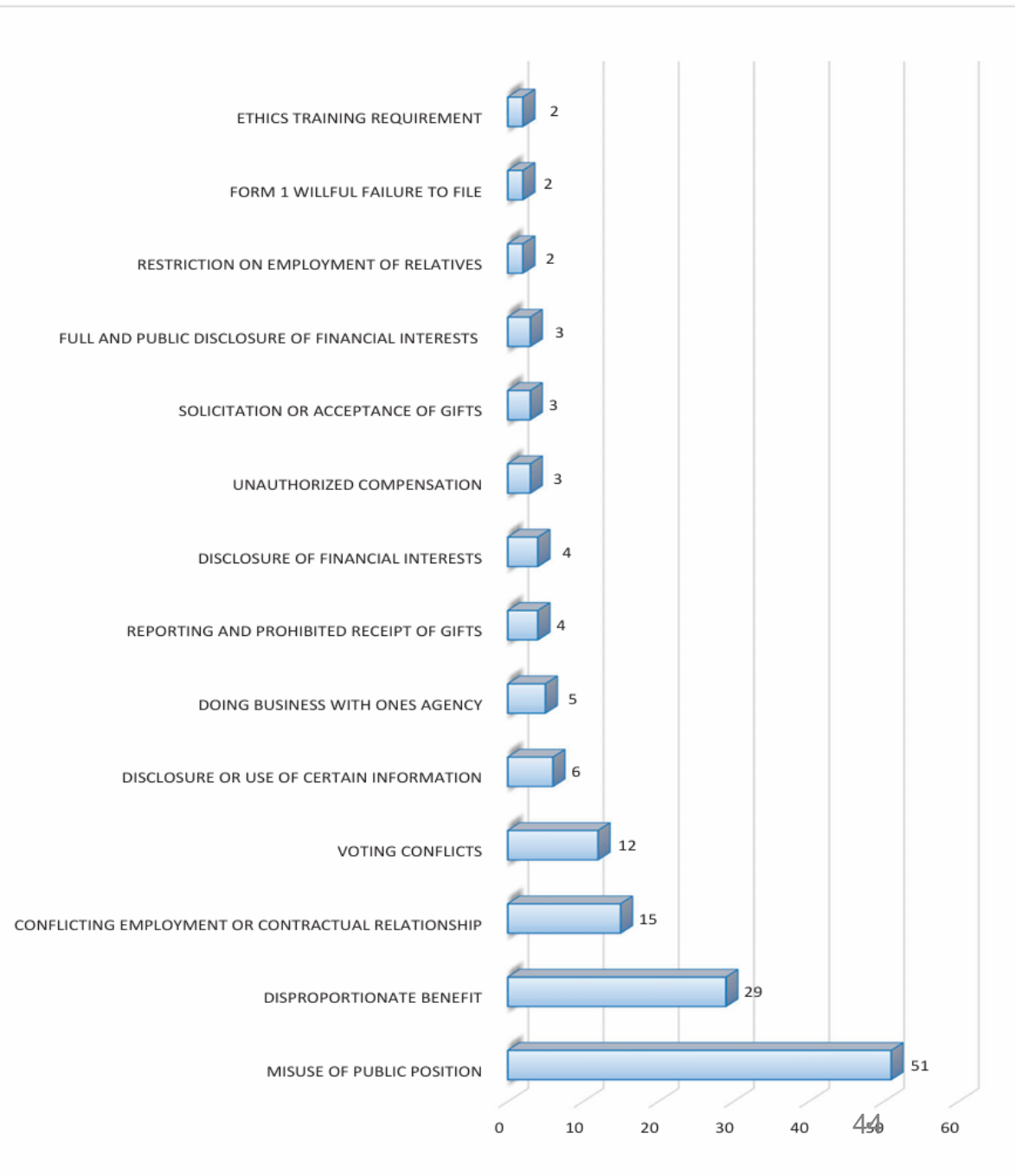
- May be filed by ANYONE possessing “personal knowledge or information other than hearsay”
- Must be filed on a notarized, sworn “Form 50”
- Confidential during investigation/review
- Cannot be initiated by Commission*
- 5-year statute of limitations. s. 112.3231, F.S.
- Since 2013 Commission also receives referrals from statutorily designated agencies

ETHICS COMPLAINTS BY THE NUMBERS

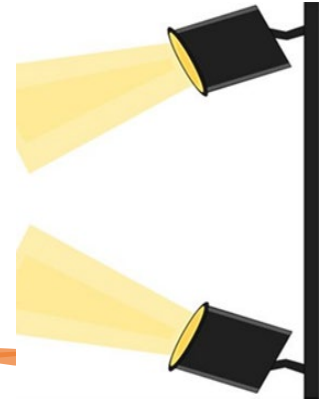
- On average the Commission receives 250 ethics complaints and referrals a year.
- In **2023 the Commission received 292 complaints** and referrals.
 - 32.2% filed against elected municipal officials.
 - 23.6% filed against county elected officials
 - 23.9% filed against state, county, and city employees
 - **6% filed against appointed officials**
- Approximately 60% of complaints investigated annually.

Ethics Complaints By The Numbers

2023 Complaint Allegations



Spotlight on 2024 Changes to Ethics Complaint Process: SB 7014



- Creates expedited timelines for completion of specific steps of the State ethics investigatory process and imposes a “personal knowledge or information other than hearsay” requirement on all ethics complaints
- **Requires all local political subdivisions, including local ethics commissions, to:**
 - Require that ethics complaints must be written and signed under oath or affirmation—NO anonymous complaints:
 - Require that ethics complaint must be based upon “personal knowledge or information other than hearsay”;
 - Prohibit self-initiation of ethics complaints; and
 - Authorize recovery of costs and attorney fees by Respondents only

WE WILL COVER

Key Ethics Laws

- Gifts, Bribes, & Unauthorized Compensation
- Conflicts of Interest
- Voting Conflict
- Misuse of public office/information

NEW Ethics Law Requirements

- New changes in financial disclosure requirements and process
- Prohibited Disproportionate Benefit



REQUIREMENTS IN FINANCIAL DISCLOSURE



WHO FILES FINANCIAL DISCLOSURE?

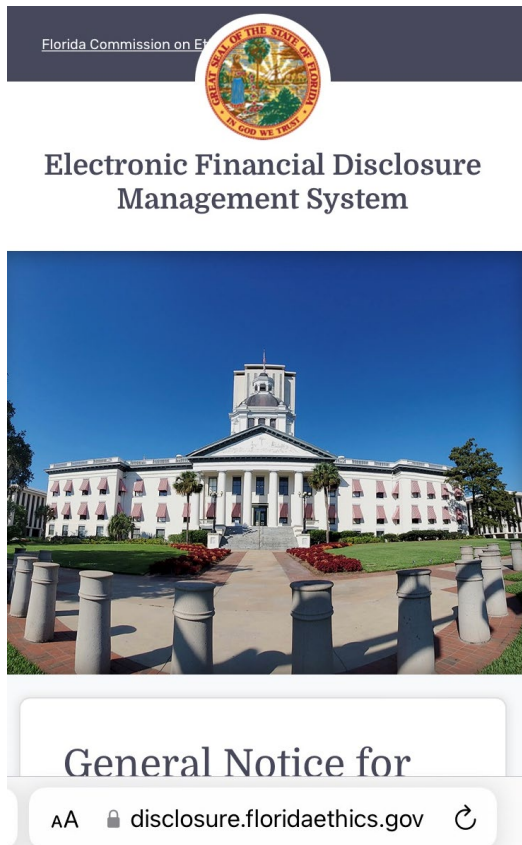
Form 6 Full & Public Disclosure of Financial Interests (5,000 +filers)

- All constitutional officers
- Art. II, s. 8(a), Fla. Const.
- Section 112.3144, F.S.

Form 1 Statement of Financial Interests (35,000+ filers)

- Local Officers
(including all pension trustees)
- State Officers
- Specified State Employees
- Section 112.3145, F.S.

ELECTRONIC FINANCIAL DISCLOSURE MANAGEMENT SYSTEM



- Launched on January 1, 2022.
- Enables the **electronic creation, submission, and publication** of financial disclosures.
- ALL Form 1 and Form 6 filers are now required to **electronically** create and file disclosures
- <https://disclosure.floridaethics.gov>

KEY FORM 1 DISCLOSURE FACTS

- Initially due within 30 days of appointment or election
- Forms are due annually by **July 1** every year
- **After Sept. 1**, fines of \$25/day for up to 60 days (\$1,500)
- Failure to file financial disclosure in any calendar year can result in removal from public office/employment if willful
- The only manner of calculating reportable interests is the **Dollar Value Threshold** method
- **Dollar Value Threshold:**
 - Disclose primary sources of income over \$2,500
 - Secondary sources > \$5,000
 - Liabilities over \$10,000
 - Real property in Fla.
 - Intangible personal property over \$10,000
- **Remember—no actual dollar amounts need be disclosed!**

REDACTION REQUEST FOR PERSONAL INFO

Florida Commission on Ethics Public Records Exemption Request

Florida law provides that an agency shall treat social security numbers, bank account numbers, and debit, charge, and credit card numbers as automatically exempt from public disclosure. In addition, Florida law allows eligible persons to submit a written and notarized request that a non-employing agency maintain as exempt from public disclosure certain identification and/or location information contained in records within the agency's custody.

The person entitled to the additional exemptions must submit a written and notarized request directly to this agency to maintain the exemption to the records in our custody. § 119.071(4)(d)3., F.S. You are not required to use this form; however doing so will help us keep your information confidential. Please return this completed form or a written and notarized request to: Florida Commission on Ethics, P.O. Drawer 15709, Tallahassee, Florida 32317.

If you or your spouse qualify; or if you are the child of someone who qualifies; you are eligible to receive additional public records exemptions. Please check the box for any of the following that apply:

Active or Former:

- ☐ Sworn or civilian law enforcement personnel, including correctional and correctional probation officers.
- ☐ Department of Children and Families personnel whose duties include investigating criminal activities.
- ☐ Department of Health personnel whose duties are to support the investigation of child abuse or neglect.
- ☐ Department of Revenue or local government personnel whose responsibilities include revenue collection and enforcement or child support enforcement.

Current or Active:

- ☐ General magistrate, special magistrate, judge of compensation claims, administrative law judge of the Division of Administrative Hearings, or child support enforcement hearing officer.
- ☐ County Tax Collector.
- ☐ Child protection team members.

Current or Former:

- ☐ Department of Financial Services nonsworn investigative personnel whose duties include investigating criminal activities, workers' compensation coverage requirements and compliance, or state regulatory requirement violations.
- ☐ Supreme Court Justice, or judge of district court of appeal, circuit court, or county court.
- ☐ State attorney, assistant state attorney, statewide prosecutor, or assistant statewide prosecutor.
- ☐ Public defender, assistant public defender, criminal conflict and civil regional counsel, and assistant criminal conflict and civil regional counsel.
- ☐ Human resource, labor relations, or employee relations director, assistant director, manager, or assistant manager of any local government agency or water management district whose duties include hiring/firing employees, labor contract negotiation, administration, or other personnel-related duties.
- ☐ Code Enforcement Officer.
- ☐ Guardian ad litem, as defined in s. 39.820, F.S.
- ☐ Guardian ad litem, as defined in s. 39.820, F.S.
- ☐ Juvenile probation officer, juvenile probation supervisor, detention superintendent, assistant detention superintendent, juvenile justice detention officers I and II, juvenile justice detention officer supervisor, juvenile justice residential officer, juvenile justice

residential officer supervisors I and II, juvenile justice counselor, juvenile justice counselor supervisor, human services counselor administrator, senior human services counselor administrator, rehabilitation therapist, or social services counselor of the Department of Juvenile Justice.

- ☐ Department of Business and Professional Regulation investigator or inspector.
- ☐ Department of Health personnel involved in determining or adjudicating eligibility for social security disability benefits, investigating or prosecuting complaints filed against health care practitioners, or inspecting health care practitioners or health care facilities licensed by the Department of Health.
- ☐ Impaired practitioner consultant retained by an agency, or employees of such a consultant.
- ☐ Certified emergency medical technician or paramedic.
- ☐ Personnel employed in an agency's office of inspector general or internal audit department whose duties include auditing or investigating activities that could lead to criminal prosecution or administrative discipline.
- ☐ U.S. Attorney or Assistant U.S. Attorney, U.S. Courts of Appeal judge, U.S. district judge, or U.S. magistrate.*
- ☐ Victim of sexual battery, aggravated child abuse, aggravated stalking, harassment, aggravated battery, or domestic violence (if applicable, must attach official verification that crime occurred; exemption applies only to individual victim of specified crime, not to the spouse or child of the victim).**
- ☐ Certified firefighter.
- ☐ Nonsworn investigative personnel of the Office of Financial Regulation whose duties include investigating fraud, theft, criminal activities related to fraud or theft, and violations of state regulatory requirements.
- ☐ Child Advocacy Center Directors, managers, supervisors, and clinical employees.
- ☐ County addiction treatment facility directors, managers, supervisors, nurses, and clinical employees.
- ☐ Public guardians, and those employees of public guardians with fiduciary responsibilities.
- ☐ Staff and domestic violence advocates of domestic violence centers certified by the Department of Children and Families under Chapter 39, F.S.

☐ Yes, I qualify

☐ Yes, my spouse qualifies

☐ Yes, my parent qualifies

Printed Name: _____ Phone Number: _____

The residence address(es) you wish us to maintain as confidential _____

OATH

I, the person whose name appears at the beginning of this form, do depose on oath or affirmation and say that the information disclosed on this form and any attachments hereto is true, accurate, and complete.

SIGNATURE OF REPORTING OFFICIAL OR CANDIDATE _____

STATE OF FLORIDA COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of
☐ physical presence or ☐ online notarization, this _____ day of _____, 20____ by _____.

(Signature of Notary Public--State of Florida)

(Print, Type, or Stamp Commissioned Name of Notary Public)

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

*-- If this category is selected, person also certifies, by signing this form, that he or she has made reasonable efforts to protect such information from being accessible through other means available to the public.

** -- Exemption valid for 5 years from date of request.

Examples of Persons Eligible to Request Exemption

Current or Active:

- **NEW exemption for County and City Commissioners (as of July 1, 2025)!**
- County Attorney, Assistant County Attorney, or Deputy County Attorney
- City Attorney, Assistant City Attorney, or Deputy City Attorney
- Judges/Special Magistrates/Administrative Law Judges, and NOW Judicial Assistants
- Circuit Court Clerk, Deputy Circuit Court Clerk, or Circuit Court Clerk Personnel
- And many more . . .

Current or Former:

- Law enforcement personnel
- Specified military personnel
- Local government personnel whose responsibilities include revenue collection or child support enforcement
- Public Defenders, Guardian ad litem, Code Enforcement Officers
- Firefighters, paramedics, EMTs
- And many more!

GIFTS, BRIBES & UNAUTHORIZED COMPENSATION!



ANTI-BRIBERY ETHICS REQUIREMENTS

Prohibited Solicitation or Acceptance of Things of Value s. 112.313(2)

- Prohibits all public officers, public employees, local government attorneys, and candidates from asking for or accepting *anything of value* based upon an understanding that their vote, official action, or judgment would be influenced.

Unauthorized Compensation s. 112.313(4), F.S.

- Prohibits all public officers, public employees, and local government attorneys, or their spouse or minor child, from accepting *anything of value* when the official knows, or under the circumstances should know, that it was given to influence a vote or other official action.

Ghost Candidate Example



In re Alexis Pedro Rodríguez

Comp. No. 20-225, Final Order No. 21-031

- In a 2020 tight Senate race involving then-incumbent candidate Sen. José Javier Rodríguez, the Respondent agreed to accept \$44,000 in exchange for changing his party affiliation, falsifying information on his financial disclosure filing as a candidate and running as a no-party affiliation candidate.
- Fined \$20,000 and public censure/reprimand.
- In **Oct 2024** the bribe giver, former Sen. Frank Artiles, convicted of three federal charges related to a "ghost candidate" scheme!

ADVISORY OPINIONS APPLYING 112.313(2) & (4), F.S.

- CEO 21-1:** Finding that a police officer's acceptance of an offer from a landlord of reduced rent in exchange for off duty work at complex would not violate s. 112.313(2) or (4), F.S.
- CEO 14-26:** Finding that a City Council member's acceptance of a chamber of commerce designation of the councilmember's business as an "endorsed vendor" did not violate s. 112.313(2) and (4), F.S.
- CEO 80-27:** Finding that s. 112.313(4) would be violated where a university employee received a "meal card" which could be used for unlimited free meals from a food service company contracting with the university.

ADDITIONAL GIFTS RESTRICTIONS APPLICABLE TO REPORTING INDIVIDUALS

- The traditional Gifts Law — s. 112.3148, F.S.
- Gifts from political committees — s. 112.31485, F.S.
- Honoraria Law — s. 112.3149, F.S.
- See also* Locality-Specific Restrictions Imposed by City or County

THE GIFTS LAW

s. 112.3148, F.S.



- X Cannot solicit gifts from lobbyists, employers of lobbyists, and vendors of your agency.
- X Cannot accept gifts worth more than \$100 from lobbyists, principal/employers of lobbyists, vendors, certain others.
- ✓ Must report gifts worth more than \$100 received from non-restricted sources on Form 9
- ✓ May accept gifts of any value from relatives!
- ✓ Restricted donor giving gift valued at \$25 to \$100 must report the gift on Form 30 quarterly

DEFINITION OF “GIFT”

Definition of “gift”

Includes:

- Tangible or intangible personal property
- Food or beverages
- Transportation
- Real property and use of real property
- Flowers and floral arrangements
- Entrance fees and tickets
- Preferential rates
- Membership dues
- Any other similar service or thing having an attributable value**

Definition of “gift” does

NOT Include:

- Salary/benefits/expenses associated with **private** "employment, business, or service as an officer or director of a corporation or organization"
- Campaign contributions
- Honorarium and honorarium event related expenses
- Awards in recognition of donee's "public, civic, charitable, or professional service"
- The use of public facility/property for public purpose
- And more!

RESTRICTED DONORS: WHO ARE “LOBBYISTS” AND “VENDORS”?

PAID TO PERSUADE

- “Lobbyist”: Anyone who, for compensation, is seeking or has sought in the last 12 months to influence the governmental decisions of a RIPE or his or her agency. s. 112.3148(2)(b), F.S.
- “Vendor”: A business entity doing business directly with an agency, such as renting, leasing, or selling any realty, goods, or services. s. 112.3148(2)(f), F.S.

ANTI-SOLICITATION FROM RESTRICTED DONORS

s. 112.3148(3), F.S.

- A RIPE **cannot solicit (ask for) a gift**, regardless of value, **from a “lobbyist”** who lobbies their agency (or the principal/partner/firm or employer of such a lobbyist), a **“vendor,”** or political committee, *if* the gift is for the personal benefit of the RIPE, another RIPE, or immediate family of either.
- Limited exception for charitable solicitations not benefiting the RIPE or their family — CEO 91-52 and CEO 95-25.

DISCLOSURE OF GIFTS OF LESS THAN \$100 FROM RESTRICTED SOURCES

- RIPEs can accept gifts from restricted sources (lobbyists, employers of lobbyists, vendors, etc.) having a value **less than \$100** and RIPEs do not have to report them.
- Vendor/Lobbyist can give gifts to RIPEs having a value of less than \$100.
- IF a restricted donor gives a gift to a RIPE having a value **between \$25 and \$100** THE GIFT GIVER (vendor/lobbyist) is required to report it on a **Form 30, “Donor’s Quarterly Gift Disclosure.”**

PROHIBITED ACCEPTANCE OF GIFTS OVER \$100 FROM RESTRICTED SOURCES

S. 112.3148(4), F.S.

A RIPE **cannot accept**, directly or indirectly, a **gift from a lobbyist** who lobbies their agency (or the principal/partner/firm or employer of such a lobbyist), a **vendor**, or political committee IF valued at **over \$100**.

- Reporting an impermissible gift will not cure its unacceptability.

GIFTS FROM NON-RESTRICTED SOURCES

- Applies only to Form 1/Form 6 filers (RIPEs)
- Gifts from “relatives” of any amount can be accepted. s. 112.3148(1), F.S.
 - No reporting requirement
- Gifts from friends in community of any amount can be accepted BUT
 - Have to report if over \$100 on a Form 9
 - CEO 16-01 – Do not accept gift of over \$100 if friend is a lobbyist/vendor!

CASE STUDY INVOLVING GIFTS & BRIBES

You are a pension board trustee. During a meeting of the board a friend who is a partner in an actuarial firm providing services to the board via contract, offers you two tickets to the big game! During your conversation, he asks if you could help with the renewal of his firm's contract considering these free tickets. **What ethics issues does this raise, if any?**

GIFTS CASE STUDY ANALYSIS

Steps for Analyzing ANY Gift

1. Is this a bribe?
2. Who is giving me the gift?
3. Is the gift giver a lobbyist or vendor of my agency?
4. How much is this thing worth?
5. Less than \$100 or more than \$100?
6. If the value is more than \$100 *and* the gift giver is a lobbyist or vendor—either do not accept it or pay the value down!

Analysis of These Gifts

- Is there indication that gifts being offered to influence official decision/vote?
- Here gift giver is a **vendor** (and possibly a lobbyist) of the board. CEO 16-1
- Sect. 112.3148(4) **\$100 threshold** of acceptance re gifts from **lobbyists** and/or **vendors** of one's agency.
- Tickets are a gift. Tickets valued by face value x the number of tickets accepted.

**CONFLICTS
OF
INTEREST**
s. 112.313, F.S.

**Doing Business with
One's Own Agency**

&

**Conflicting
Employment and
Contractual
Relationships**

WHAT IS A CONFLICT OF INTEREST?

“Conflict” or “Conflict of Interest” means a situation in which regard for a private interest tends to lead to disregard of a public duty or interest.

s. 112.312(8), F.S.



CONFLICTS OF INTEREST

s. 112.313(3) and (7), F.S.

Doing Business with One's Own Agency

- Cannot do business with a company in which you or your spouse or child are an officer/director, or own a material interest (of more than 5%)
- Cannot sell realty, goods, or services to your own agency

Conflicting Employment & Contractual Relationship

- Cannot have an employment or contractual relationship with any businesses that is doing business with your agency/board
- Nor can you have employment or contractual relationships that causes a frequently recurring conflict with public duties

EXEMPTIONS

- **Grandfathering**— Contracts entered into prior to qualification for elective office, **appointment to public office**, or beginning public employment are **automatically exempted**. *See* CEO 96-30 and CEO 09-1.
- Exemptions in s. 112.313(12), F.S.
 - **Waiver of conflict by appointing board!**
 - Sole source of supply
 - Sealed competitive bid
 - Sales of less than \$500 in any calendar year
 - And more!
- Additional exemption in s. 112.313(16), F.S. *See* CEO 91-55.

CONFLICTS OF INTEREST CASE STUDY

You are a Sun City Pension Board Trustee. In your private capacity you own a company, ABC Actuarial. The Board needs an actuarial services provider. During a Board meeting you state that there's no need to engage in competitive bidding as your company should be selected immediately. Thereafter, the Board votes to approve a contract with ABC Actuarial, and you abstain from the vote. **What ethics issues does this scenario raise, if any?**

VOTING CONFLICT

s. 112.3143, F.S.

- Memorandum of Voting Conflict (Form 8B)
- Applies only to members of collegial bodies



IDENTIFYING & APPLYING VOTING CONFLICTS LAW

s. 112.3143, F.S.

Measure would result in a special
(economic) private gain or loss TO YOU

OR

Which you know would result in a
special private gain or loss to:

- A relative
- A business associate
- A principal/employer by whom you are retained or the parent or subsidiary of your principal/employer

WHAT TO DO

s. 112.3143(3) & (4), F.S.

Appointed Public Officers:

1. Publicly disclose conflict;
2. Abstain from voting; AND
3. File a memorandum (CE Form 8B) prior to vote or within 15 days.

Also, disclose conflict before participating in any discussion

LAWS PERTAINING TO PROHIBITED CONDUCT



MISUSE OF PUBLIC POSITION

s. 112.313(6), F.S.

All public officers, public employees, and local government attorneys are prohibited from **corruptly** using or attempting to use their public position or resources to secure a **special benefit, privilege, or exemption** for themselves or others.



MISUSE OF PUBLIC INFORMATION

s. 112.313(8), F.S.

- Applies to current and former public officers and employees.
- Prohibits using info gleaned in public capacity and not available to public for their personal benefit or for the benefit of persons or entities connected to them in a private capacity.



There is a New Sheriff in Town!

Art. II, s. 8(h)(2),
Fla. Const.:

Prohibited
Disproportionate
Benefit!

PROHIBITED DISPROPORTIONATE BENEFIT

- Article II, Section 8 of the Florida Constitution.
- Effective **Dec. 31, 2020.**
- Rule 34-18.001, Florida Administrative Code.
- CEO 19-23 and CEO 21-1.
- Prohibits all public officers and employees from **abusing** their position in order to obtain a **disproportionate benefit** for:
 - Themselves
 - Spouse or Children
 - Employer
 - Any business entity with whom they contract or serve as officer, partner, director, **or** own an interest.

PENALTIES

- Sect. 112.317, F.S., provides non-criminal penalties for current and former public officers and public employees, candidates for public office, and others.
 - Impeachment,
 - Removal/suspension from public office/employment,
 - Public censure and reprimand,
 - Forfeiture of up to one third of public salary,
 - Civil penalties \$20,000 per violation (as of May 11, 2023),
 - Restitution of pecuniary benefits

Forfeiture of Retirement Benefits

- Any public officer or employee who is convicted of a felony involving a **breach of public trust** shall be subject to forfeiture of rights and privileges under a public retirement system or pension plan in such manner as may be provided by law.
- Art. II, s. 8(d), Fla. Const.
- **FORFEITURE.**— Any public officer or employee who is **convicted of a specified offense** committed prior to retirement, or whose office or employment is terminated by reason of his or her admitted commission, aid, or abetment of a specified offense, shall forfeit all rights and benefits under any public retirement system of which he or she is a member, except for the return of his or her accumulated contributions as of the date of termination. s. 112.3173(3), F.S.

Specified Offenses

s. 112.3173(1)(e), F.S.



- Embezzlement of public funds
- Theft by a public officer/employee from his/her public agency
- Bribery
- Felonies involving sexual battery or lewd acts against minors
- Committing of any felony by a public officer or employee who, willfully and with intent to defraud the public/public agency for which the public officer or employee acts or in which he or she is employed of the right to receive the faithful performance of his or her duty as a public officer or employee, realizes or obtains, or attempts to realize or obtain, a profit, gain, or advantage for himself or herself or for some other person . . .

Thank You!

Caroline Klancke

Executive Director

Florida Ethics Institute

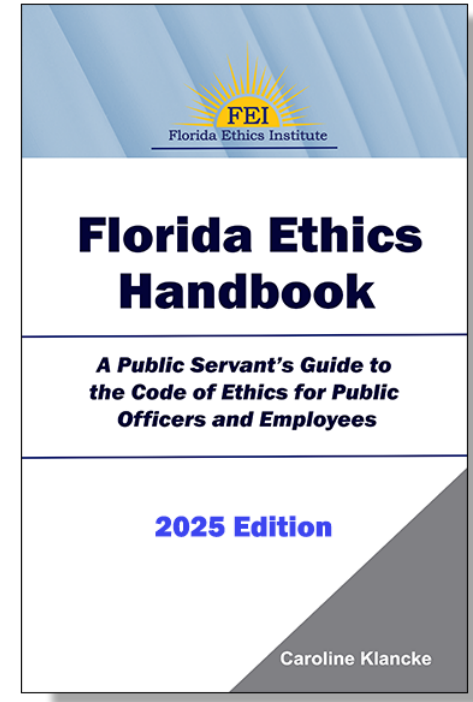
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info@floridaethics.org



Behavioral Governance Leadership

Don Trone

Center for Board Certified Fiduciaries

Don Trone, BCF™ is the CEO of the Center for Board Certified Fiduciaries (CBCF), which is affiliated with the Wake Forest University – School of Professional Studies. CBCF is offering the first executive education certificates in fiduciary studies and awards the peerreviewed BCF (Board Certified Fiduciary) mark. Don also is one of the Co-founders of 3ethos, which conducts original research in the field of Behavioral Governance (BG). BG is the follow-on to Behavioral Finance, except now the focus is on how the behaviors of key decision-makers impact the quality of their decision-making outcomes. Don was the founding CEO of fi360; founder and President of the Foundation for Fiduciary Studies; and the first person to direct the Institute for Leadership at the U.S. Coast Guard Academy. In 2015 Don was named by Investment Advisor magazine as the “Father of Fiduciary” and one of the 35 most influential people in the financial services industry. In 2003, he was appointed by the U.S. Secretary of Labor to represent the investment counseling industry on the ERISA Advisory Council, in 2007 he testified before the U.S. Senate Finance Committee on fiduciary best practices; and in 2015 he testified before the U.S. Department of Labor against the proposed DOL Rule. Don is a graduate of the U.S. Coast Guard Academy (Class President), and served for ten years on active duty, most notably as a long-range search and rescue helicopter pilot. He is a fourtime recipient of the Sikorsky Helicopter Rescue Award. He has a Master’s from The American College and has completed post-graduate studies in theology from the Pittsburgh Theological Seminary and Trinity Episcopal Seminary.



FPPTA Presentation

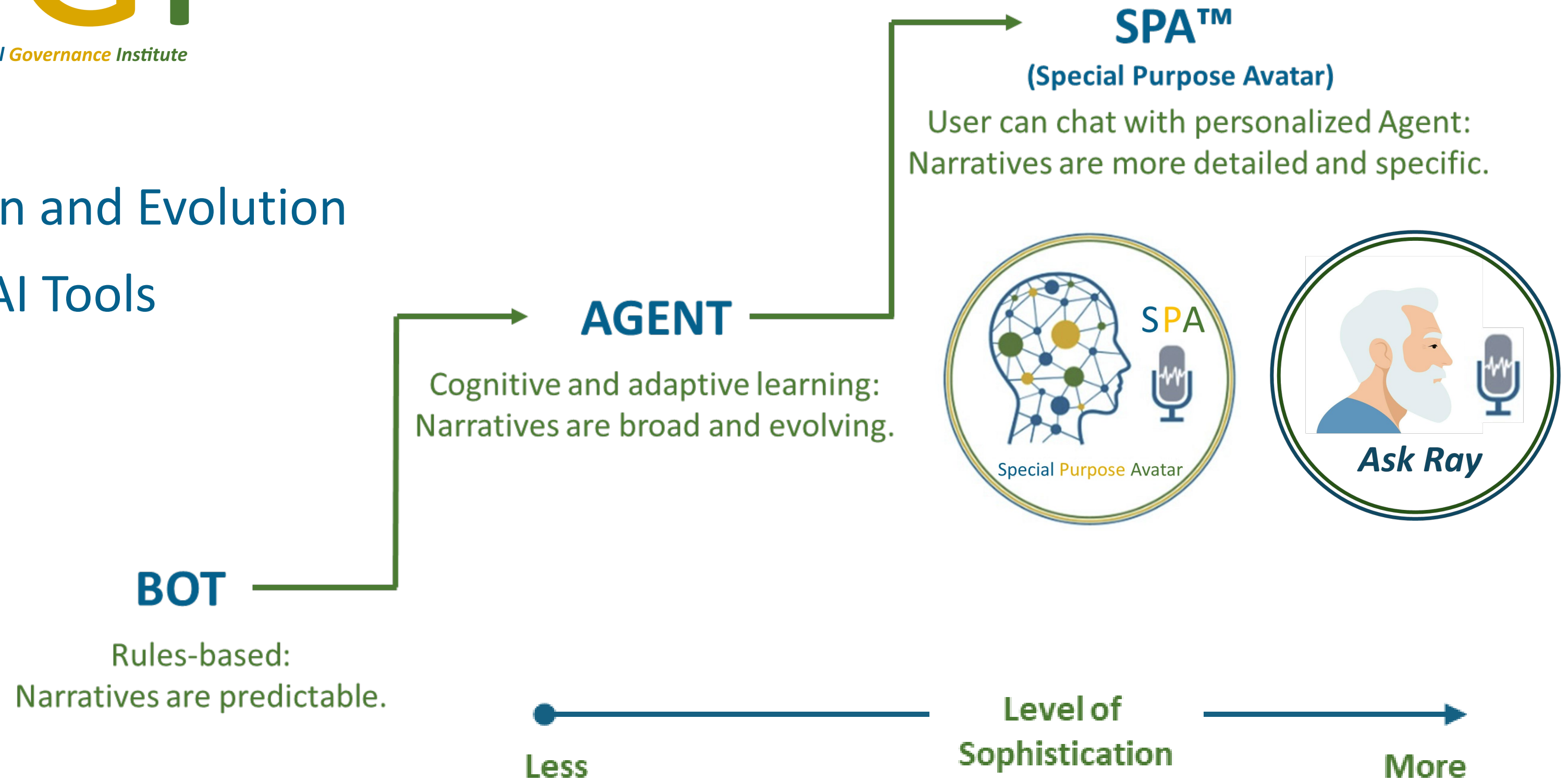
FLORIDA PUBLIC PENSION TRUSTEES ASSOCIATION

Behavioral Governance – Leadership

Don Trone
CEO



Classification and Evolution of AI Tools



BEHAVIORAL GOVERNANCE DEFINED

Behavioral Governance is a new body of research that studies the interrelationships between Leadership, Stewardship, and Governance



Leadership is your capacity to inspire and engage others.

Stewardship is your passion and discipline to protect the long-term interests of those you serve.

Governance is your ability to manage the details of a prudent decision-making process.

Behavioral Governance Framework



- **Leadership** is your capacity to inspire and engage others.
- **Stewardship** is your passion and discipline to protect the long-term interests of others.
- **Governance** is your ability manage the details of a prudent decision-making process.



Management is about influencing processes, systems, and resources.

Leadership is about influencing the people that drive those processes and systems.

Behavioral Governance is understanding how to synchronize both functions.



Behavioral Governance is Universal



Significance of Using Behavioral Governance

- **Recent Internet Search:** *“Given the successful Nobel Prize recognition of Behavioral Economics and its growing influence in policy and academic research, the likelihood of Behavioral Governance research being considered for the Nobel Prize in Economics in the future is high.”*
- **Impacts the Quality of Decision-Making:** Emphasizes how leadership behaviors and behavioral biases affect decision-making...which can lead to more effective governance structures and improved decision-making outcomes.
- **Addresses Complex Social Challenges:** Provides tools to enhance transparency, accountability, and stakeholder engagement.

Leadership



Leadership is your capacity to inspire and engage others.

Stewardship



Stewardship is the passion and discipline to protect the long-term interests of others.

Professionals don't define themselves by what they do, but rather by who they are and how they do it - they can demonstrate a balanced continuum between their Leadership, Stewardship, and Governance.

When Leadership is missing, you'll find disengagement.

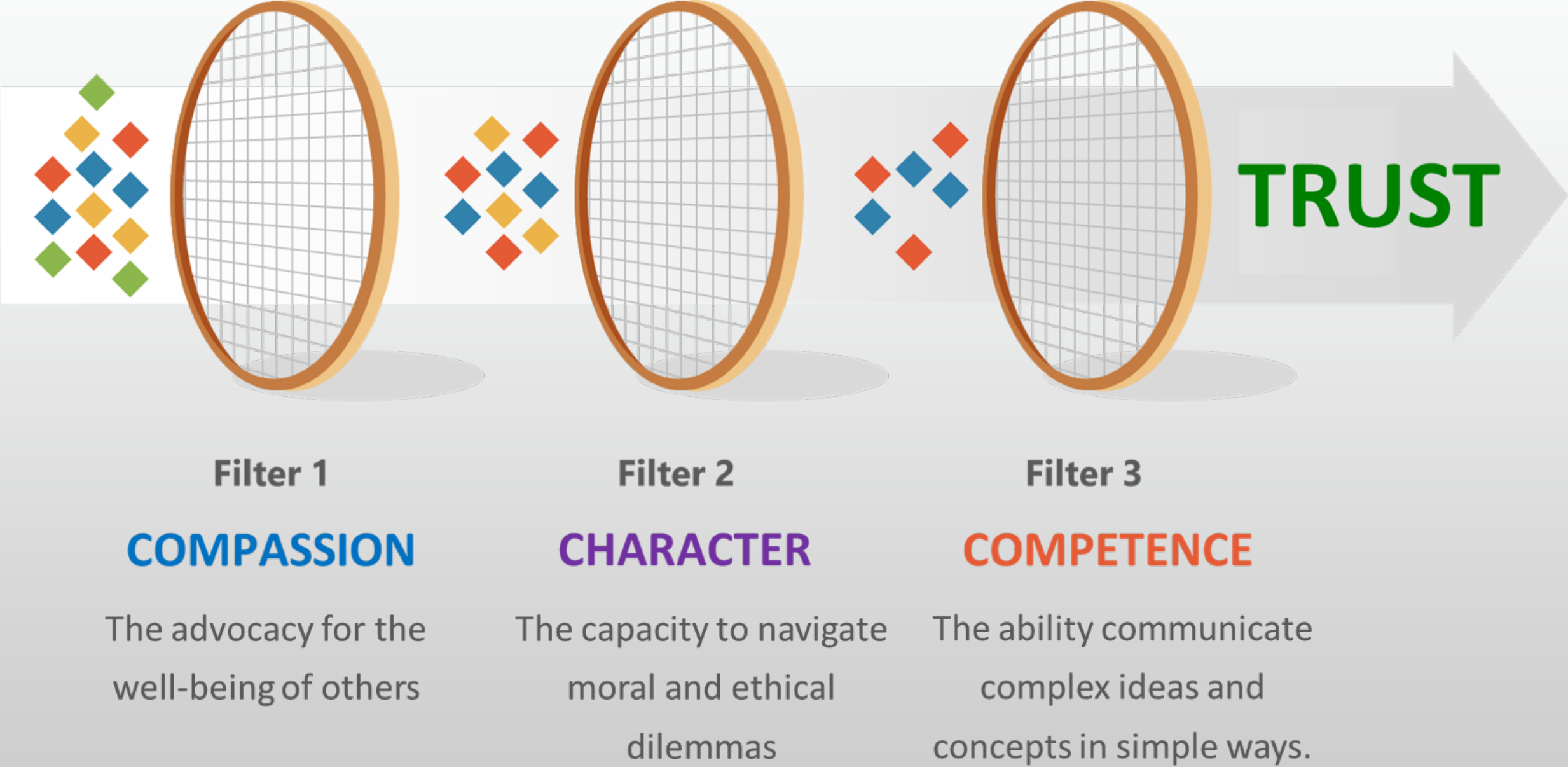
When Stewardship is missing, you'll find anxiety.

When Governance is missing, you'll find uncertainty and confusion.



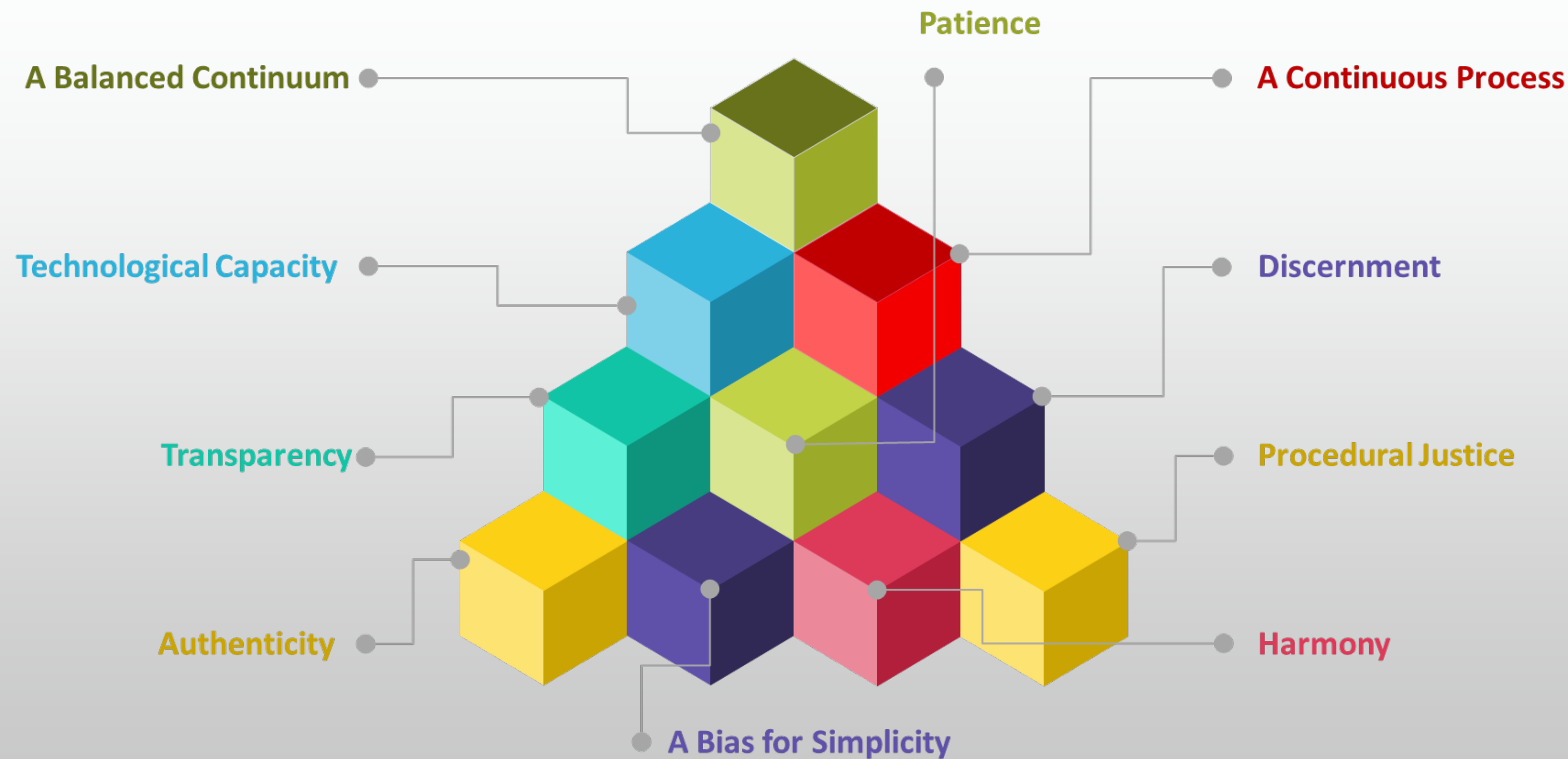
Original source: Tim Johnson

HOW TO BUILD TRUST



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BUILDING TRUST AS A LEADER



THE SECRET TO SUCCESS...KNOWING HOW TO FAIL

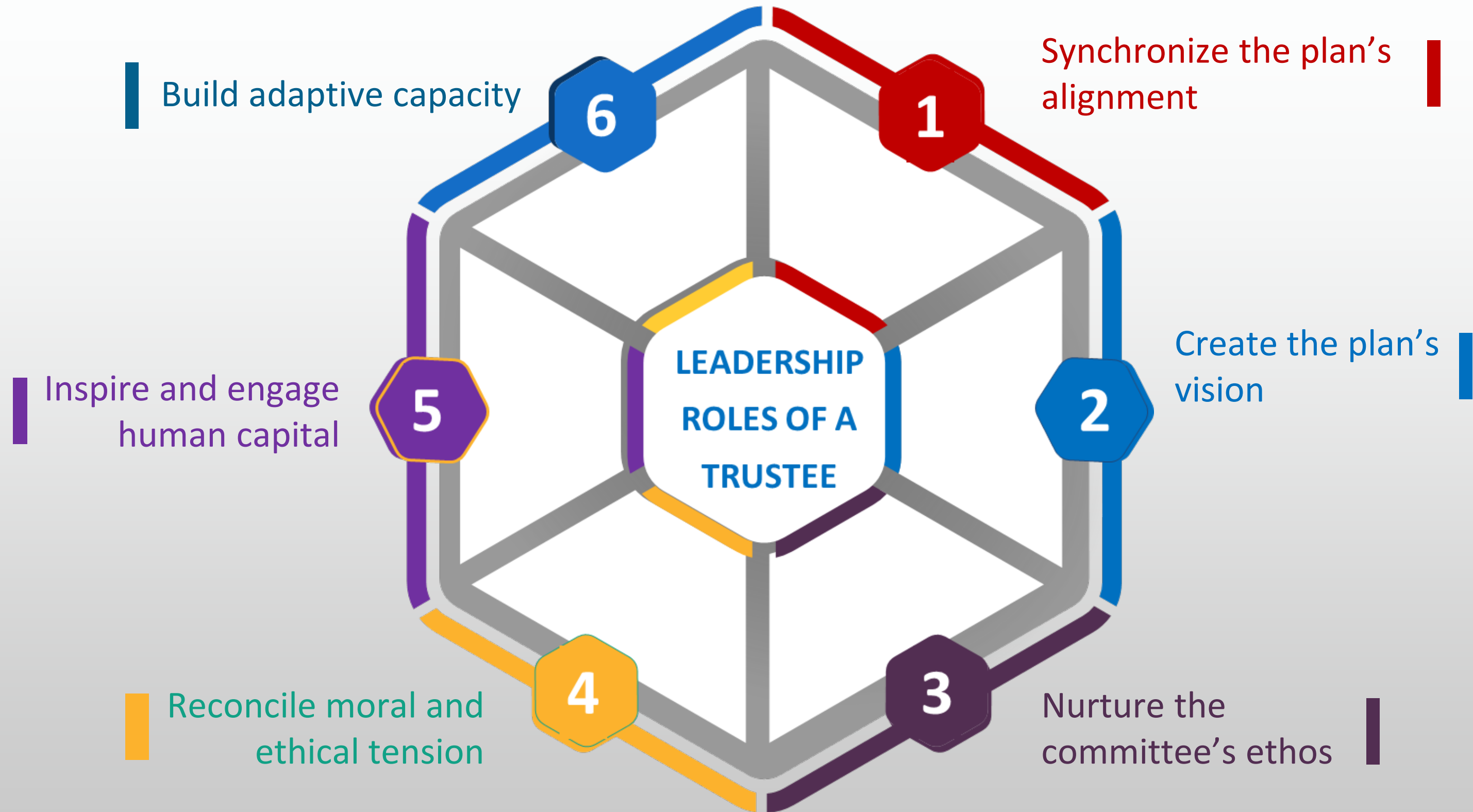




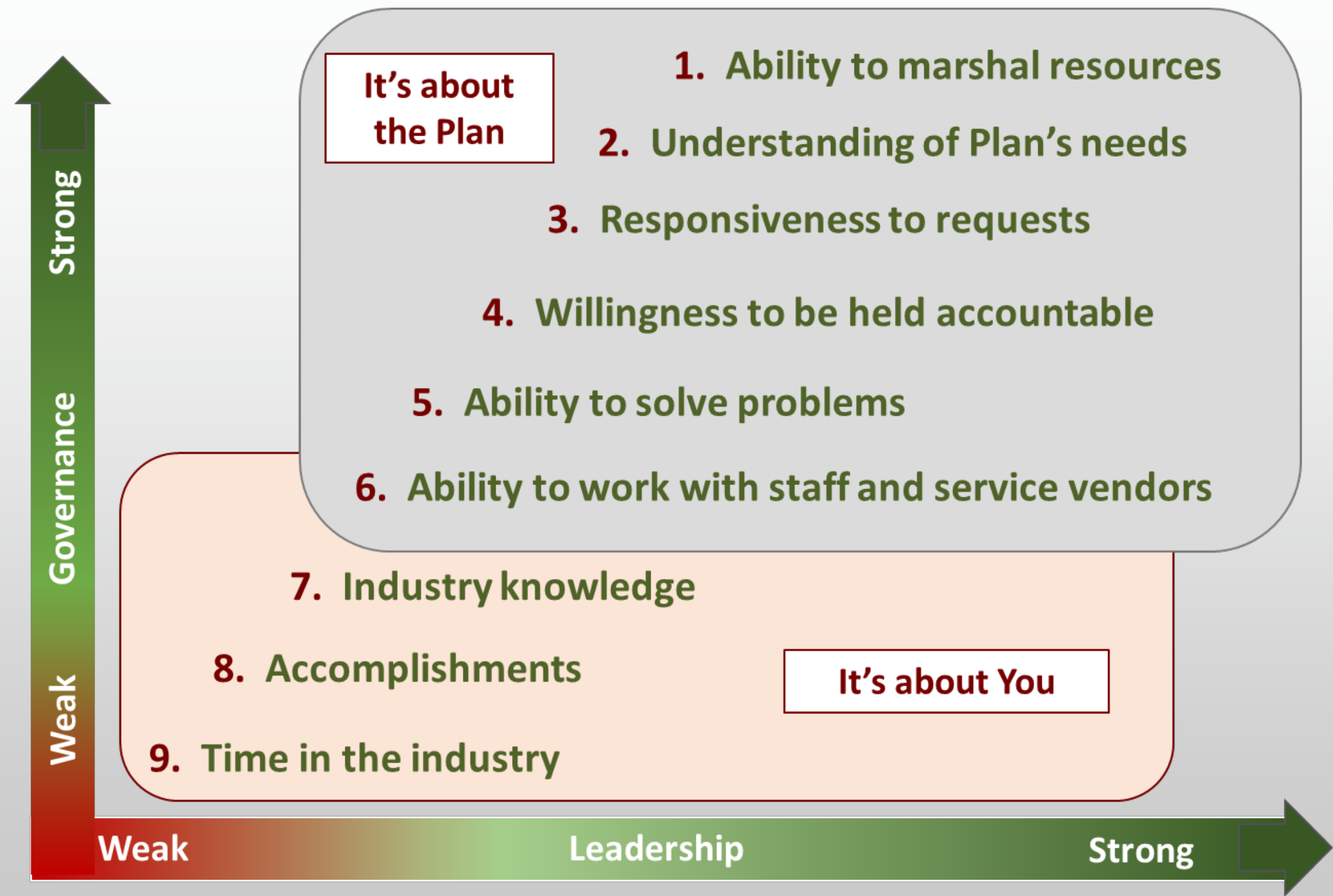
*We know that you know how to
succeed.*

*Now we need to know whether you
know how to fail.*





BUILDING LEADERSHIP CREDIBILITY



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Don Trone [Add verification badge](#)

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Behavioral Governance
Institute



US Coast Guard Academy

Follow Don Trone on LinkedIn
to receive a daily inspirational
message on leadership,
stewardship, or governance

Leaders start each day with a renewed
commitment to be a passionate steward
of their various leadership roles.

For they understand that leadership is a
privilege, not a right...
it's a responsibility, not a title.

Don Trone



Avatars don't replace leaders...
they replace the absence of leaders.



Don Trone

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Asset Allocation

Tyler Grumbles

Mariner

Tyler serves as the primary consultant for various institutional plans including defined benefit and defined contribution investment portfolios. His duties include serving as the primary point of contact for various Plan Sponsors and Boards of Trustees and assisting them with their investment decisions and fiduciary responsibilities. Through his involvement with these plans, Tyler coordinates all components of Mariner's consulting services including providing investment recommendations, asset allocation and investment manager evaluations, developing investment policy guidelines, and delivering investment policy compliance and performance reviews. Tyler started with AndCo (now Mariner Institutional) in 2007 and has held the roles of performance analyst and internal consultant. In his previous roles, Tyler was responsible for investment research, performance analysis, plan administration, compliance monitoring, and operational and administrative support. Tyler holds:

- A Bachelor of Science in Business Administration, Finance, University of Central Florida
- A Bachelor Arts, Political Science, University of Central Florida
- Is a CFA Charterholder
- A Chartered Alternative Investment Analyst (CAIA)
- And holds a Certificate in Investment Performance Measurement (CIPM) from the CFA Institute



MARINER

Asset Allocation

Asset Class and Allocation
Overview

10/6/2025

Tyler Grumbles, CFA, CAIA, CIPM
Senior Institutional Advisor

Presentation

Agenda



Defining Asset Allocation

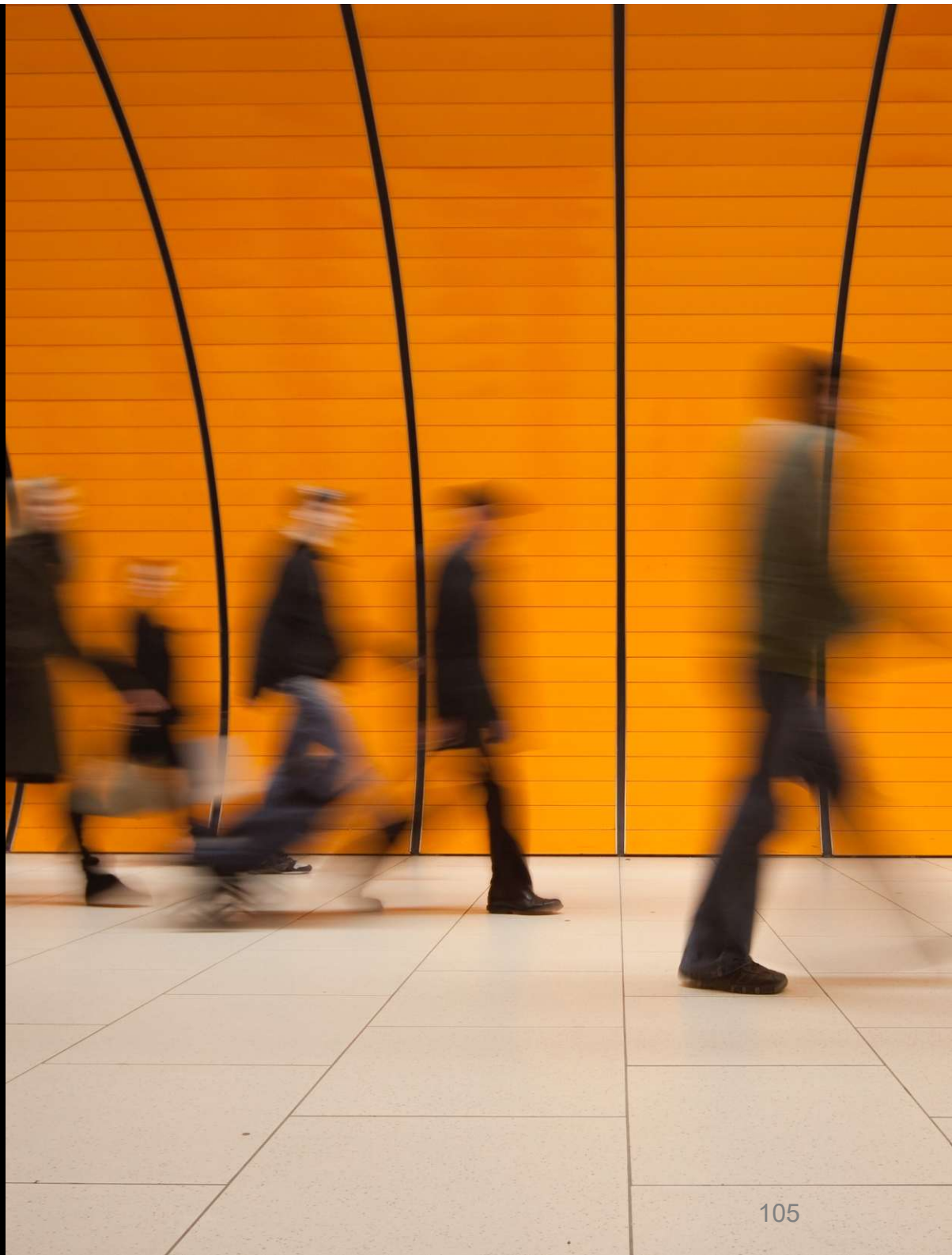
Setting an Asset Allocation

Core Asset Classes

Alternatives & Real Estate

Trends in Asset Allocation

Defining Asset Allocation



What is Asset Allocation?

Asset allocation is the process of dividing an investment portfolio among different asset categories, such as stocks, bonds, and cash, to balance risk and reward according to a plan's goals, risk tolerance, and investment horizon.

Why it matters



Diversification and Risk Management

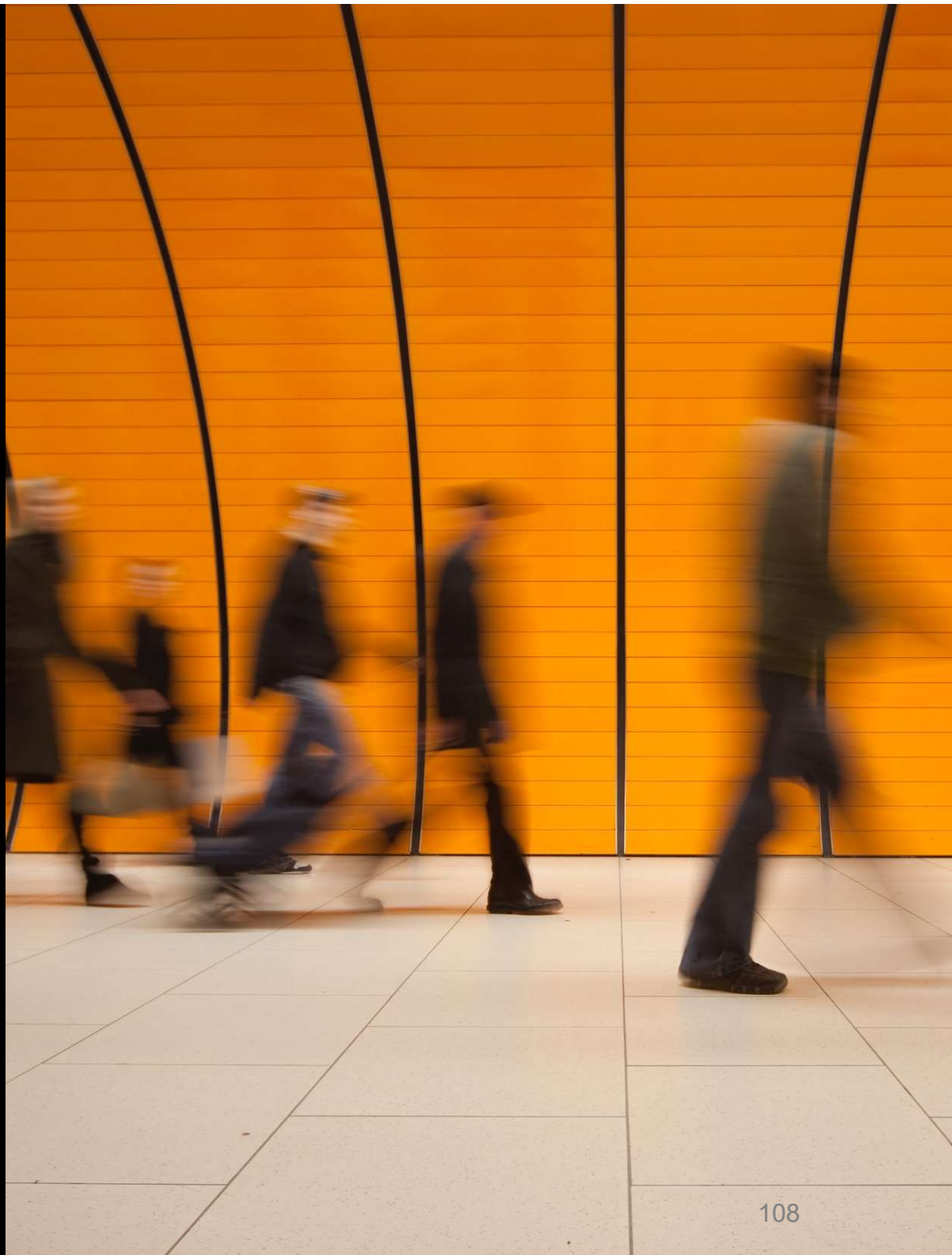
- Mitigate risk by spreading investments across asset types
- Different asset classes have different economic sensitivities and cycles

Goals, Risk Tolerance and Time Horizon

- Asset allocation should be set to optimize for goals at an appropriate risk tolerance
- Time Horizon can also impact asset allocation decisions

"The market can stay irrational longer than you can stay solvent" - John Maynard Keynes

Setting an Asset Allocation



Setting an Asset Allocation



Set Parameters

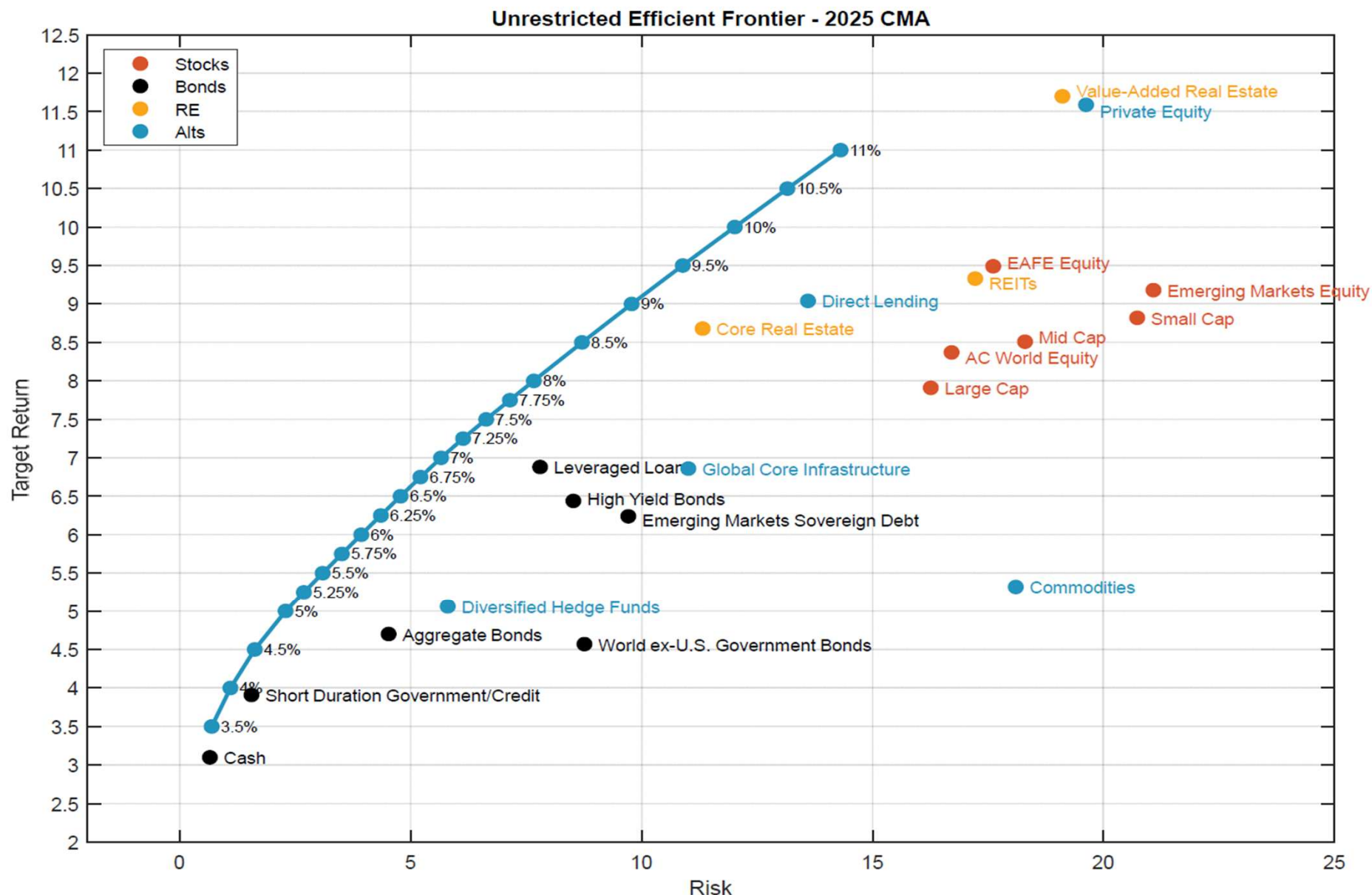
Basics

- What are your goals?
- What is your time horizon?
- What is your risk tolerance?
- What are your liquidity requirements?
- Are any of these constraints mismatched with your goals?

Florida and Local Specific Limitations

- Foreign limitations (25%)
 - Scrutinized Company List
 - Pecuniary Factors
 - Local Ordinances
-

Select Asset Classes



Source: 2024-10-21 JP Morgan Capital Market Assumptions.

Return, risk and correlation projections are hypothetical in nature and do not represent any specific course of action or reflect actual investment results

Run Asset Allocation Study

Broad Asset Class Allocation (%)

	Policy Mix	Mix 1	Mix 2
U.S. Aggregate Bonds	22.50	22.50	22.50
U.S. High Yield Bonds	5.00	5.00	5.00
World ex-U.S. Government Bonds	5.00	2.50	0.00
U.S. Large Cap	30.25	30.25	30.25
U.S. Mid Cap	7.60	7.60	7.60
U.S. Small Cap	3.20	3.20	3.20
EAFE Equity	8.00	8.00	8.00
Emerging Markets Equity	3.45	3.45	3.45
U.S. Core Real Estate	10.00	10.00	10.00
Global Core Infrastructure	0.00	2.50	5.00
Direct Lending	5.00	5.00	5.00

Single Year Expectations (%)

	Policy Mix	Mix 1	Mix 2
Arithmetic Mean	7.71	7.77	7.82
Standard Deviation	10.33	10.39	10.46
Sharpe Ratio	0.75	0.75	0.75

For illustrative purposes only and does not represent a specific tailor recommended allocation. Any allocations, managers, or performance depicted are provided solely to demonstrate a portfolio allocation, whereby results could differ from those indicated. Past performance is not a guarantee of future results.

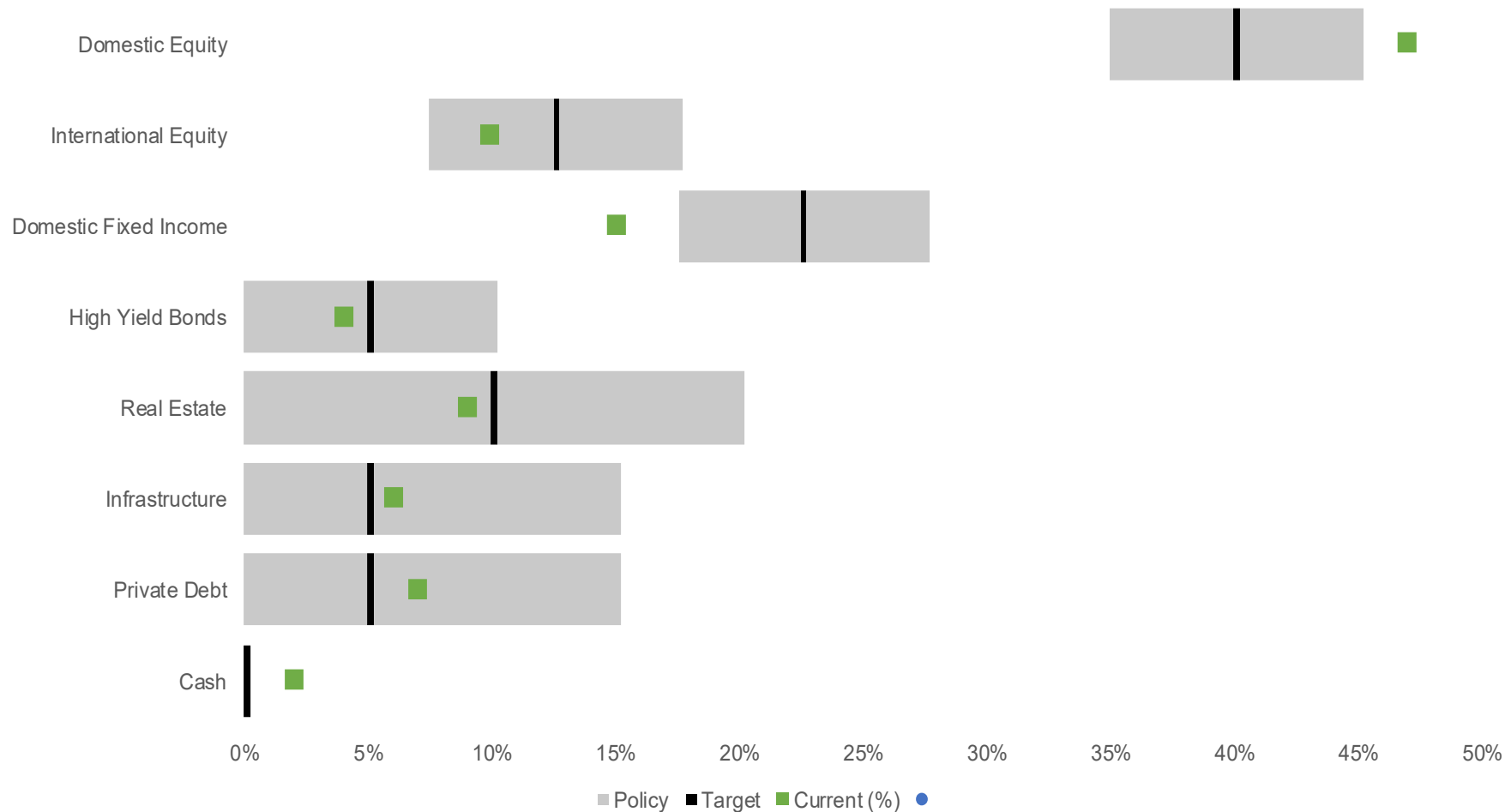
Select Mix and Ranges

Asset Class	Target	Range
U.S. Bonds	22.5%	17.5% - 27.5%
High Yield Bonds	5.0%	0% - 10%
U.S. Stocks	40.0%	35% - 45%
International Stocks	12.5%	7.5% - 17.5%
Core Real Estate	10.0%	0% – 20%
Infrastructure	5.0%	0% - 15%
Private Debt	5.0%	0% - 15%

Memorialize It

- Add asset classes and ranges to Investment Policy Statement
- Assign benchmarks to each asset class
- Use a weighted average benchmark of all of the asset classes for the total fund
- Track compliance in performance report

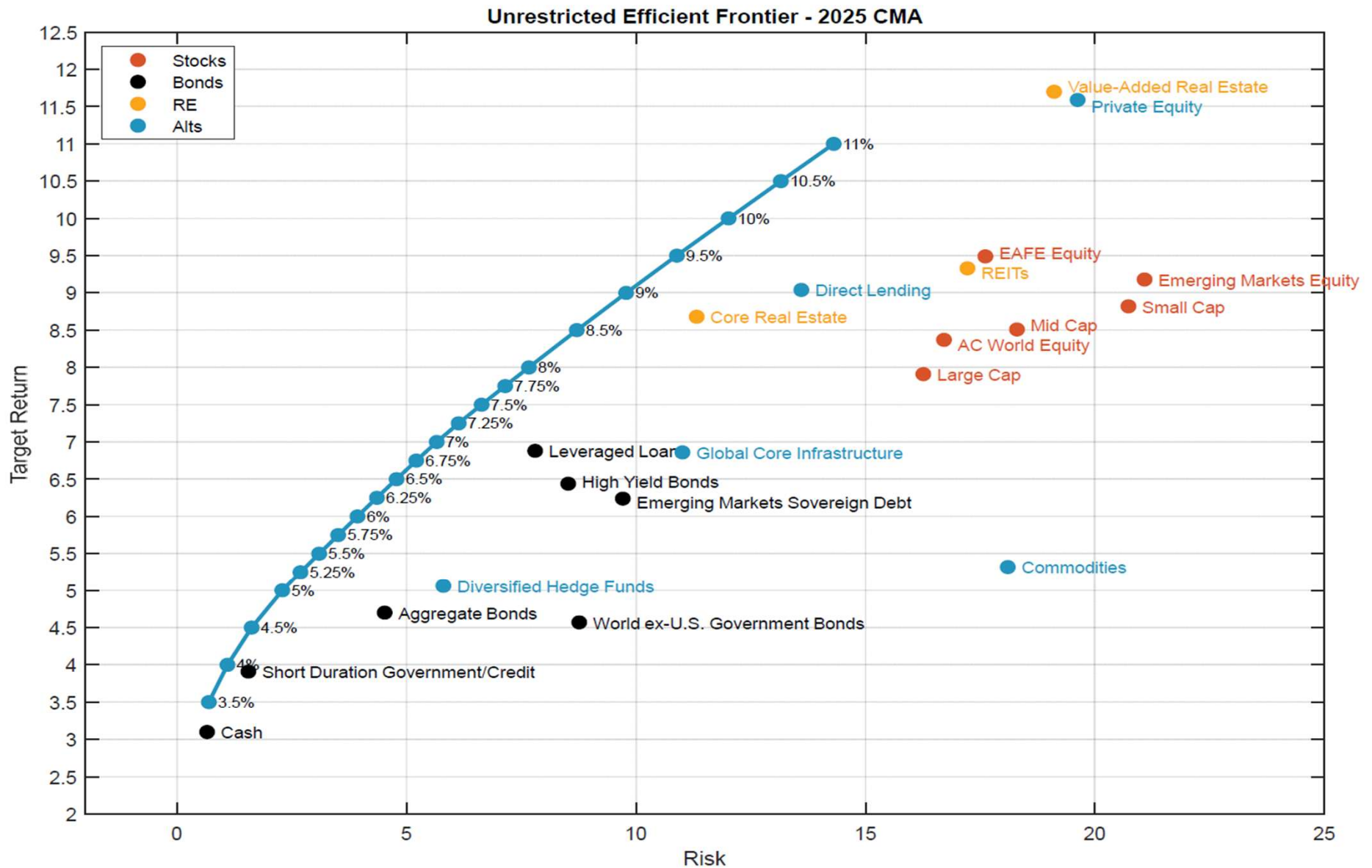
Rebalancing



For illustrative purposes only.

Return, risk and correlation projections are hypothetical in nature and do not represent any specific course of action or reflect actual investment results.

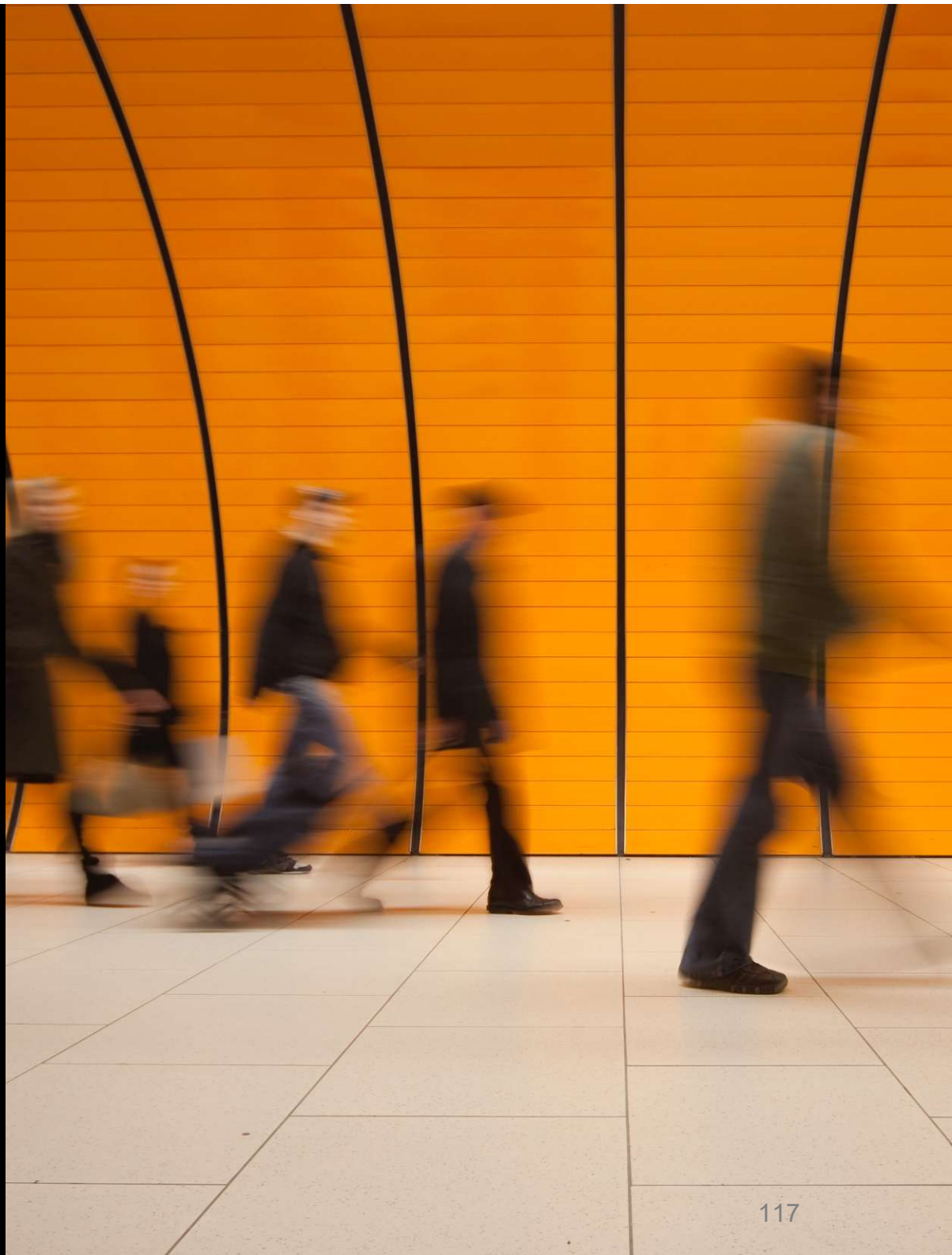
Why Rebalance?



Source: 2024-10-21 JP Morgan Capital Market Assumptions.

Return, risk and correlation projections are hypothetical in nature and do not represent any specific course of action or reflect actual investment results

Core Asset Classes



Public Equities

Geographic

- U.S. (aka Domestic)
- International: Developed
- International: Emerging
- Global (U.S. & International)

Style

- Growth
- Core
- Value

Market Cap

- Large
- Mid
- Small

Strategy

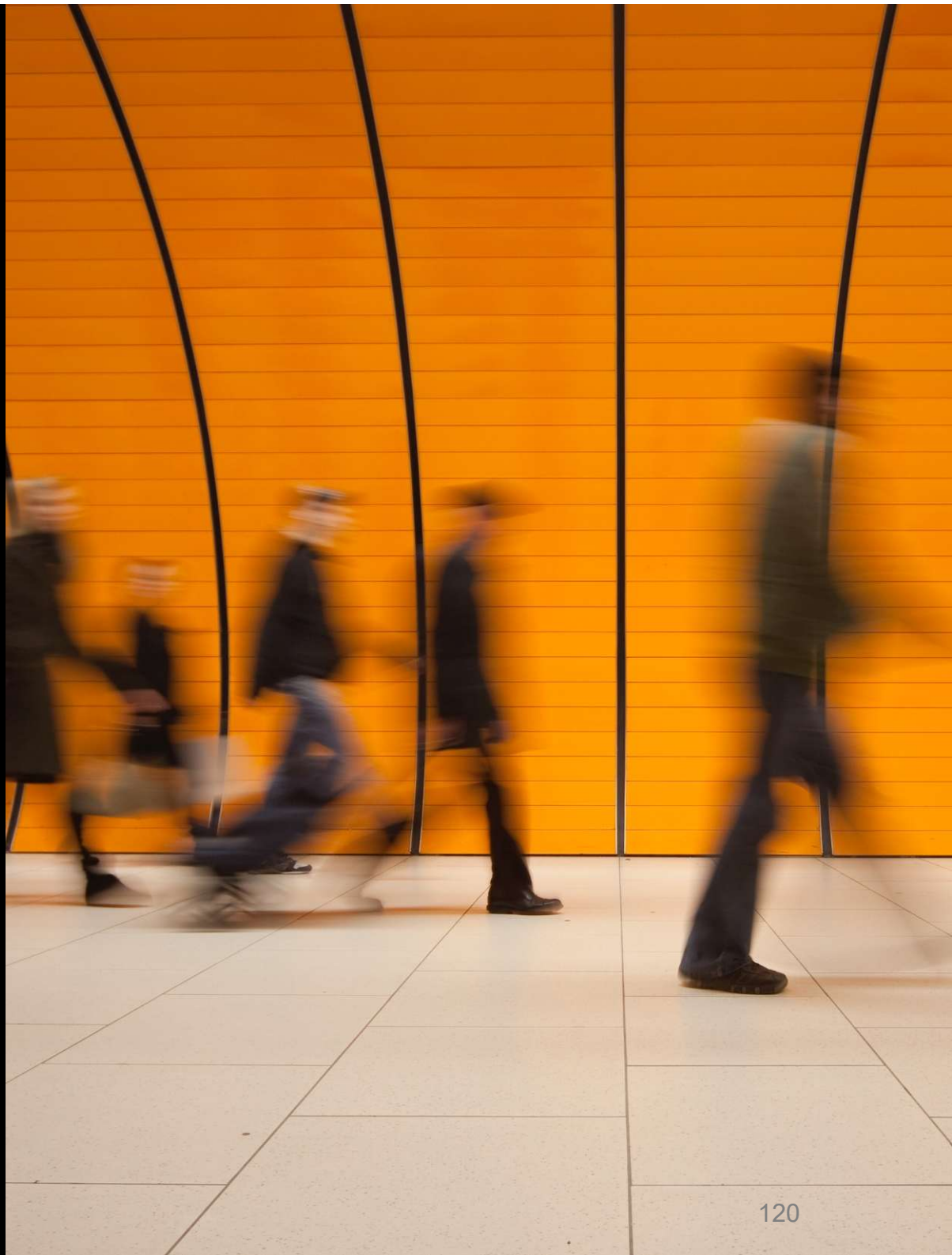
- Active/Passive
- Fundamental
- Factor Based
- Quantitative

Public Fixed Income

Basics

- Fixed Income = Bonds = Debt
- Companies take out loans to fund operations and pay a fixed rate of payment
- Generally seen as safer vs equities (stocks) but the upside is more limited
- In the event of bankruptcy bond holders get paid first (top of the stack)
- Interest payments can be fixed or floating
- Bonds are rated by rating agencies based on the likelihood of repayment

Alternatives and Real Estate



Real Estate

Basics

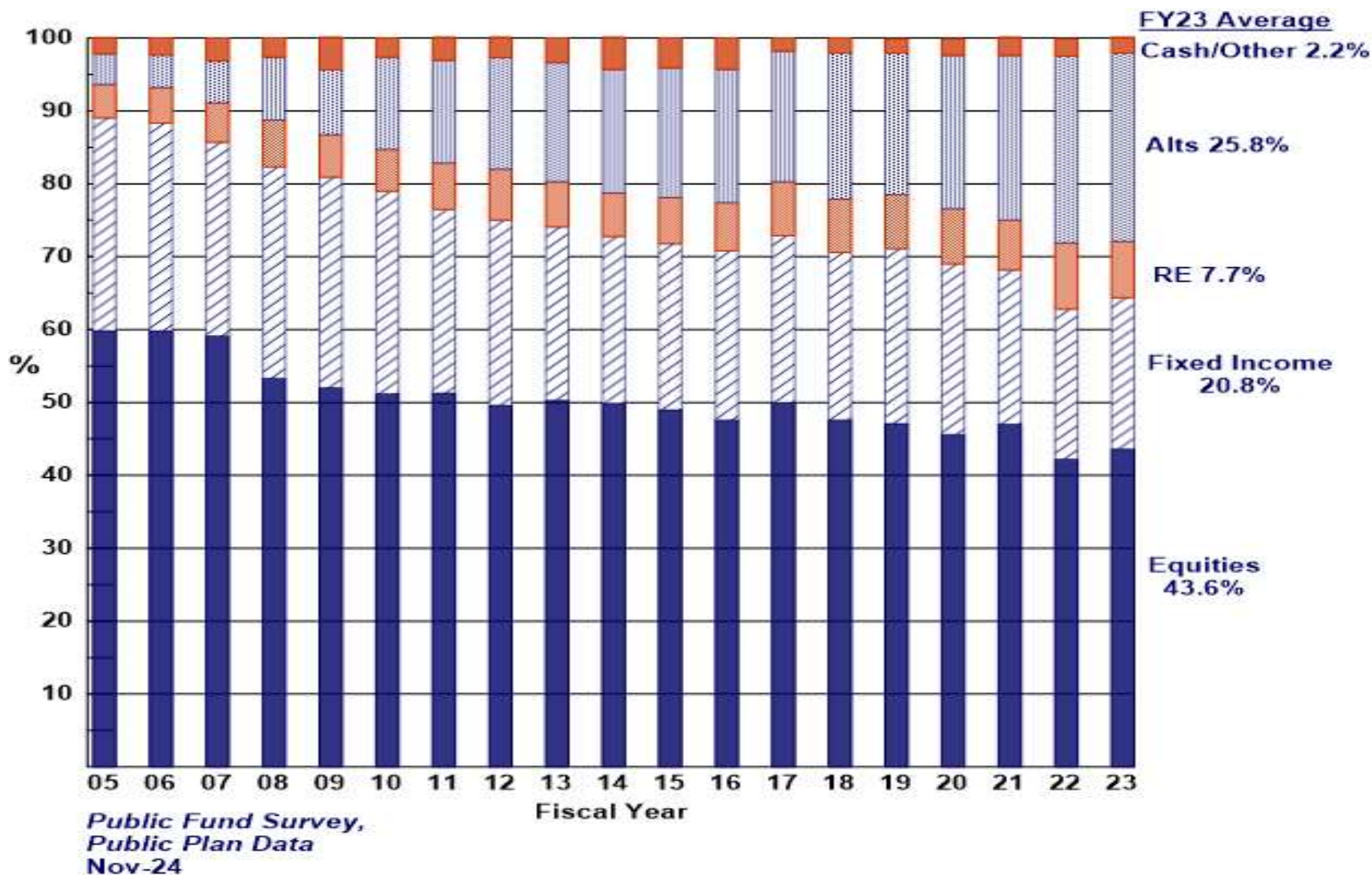
- Real estate invests directly in properties
- Institutional quality real estate will be invested through a limited partnership with other similar investors with a diversified portfolio of properties
- Can invest in equity or debt
- Core = high lease rate (~90%) and low debt (~25%) in traditional property types
- Non-core = lower lease rates with higher debt and can have a higher range of risk/return trade-offs

Alternatives

Basics

- **Include, but aren't limited to:**
 - Global Tactical Asset Allocation (GTAA)
 - Private Equity
 - Private Debt
 - Infrastructure
 - Commodities
 - Hedge Funds
 - Farmland/Timberland
- **Common Characteristics**
 - Usually privately held in limited partnerships
 - Little or no liquidity
 - Valuations are delayed
 - Returns are smoothed and diversify the portfolio

Asset Allocation Over Time



Disclosures

Important Disclosure Information

This material is provided for informational and educational purposes only. It is the propriety and confidential work product of Mariner. It does not consider any individual or personal financial, legal, or tax circumstances. As such, the information contained herein is not intended and should not be construed as individualized advice or recommendation of any kind. Where specific advice is necessary or appropriate, individuals should contact their professional tax, legal, and investment advisors or other professionals regarding their circumstances and needs.

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Investing involves risk and the potential to lose principal.

This material may contain forward-looking statements, estimates and projections which are inherently speculative as they are based on assumptions which may involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those expressed or implied in such statements.

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Mariner Institutional is neither affiliated with the Florida Public Pension Trustees Association nor any firms we're presenting alongside.

Investment Consultant/Manager Search

Scott Owens

Graystone Consulting

Scott Owens, an Institutional Consulting Director is responsible for managing the Institutional Business of Graystone Consulting Tampa. His primary focus involves overseeing and assisting clients with developing their investment policy statement, plan design, performance evaluation, risk management, manager selection and oversight, and cost analysis. Scott began his career in 1987, working his way through college as a sales assistant for Stifel, Nicolaus. Since 1998, Scott has specifically focused on advising public retirement plans, Taft-Hartley Funds, endowments and foundations qualified, and non-qualified corporate retirement plans including 401 (k)'s. He has specialized training with Modern Portfolio Theory, Behavioral Finance and Investment Manager Evaluation and Selection. Scott is a true believer in education for himself and his clients. He received Bachelor's degrees in both economics and finance from Florida State University. Scott has earned the Chartered Financial Analyst (CFA) designation as well as the Certified Investment Management Analyst (CIMA) designation. Additionally, he attained the Alternative Investments Director designation and earned the title of U.S. Government Entity Specialist at Morgan Stanley. Mr. Owens is required to commit to continuing professional education and adhere to the ethical standards of the investment industry. Scott is often invited to speak at various client conferences. He is a member of the Florida Public Pension Trustee Association (FPPTA), the Georgia Association of Public Pension Trustees (GAPPT), the Investments & Wealth Institute (formerly IMCA), the Chartered Financial Analyst Institute (CFA), and the CFA Society of Tampa Bay.



The Investment Manager Search Process



Scott Owens, CFA, CIMA
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Institutional Consulting Director
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813-227-2027

A Client Focused Fiduciary Responsibility



Investment Manager Evaluation (Step 4)

- Open architecture manager searches
- Leverage dedicated research professionals
- Assessments available to clients for full transparency
- Work with investment committee on manager recommendations
- Fee analysis and negotiation

Due Diligence Process

- How many analysts are dedicated to manager analysis?
- Do they have a Patented Process?
- How many new strategies are approved each year?
- Does the research team conduct onsite visits?
- How many strategies are monitored each year?

Manager Selection Criteria

No single blueprint exists, but we do have preferred attributes that we look for in an investment strategy.

- Investment Process & Characteristics
- Business Stability
- Operations & Compliance Characteristics

Qualitative Summary

	Manager 1	Manager 2	Manager 3	Manager 4	Russell 1000G
Growth Sub-Style	<i>Conservative</i>	<i>Traditional</i>	<i>Traditional</i>	<i>Aggressive</i>	<i>Index</i>
Forecasted P/E (1 Yr) vs. Index	26.5 Lower	32.4 Lower	25.6 Lower	32.3 Lower	32.8
Market Cap (\$Billions) vs. Index	\$1,139 Lower	\$982 Lower	\$389 Lower	\$1,504 Lower	\$1,748
Decision Making	Bottom-Up	Bottom-Up	Bottom-Up	Bottom-Up	
# of Securities	47	34	55	69	385
Foreign Secs. Permitted	No	Yes	No	Yes	
Maximum Cash	5%	5%	2%	5%	
Year Firm Established	1998	1993	1978	1863	
Who Est. Performance	Team	Team	PM	Team	
Commitment	Owners	Owners	Well Paid	Owners	
Total Firm Assets	\$2.2 Billion	\$73.0 Billion	\$3.6 Billion	\$3.7 Trillion	
Total PM's & Analysts	6	39	4	7	

Information as of June 30, 2025

Sources: Morgan Stanley Global Investment Manager Analysis team, Informa PSN, and Zephyr StyleADVISOR

This summary contains select data for each investment manager and index listed and should not be considered inclusive of all material information available for each investment. Please refer to additional information provided in the complete manager search analysis for each manager.

The prices, quotes or statistics contained herein have been obtained from sources believed to be reliable, however, the accuracy cannot be guaranteed. Past performance is not a guarantee of future results.

Trailing Returns

As of June 30, 2025

	1 year	3 years	5 years	7 years	10 years	15 years
Manager 1 (Conservative Growth)	11.13%	17.60%	14.55%	14.91%	13.94%	15.28%
Manager 2 (Traditional Growth)	11.48%	20.43%	14.83%	16.65%	16.80%	17.70%
Manager 3 (Traditional Growth)	16.61%	20.40%	17.00%	16.25%	14.30%	16.04%
Manager 4 (Aggressive Growth)	15.19%	25.82%	17.80%	19.19%	18.35%	18.95%
Russell 1000 Growth	17.22%	25.76%	18.15%	17.90%	17.01%	17.54%

Calendar-Year Returns

2020 To Year-to-Date 2025 (as of 6/30/2025)

	YTD 2025	2024	2023	2022	2021	2020
Manager 1 (Conservative Growth)	2.96%	18.86%	30.77%	-17.57%	27.59%	21.71%
Manager 2 (Traditional Growth)	5.52%	20.99%	39.80%	-30.63%	30.86%	40.21%
Manager 3 (Traditional Growth)	6.18%	22.10%	25.96%	-16.33%	31.27%	24.87%
Manager 4 (Aggressive Growth)	6.45%	34.89%	35.58%	-24.90%	19.30%	57.09%
Russell 1000 Growth	6.09%	33.36%	42.68%	-29.14%	27.60%	38.49%

Calendar-Year Returns

2014 To 2019

	2019	2018	2017	2016	2015	2014
Manager 1 (Conservative Growth)	30.63%	3.46%	23.05%	6.54%	2.27%	13.92%
Manager 2 (Traditional Growth)	36.19%	5.33%	29.06%	6.55%	13.70%	7.10%
Manager 3 (Traditional Growth)	36.82%	-6.13%	23.06%	9.31%	0.47%	21.11%
Manager 4 (Aggressive Growth)	39.97%	0.98%	38.95%	-1.11%	8.55%	11.87%
Russell 1000 Growth	36.39%	-1.51%	30.21%	7.08%	5.67%	13.05%

3-Year Rolling Returns

July 2017 - June 2025 (36-Month Moving Windows, Computed Monthly)

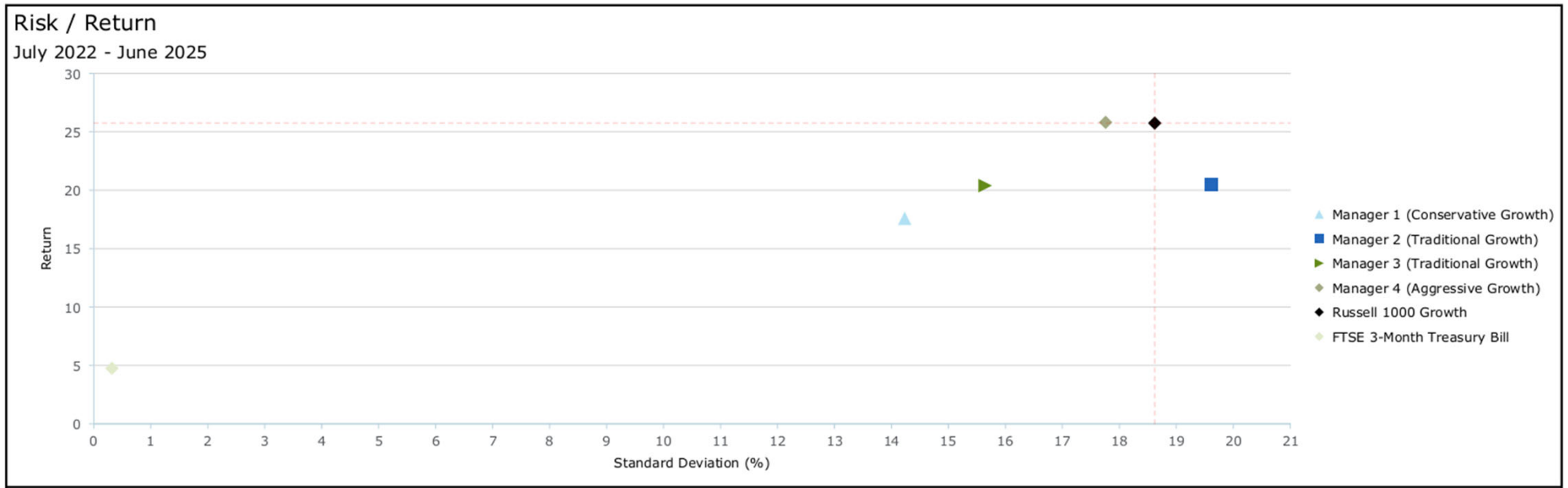
	Jun-25	Jun-24	Jun-23	Jun-22	Jun-21	Jun-20
Manager 1 (Conservative Growth)	17.60%	10.76%	13.33%	11.64%	20.56%	16.13%
Manager 2 (Traditional Growth)	20.43%	8.43%	11.78%	11.98%	27.42%	22.40%
Manager 3 (Traditional Growth)	20.40%	10.41%	15.51%	12.71%	22.27%	13.65%
Manager 4 (Aggressive Growth)	25.82%	11.44%	12.98%	14.35%	28.93%	24.98%
Russell 1000 Growth	25.76%	11.28%	13.73%	12.58%	25.14%	18.99%

3-Year Rolling Alphas

July 2017 - June 2025 (36-Month Moving Windows, Computed Monthly)

	Jun-25	Jun-24	Jun-23	Jun-22	Jun-21	Jun-20
Manager 1 (Conservative Growth)	-0.76%	1.94%	2.66%	1.50%	0.73%	0.49%
Manager 2 (Traditional Growth)	-4.82%	-2.80%	-1.05%	0.23%	4.76%	3.85%
Manager 3 (Traditional Growth)	1.01%	1.48%	4.29%	1.47%	-1.05%	-4.43%
Manager 4 (Aggressive Growth)	1.49%	0.73%	0.25%	1.52%	1.88%	3.55%
Russell 1000 Growth	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Risk/Return – 3 Years

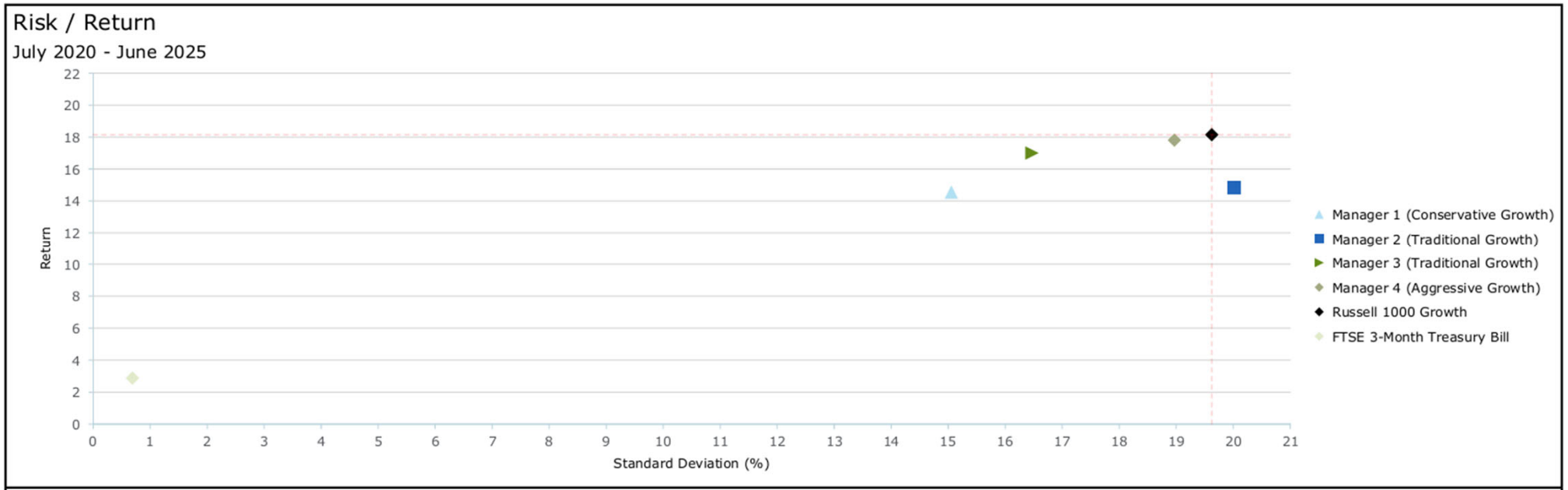


July 2022 - June 2025: Summary Statistics

	Return	Standard Deviation	Beta	Up Capture	Down Capture	Alpha	Sharpe Ratio	R-Squared
Manager 1 (Conservative Growth)	17.60%	14.23%	0.73	66.69%	80.13%	-0.76%	0.90	90.78%
Manager 2 (Traditional Growth)	20.43%	19.63%	1.03	92.12%	108.41%	-4.82%	0.80	95.22%
Manager 3 (Traditional Growth)	20.40%	15.64%	0.76	74.56%	82.02%	1.01%	1.00	82.09%
Manager 4 (Aggressive Growth)	25.82%	17.76%	0.94	98.11%	97.19%	1.49%	1.19	96.28%
Russell 1000 Growth	25.76%	18.62%	1.00	100.00%	100.00%	0.00%	1.13	100.00%

The prices, quotes or statistics contained herein have been obtained from sources believed to be reliable, however, the accuracy cannot be guaranteed. Past performance is not a guarantee of future results. For illustrative purposes only. Not representative of actual fund performance.

Risk/Return – 5 Years

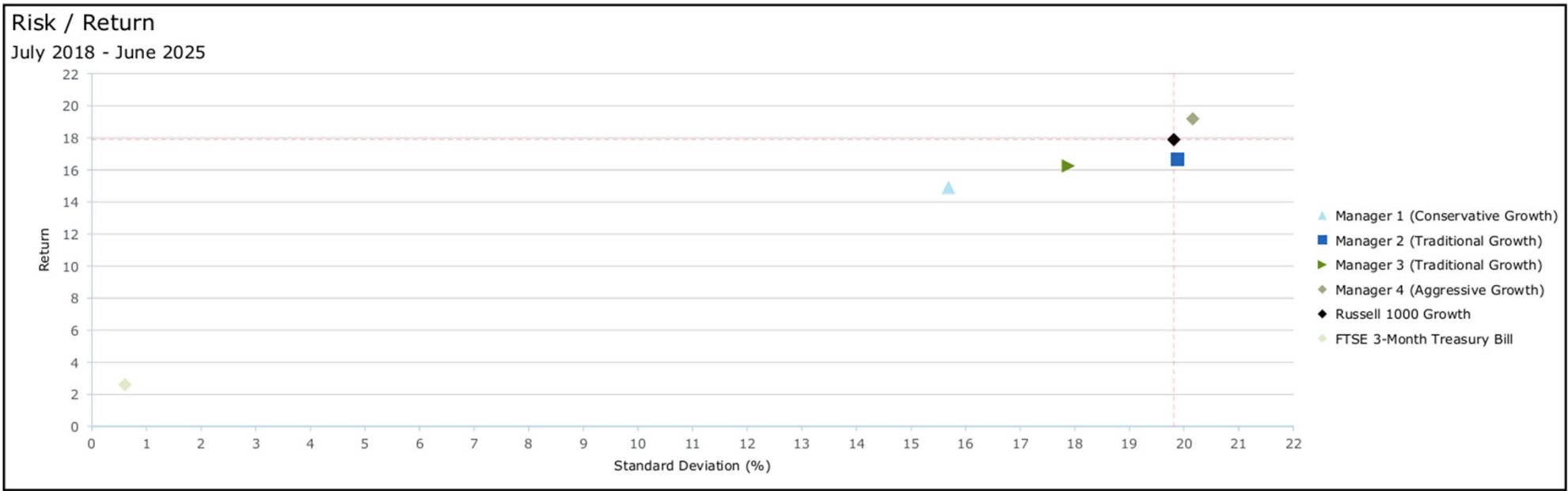


July 2020 - June 2025: Summary Statistics

	Return	Standard Deviation	Beta	Up Capture	Down Capture	Alpha	Sharpe Ratio	R-Squared
Manager 1 (Conservative Growth)	14.55%	15.05%	0.73	72.74%	80.31%	1.23%	0.77	89.35%
Manager 2 (Traditional Growth)	14.83%	20.02%	0.98	90.20%	100.12%	-2.38%	0.60	92.14%
Manager 3 (Traditional Growth)	17.00%	16.47%	0.78	80.15%	81.20%	2.65%	0.86	85.68%
Manager 4 (Aggressive Growth)	17.80%	18.97%	0.95	93.84%	94.59%	0.56%	0.79	96.10%
Russell 1000 Growth	18.15%	19.62%	1.00	100.00%	100.00%	0.00%	0.78	100.00%

The prices, quotes or statistics contained herein have been obtained from sources believed to be reliable, however, the accuracy cannot be guaranteed. Past performance is not a guarantee of future results. For illustrative purposes only. Not representative of actual fund performance.

Risk/Return – 7 Years

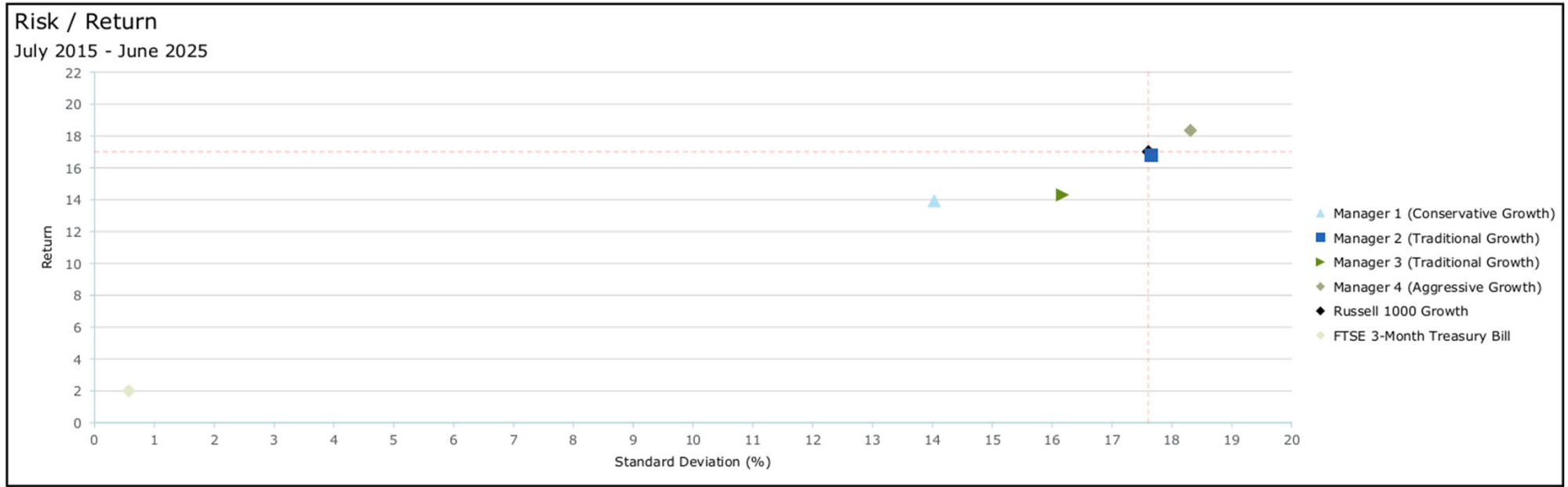


July 2018 - June 2025: Summary Statistics

	Return	Standard Deviation	Beta	Up Capture	Down Capture	Alpha	Sharpe Ratio	R-Squared
Manager 1 (Conservative Growth)	14.91%	15.69%	0.76	76.51%	83.35%	1.21%	0.78	91.08%
Manager 2 (Traditional Growth)	16.65%	19.89%	0.97	92.90%	96.49%	-0.50%	0.71	93.35%
Manager 3 (Traditional Growth)	16.25%	17.88%	0.85	84.61%	88.63%	1.05%	0.76	88.18%
Manager 4 (Aggressive Growth)	19.19%	20.16%	0.99	98.37%	94.50%	1.32%	0.82	94.94%
Russell 1000 Growth	17.90%	19.81%	1.00	100.00%	100.00%	0.00%	0.77	100.00%

The prices, quotes or statistics contained herein have been obtained from sources believed to be reliable, however, the accuracy cannot be guaranteed. Past performance is not a guarantee of future results. For illustrative purposes only. Not representative of actual fund performance.

Risk/Return – 10 Years



July 2015 - June 2025: Summary Statistics

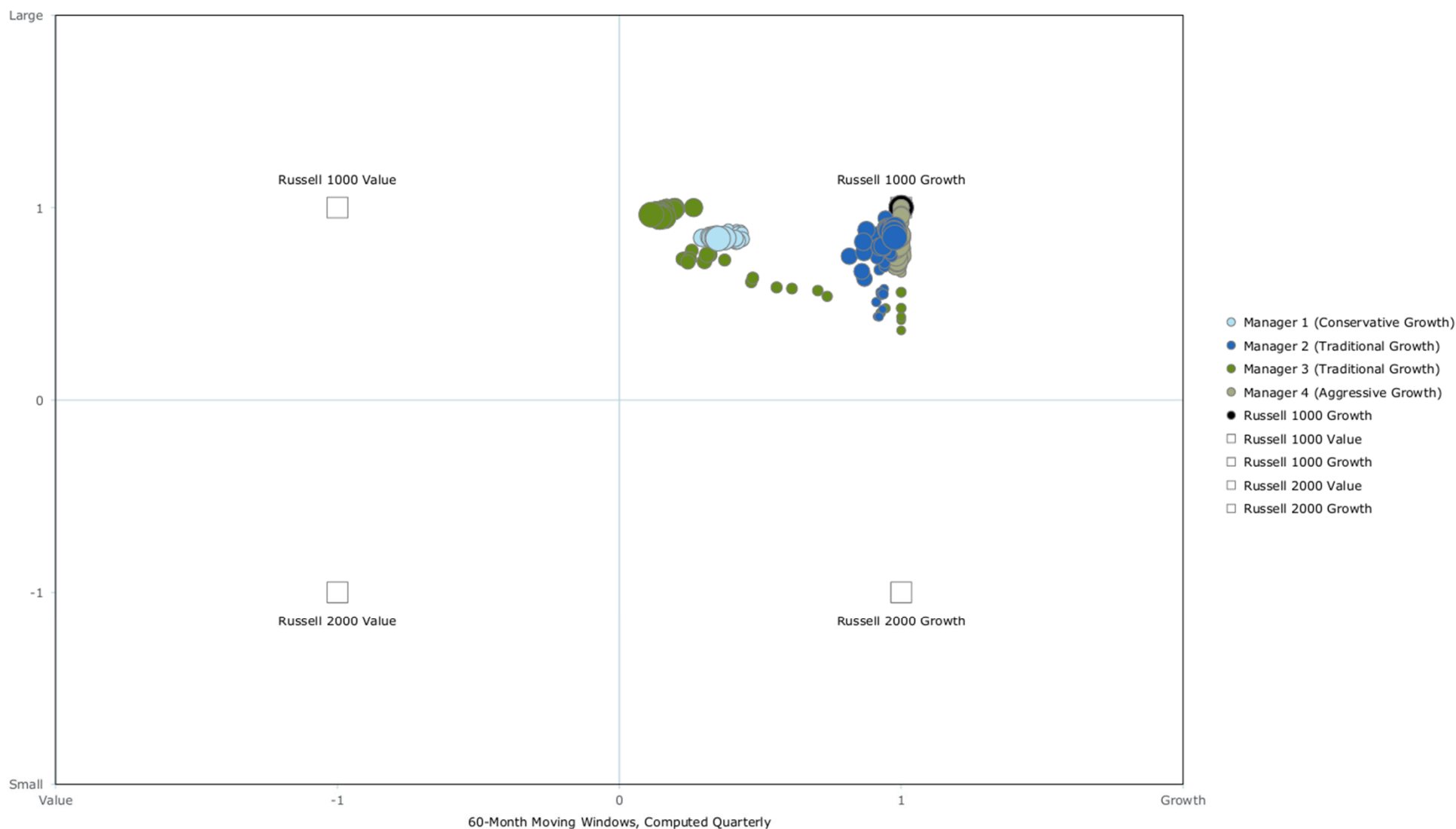
	Return	Standard Deviation	Beta	Up Capture	Down Capture	Alpha	Sharpe Ratio	R-Squared
Manager 1 (Conservative Growth)	13.94%	14.03%	0.76	76.86%	82.95%	0.92%	0.85	90.88%
Manager 2 (Traditional Growth)	16.80%	17.66%	0.96	94.70%	94.52%	0.43%	0.84	92.63%
Manager 3 (Traditional Growth)	14.30%	16.17%	0.86	84.07%	91.19%	-0.18%	0.76	87.63%
Manager 4 (Aggressive Growth)	18.35%	18.31%	1.01	103.06%	98.45%	1.16%	0.89	93.66%
Russell 1000 Growth	17.01%	17.61%	1.00	100.00%	100.00%	0.00%	0.85	100.00%

The prices, quotes or statistics contained herein have been obtained from sources believed to be reliable, however, the accuracy cannot be guaranteed. Past performance is not a guarantee of future results. For illustrative purposes only. Not representative of actual fund performance.

Style Analysis

Manager Style

60-Month Moving Windows, Computed Quarterly, July 2010 - June 2025



Important Disclosures

This report must be accompanied by a separate profile document or other report for each mutual fund and exchange-traded fund (ETF), referred to herein as "fund" or "funds", shown in this report, and for each investment manager shown in this report and approved by Morgan Stanley to be offered to investors in any investment advisory program in which you may invest. These separate documents show, for each manager and fund, various information which may include both gross and net performance (which may be more up-to-date than the gross performance shown in this report).

Morgan Stanley has prepared this report for your personal use, at your request, to help you evaluate the investment disciplines and investment managers/funds shown in this report. It is for informational purposes only. It is not a recommendation of a particular portfolio, investment manager or fund. It is not tax or legal advice. The report is based on information you gave Morgan Stanley about your financial situation, investment objectives, risk tolerance and investment time horizon.

IT IS TO BE PRESENTED TO YOU IN A ONE-ON-ONE PRESENTATION WITH YOUR MORGAN STANLEY FINANCIAL ADVISOR OR PRIVATE WEALTH ADVISOR SO THAT YOU HAVE AN OPPORTUNITY TO ASK QUESTIONS.

If you asked us to do so, we have included one or more investment managers/funds that have not been approved by Morgan Stanley to be offered to investors in any investment advisory program in which you may invest. Morgan Stanley does not and will not recommend any such manager/fund for investment in these programs, and has included the manager/fund in the report solely at your request and for your information. The performance shown in this report for any such managers or funds could differ materially from their performance in investment advisory programs offered by firms other than Morgan Stanley. If you have invested with any such manager/fund through another firm, we recommend that you seek information from that firm on the manager's or fund's gross and net performance in its programs.

This report is not complete unless it contains all pages (as indicated in the page numbering below). Please see "Important Notes About Performance" and "Important Notes About this Report" for other important information (including the effect of fees and a summary of the risks associated with particular investment disciplines).

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Important Notes About Performance

The performance data in this report is historical. Past performance does not guarantee future results.

GROSS PERFORMANCE

The past performance and statistics for investment managers in this report are calculated based on gross performance and do not reflect the deduction of investment management fees and expenses (including Morgan Stanley program fees) that would apply if you invest with any of these managers. The past performance for funds in this report is, and statistics calculated use, gross performance. Returns reflect the funds' internal fees and expenses (such as the funds' management fees and 12b-1 fees), but do not reflect any Morgan Stanley program fees (nor any sales charge or brokerage commission that might apply if you purchased fund shares outside of our investment advisory programs). If you engaged any investment manager or invested in any fund, fees and other expenses would reduce your returns.

NET PERFORMANCE

See the accompanying investment manager profiles for each investment manager in this report for net performance information on the manager. See the accompanying Morningstar profiles for each fund in the report for standardized fund performance (i.e. returns net of any maximum sales charges that apply if you purchase the fund outside of our investment advisory programs) and also returns net of the maximum annual investment advisory fees that apply if you purchase the fund in one of our investment advisory programs. You should carefully read the manager/fund profiles, which may contain more up-to-date performance information than in this report.

NOTE ABOUT ETF PERFORMANCE

For ETFs, performance shown may be based on net asset value (NAV), market price (MKT) or both. The Morningstar profile that must accompany this report shows performance based on both NAV and market price.

COMPOUNDING EFFECT OF FEES AND EXPENSES

The impact of fees and expenses can be material. In most Morgan Stanley investment advisory accounts, fees are deducted quarterly and have a compounding effect on performance. For example, on an account with a 1% annual fee, if the gross annual performance is 6%, the compounding effect of the fees will result in a net performance of approximately 4.94% after one year, 4.81% after three years and 4.66% after five years.

Important Notes About Performance (Cont'd)

GENERAL DISCLOSURE

The investment return and principal value of an investment will fluctuate so that an investor's shares in a fund, when redeemed, may be worth more or less than their original cost, and investments in separately managed accounts may be worth more or less than the original amount. Current performance may be lower or higher than the performance quoted. For performance data for a fund current to the most recent month end, please either contact the fund (at the toll-free number or website address specified in that fund's profile given to you with this report) or call your Financial Advisor or Private Wealth Advisor at the toll-free number on the cover page of this report.

You would not necessarily have obtained the performance results shown in this report if you had invested with these managers or funds for the periods indicated. Actual performance results of accounts vary due to factors such as the timing of contributions and withdrawals, client restrictions, rebalancing schedules, and fees and costs. THE SELECTION OF MANAGERS/FUNDS IN THIS REPORT MAY REFLECT THE BENEFIT OF HINDSIGHT BASED ON HISTORICAL RATES OF RETURN.

In this report, all performance returns for periods of more than one year are annualized returns and for periods of less than one year are not annualized.

See the applicable Morgan Stanley ADV brochure for an explanation of the fees and charges that would apply if you invest with an investment manager or in a fund through a Morgan Stanley investment advisory program. See "Important Notes About This Report" for information on the sources of performance information in this report.

Manager and Fund Designations

Managers shown in this report may be approved managers offered in some or all of Morgan Stanley's Consulting and Evaluation Services program or Select UMA program. Please ask your Financial Advisor or Private Wealth Advisor about availability in particular programs. See "Important Notes About This Report" for more information on how Morgan Stanley approves managers for these programs.

Any strategies designated with "GIS" in this report are managed in the Global Investment Solutions program by a team of portfolio managers employed by Morgan Stanley or third party subadvisors.

For managers in Morgan Stanley's investment advisory programs, the following terms have the following meanings:

- (S) Manager participates in the Select UMA program, performance is Gross of advisory fees
- (n) Manager participates in the Select UMA program, performance is Net of advisory fees
- (C) Manager participates in the Consulting and Evaluation Services program, performance is Gross of advisory fees
- (Cn) Manager participates in the Consulting and Evaluation Services program, performance is Net of advisory fees

The "Inception Date" is, for separately managed accounts, the date when the investment manager began managing the applicable investment discipline and, for funds, the date the fund was established. In either case, this date may be before the investment discipline or fund became available in any applicable Morgan Stanley investment advisory program.

Important Notes About This Report

PAST PERFORMANCE DOES NOT GUARANTEE FUTURE RESULTS. ACTUAL INDIVIDUAL ACCOUNT RESULTS WILL DIFFER FROM THE PERFORMANCE SHOWN IN THIS REPORT.

INVESTMENT DECISIONS: Do not use this report as the sole basis for investment decisions. Do not select an allocation, investment disciplines or investment managers/funds based on performance alone. Consider, in addition to performance results, other relevant information about each investment manager or fund, as well as matters such as your investment objectives, risk tolerance and investment time horizon.

SOURCE OF PERFORMANCE INFORMATION FOR INVESTMENT MANAGERS AVAILABLE IN CONSULTING AND EVALUATION SERVICES OR SELECT UMA: Each investment manager included in this report that participates in one or more of the Consulting and Evaluation Services or Select UMA programs ("Programs") has a track record of investing assets in the relevant investment discipline. The investment manager's gross performance track record shown in this report consists of its gross performance in either the Morgan Stanley or the Smith Barney form of the Select UMA program (if that investment manager was in the Select UMA program) for periods for which sufficient data is available. If the strategy or similar strategies are available in both the Morgan Stanley and Smith Barney forms of the program, this profile presents the composite for the strategy that is closest to the strategy currently offered in the Select UMA program. If both strategies are equally close, the profile shows the longer of the two composites. For other periods, the gross performance track record is provided by the investment manager and consists of accounts managed by the investment manager in the same or a similar investment discipline, whether at Morgan Stanley or elsewhere (and may include institutional accounts, retail accounts and/or pooled investment vehicles such as mutual funds).

There may be differences between the performance in the different forms of the Select UMA program, in different Programs, and between the performance in Programs and performance outside the Programs, due to, among other things, investment and operational differences. For example:

- Institutional accounts included in related performance may hold more securities than the Program accounts, participate in initial public offerings (IPOs) and invest directly in foreign securities (rather than in ADRs).
- Mutual funds included in related performance may hold more securities than the Program accounts, may participate in IPOs, may engage in options and futures transactions, and are subject to certain regulatory limitations.
- Performance results in Select UMA accounts could differ from that in Consulting and Evaluation Services accounts because Select UMA accounts may hold fewer securities, and have automatic rebalancing, wash sale loss and tax harvesting features.

You should read the investment manager profile accompanying this report for each investment manager. The investment manager profile gives further details on the sources of performance information for a particular investment manager, as well as other calculations of the manager's performance returns (such as performance net of fees and expenses).

SOURCE OF PERFORMANCE INFORMATION FOR GLOBAL INVESTMENT SOLUTION STRATEGIES: In the Global Investment Solutions program, dedicated portfolio managers employed by Morgan Stanley or third party subadvisors make day-to-day investment decisions for clients' accounts invested in various investment strategies. The track record shown in this report for Global Investment Solutions strategies consists of the portfolio management team's gross performance in that strategy in the Global Investment Solutions program (or a predecessor program).

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BENCHMARK INDICES: Depending on the composition of your account and your investment objectives, the indices shown in this report may not be appropriate measures for comparison purposes and are therefore presented for illustration only. The indices used in this report may not be the same indices used for comparative purposes in the profile for each investment manager, mutual fund and/or ETF that accompanies this report. Indices are unmanaged. They do not reflect any management, custody, transaction or other expenses, and generally assume reinvestment of dividends, accrued income and capital gains. Performance of selected indices may be more or less volatile than that of any investment manager/fund shown in this report. Past performance of indices does not guarantee future results. You cannot invest directly in an index.

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- Managers and funds offered in Institutional Consulting Group and Graystone Consulting programs may be approved by GIMA, approved by Morgan Stanley Wealth Management using another process, or not approved by Morgan Stanley Wealth Management.
- Morgan Stanley Wealth Management does not approve managers in the Investment Management Services consulting program.
- Managers in the Global Investment Solutions (GIS) program are not evaluated by GIMA.

If you invest in a manager or fund that is not approved by Morgan Stanley Wealth Management, you are responsible for selecting and/or retaining that manager or fund, and Morgan Stanley Wealth Management does not recommend or monitor that manager or fund. For more information on the approval process in any program, see the applicable ADV brochure, available at www.MorganStanley.com/ADV or from your Financial Advisor or Private Wealth Advisor. If you have any questions about whether or how Morgan Stanley Wealth Management has approved a manager or fund shown in this report, please ask our Financial Advisor or Private Wealth Advisor.

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REINVESTMENT: The performance results shown in this report assume that all dividends, accrued income and capital gains were reinvested.

SOURCES OF INFORMATION: Although the statements of fact in this report have been obtained from, and are based on, sources that Morgan Stanley believes to be reliable, Morgan Stanley makes no representation as to the accuracy or completeness of the information from sources outside Morgan Stanley. Any such information may be incomplete and you should not use it as the sole basis for investment decisions.

It is important to consider a fund's investment objectives, risks, charges and expenses carefully before investing. The prospectus contains this and other information about the fund. A copy of the prospectus may be obtained from your Financial Advisor or Private Wealth Advisor. Please read the prospectus carefully before investing in the fund.

KEY ASSET CLASS RISK CONSIDERATIONS: Investing in securities entails risk including the risk of losing principal. There is no assurance that the investment disciplines and investment managers/funds selected will meet their intended objectives.

Commodities – Diversified: The commodities markets may fluctuate widely based on a variety of factors including changes in supply and demand relationships; governmental programs and policies; national and international political and economic events; war and terrorist events; changes in interest and exchange rates; trading activities in commodities and related contracts; pestilence; weather; technological change; and the price volatility of a commodity. In addition to commodity risk, commodity-linked notes may be subject to special risks, such as risk of loss of interest and principal, lack of a secondary market and risk of greater volatility that do not affect traditional equity and debt securities.

Commodities – Precious Metals: The prices of Commodities – Precious Metals tend to fluctuate widely and in an unpredictable manner, and have historically experienced extended periods of flat or declining prices. The prices of Commodities – Precious Metals are affected by several factors, including global supply and demand, investors' expectations with respect to the rate of inflation, currency exchange rates, interest rates, investment and trading activities of hedge funds and commodity funds, and global or regional political, economic or financial events and situations.

Fixed Income: Fixed income securities are subject to certain inherent risks such as credit risk, reinvestment risk, call risk, and interest rate risk. Fixed income securities are sensitive to changes in prevailing interest rates. When interest rates rise, the value of fixed income securities generally declines. Accordingly, managers or funds that invest in fixed income securities are subject to interest rate risk and portfolio values can decline in value as interest rates rise and an investor can lose principal.

High Yield Fixed Income: As well as being subject to risks relating to fixed income generally (see "Fixed Income"), high yield or "junk" bonds are considered speculative, have significantly higher credit and default risks (including loss of principal), and may be less liquid and more volatile than investment grade bonds. Clients should only invest in high yield strategies if this is consistent with their risk tolerance, and high yield investments should comprise only a limited part of a balanced portfolio.

Important Notes About This Report (Cont'd)

International/Emerging Market: International investing (including investing in particular countries or groups of countries) should be considered only one component of a complete and diversified investment program. Investing in foreign markets may entail greater risks than those normally associated with domestic markets, such as foreign political, currency, economic and market risks. In addition, the securities markets of many emerging markets are substantially smaller, less developed, less liquid and more volatile than the securities markets of the U.S. and other more developed countries. Further, a portfolio that focuses on a single country may be subject to higher volatility than one that is more diversified.

Preferred Securities: Preferred securities are generally subject to the same risks as apply to fixed income securities. (See "Fixed Income.") However, preferred securities (especially equity preferred securities) may rank below traditional forms of debt for the purposes of repayment in the event of bankruptcy. Many preferred securities are "callable" meaning that the issuer may retire the securities at specific prices and dates prior to maturity. If a preferred security is called, the investor bears the risk of reinvesting proceeds at a potentially lower return. Investors may not receive regular distributions on preferred securities. For example, dividends on equity preferred securities may only be declarable in the discretion of the issuer's board and may not be cumulative. Similarly, interest payments on certain debt preferred securities may be deferred by the issuer for periods of up to 10 years or more, in which case the investor would still have income tax liability even though payments would not have been received.

Real Estate: Real estate investments are subject to special risks, including interest rate and property value fluctuations as well as risks related to general and local conditions.

Small and Mid Cap: Investments in small-to medium-sized corporations are generally more vulnerable to financial risks and other risks than larger corporations and may involve a higher degree of price volatility than investments in the broad equity market.

Hedged and Alternatives Strategies: In most Consulting Group investment advisory program, alternative investments are limited to US registered open-end mutual funds, separate account strategies, and ETFs that seek to pursue alternative investment strategies or returns utilizing publicly traded securities. Investment products in this category may employ various investment strategies and techniques for both hedging and more speculative purposes such as short selling, leverage, derivatives, and options, which can increase volatility and the risk of investment loss. Alternative Investments are not suitable for all investors.

Important Notes About This Report (Cont'd)

Managed Futures: Involve a high degree of risk, often involve leveraging and other speculative investment practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are not subject to the same regulatory requirements as mutual funds, often charge high fees which may offset any trading profits, and in many cases the underlying investments are not transparent and are known only to the investment manager.

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies whose interests (limited partnership or limited liability company units) are generally traded on securities exchanges like shares of common stock. Investment in MLPs entails different risks, including tax risks, than is the case for other types of investments. Currently, most MLPs operate in the energy, natural resources or real estate sectors and are subject to the risks generally applicable to companies in those sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk. Depending on the ownership vehicle, MLP interests are subject to varying tax treatment.

Glossary

ALPHA: Synonym of 'value added', linearly similar to the way beta is computed, alpha is the incremental return on a portfolio when the market is stationary. In other words, it is the extra expected return due to non-market factors. This risk-adjusted measurement takes into account both the performance of the market as a whole and the volatility of the portfolio. A positive alpha indicates that a portfolio has produced returns above the expected level at that level of risk, and vice versa for a negative alpha.

ANNUALIZED RETURN: The constant rate of return that, compounded annually, would yield the same overall return for a period of more than one year as the actual return observed for that period.

ANNUALIZED EXCESS RETURN: Excess return represents the difference between the manager's return and the return of a benchmark for that manager. Annualized excess return is calculated by taking the annualized return of the original series and forming the difference between the two. A positive annualized excess return implies that the manager outperformed the benchmark over the time period shown.

BEST AND WORST PERIOD RETURNS: The best period return for a time window is simply the maximum of the returns for that period inside this window. Similarly, the worst period return for a time window is the minimum of the returns for that period inside this window. To calculate the best one-year return for a return series, the program moves a one-year time window along the series and calculates the compound return for each of these windows. The best one-year return is the maximum of the returns thus found. Similarly, the worst one-year return is the minimum of the returns thus found. Therefore, best and worst one-year returns do not refer to calendar years.

BETA: The measure of a portfolio's risk in relation to the market (for example, the S&P 500) or to an alternative benchmark or factors. Roughly speaking, a portfolio with a beta of 1.5 will have moved, on average, 1.5 times the market return. According to asset pricing theory, beta represents the type of risk, systematic risk, which cannot be diversified away. When using beta, there are a number of issues that you need to be aware of: (1) betas may change through time; (2) betas may be different depending on the direction of the market (i.e. betas may be greater for down moves in the market rather than up moves); (3) the estimated beta will be biased if the portfolio does not frequently trade; and (4) the beta is not necessarily a complete measure of risk (you may need multiple betas). Also, note that the beta is a measure of co movement, not volatility. It is possible for a security to have a zero beta and higher volatility than the market.

Glossary (Cont'd)

CORRELATION: Statistical method to measure how closely related the variances of two series are. Assets that are highly correlated would be expected to react in similar ways to changing market conditions.

CUMULATIVE RETURN: The total return on an investment over a specified time period.

CUMULATIVE EXCESS RETURN: Excess return represents the difference between the manager's return and the return of a benchmark for that manager. Cumulative excess return is calculated by taking the cumulative return of the original series and forming the difference between the two. A positive cumulative excess return implies that the manager outperformed the benchmark over the time period shown.

DOWNSIDE CAPTURE RATIO: For each portfolio, this is calculated by (1) identifying the calendar quarters in which the portfolio's benchmark index had negative returns and then (2) for those quarters, dividing the portfolio's annualized net performance by the benchmark index's performance. For investors, the lower the downside capture ratio, the better. For example, a downside capture ratio of 90% means that the portfolio's losses were only 90% of the market's losses (as represented by the benchmark index).

DOWNSIDE DEVIATION: Similar to Standard Deviation, but Downside Deviation captures the range of expected returns only on the down side [when the returns fall below the minimum acceptable return (MAR)].

DRAWDOWN (MAXIMUM DRAWDOWN): The Maximum loss (compounded, not annualized) that the manager incurred during any sub-period of the time period shown.

DRAWDOWN BEGIN DATE: the first date of the sub-period used to calculate the maximum drawdown

DRAWDOWN END DATE: The last date of the sub period used to calculate the maximum drawdown

DRAWDOWN LENGTH: The number of periods (months or quarters depending on the periodicity of the data) the sub-period used to calculate the maximum drawdown

DRAWDOWN RECOVERY DATE: Date at which the compounded returns regain the peak level that was reached before the drawdown began

DRAWDOWN RECOVERY LENGTH: Number of periods it takes to reach the recovery level from maximum drawdown end date

Glossary (Cont'd)

EXCESS RETURN: The difference between the returns of two portfolios. Usually excess return is the difference between a portfolio's return and the return of a benchmark for that portfolio.

GAIN TO LOSS RATIO: Divides the average gain in an up period by the average loss in a down period. A higher Gain to Loss Ratio is more favorable.

HIGH WATER MARK: The High Water Mark represents the peak level of the manager's return, as represented by the peak of the cumulative return series.

HIGH WATER MARK DATE: The date which the High Water Mark was reached.

UNDER WATER LOSS: Loss incurred between the high water mark date and the end of the period analyzed

UNDER WATER LENGTH: Length of the time interval that begins with the high water mark and ends with the analysis period

TO HIGH WATER MARK: The percentage of gain that the manager/fund needs to regain the peak level of the cumulative return series

INFORMATION RATIO: Measures the active return of the manager divided by the manager's active risk. Active return is the annualized differences of the manager and the benchmark index, while active risk is measured by tracking error. The higher the information ratio, the better. An information ratio of 0 implies that a manager/fund (or benchmark index, if applicable) has provided a return that is equivalent to the risk of the benchmark return.

MAR: Stands for "Minimum Acceptable Return." This represents the lowest return possible that could be considered a successful result of the investment. In most cases, the MAR will either be defined as 0 (meaning no negative return) or as the return of a cash benchmark (meaning the investment had a higher return than simply keeping the investment amount in the relatively safe investment of money market funds). Please refer to the specific chart/statistic to see the specific MAR used in the illustration.

Glossary (Cont'd)

MANAGER STYLE (RETURNS BASED STYLE ANALYSIS): A measure for analyzing the style of a portfolio's returns when compared with the quarterly returns on a number of selected style indices (the "Style Basis"). These style indices represent distinct investment styles or asset classes such as large cap value, large cap growth, small cap growth, small cap value, government bonds, or cash equivalents asset classes. Style analysis uses a calculation procedure that finds the combination of selected indices that best tracks (i.e. that has the highest correlation to) a given manager's return series. This allows the advisor to capture an accurate picture of the investment style of the manager without viewing the underlying holdings.

OMEGA: A measure of volatility designed to capture the entire return distribution (useful for investments that do not have normal return distributions), the Omega is tied to a MAR (see above) and shows the ratio of the entire upside performance to the entire downside, with the MAR representing the dividing line between upside and downside. (e.g. If MAR = 0.00%, any positive return is captured in the upside and any negative return is captured in the downside).

PAIN INDEX: Represents the frequency, the depth, and the width of the manager/fund's drawdowns. The Pain Index captures the information for every period in which the manager/fund is negative. A higher Pain Index indicates that the manager/fund had a more negative result when considering not just the depth (lowest return) but also the frequency of negative returns (frequency) and the amount of time that the return remained negative (width).

PAIN RATIO: A risk/return ratio which uses the Pain Index as the measure of risk. The higher the Pain Ratio, the better the risk-adjusted return of the portfolio.

ROLLING WINDOW: Indicates that the chart or statistic was evaluated using periodic smaller windows of data on a rolling basis. As an example, a 20 Quarter Rolling Window (Annual Roll) over a 10 year period indicates that 5 year (20 quarter) periods of time were evaluated from the start date, moving forward one year at a time, for the duration of the 10 year period, resulting in 5 "windows". Evaluating data this way allows us to remove end point bias and determine a measure of consistency in performance.

R-SQUARED: Used to show how much of a portfolio's variability can be accounted for by the market. For example, if a portfolio's R-Squared is 0.79, then 79% of the portfolio's variability is due to market conditions. As R-Squared approaches 100%, the portfolio is more closely correlated with the market.

Glossary (Cont'd)

SHARPE RATIO: Developed by William F. Sharpe, this calculation measures a ratio of return to volatility. It is useful in comparing two portfolios or stocks in terms of risk-adjusted return. The higher the Sharpe Ratio, the better the risk-adjusted return of the portfolio. It is calculated by first subtracting the risk free rate (Citigroup 3-month T-bill) from the return of the portfolio, then dividing by the standard deviation of the portfolio. Using Sharpe ratios to compare and select among investment alternatives can be difficult because the measure of risk (standard deviation) penalizes portfolios for positive upside returns as much as the undesirable downside returns.

SINGLE COMPUTATION: For a single computation chart, StyleADVISOR calculates the information over the entire time period shown as a single data point. AS an example, in a chart showing 10 years of performance, a "Single Computation" would represent the statistic shown over the entire 10 year window.

STANDARD DEVIATION: A statistical measure of the degree to which the performance of a portfolio varies from its average performance during a specified period. The higher the standard deviation, the greater the volatility of the portfolio's performance returns relative to its average return. A portfolio's returns can be expected to fall within plus or minus one standard deviation, relative to its average return, two-thirds of the time, and fall within plus or minus two standard deviations relative to its average return, 95% of the time. For example, if a portfolio had a return of 5% and a standard deviation of 13% then, if future volatility of returns is similar to historical volatility (which may not be the case):

- About two-thirds of the time, the future returns could be expected to fall between -8% and 18% (being 5% +/- 13%)
- About 95% of the time, the future returns could be expected to fall between -21% and 31% (being 5% +/- 26%).

In performance measurement, it is generally assumed that a larger standard deviation means that great risk was taken to achieve the return.

Glossary (Cont'd)

STYLE BASIS: A set of indices that represent the broad asset category being utilized. The Style Basis is used in the equation that calculates the Manager Style (see definition). The "Manager Style" chart shows the specific benchmarks utilized in the Style Basis. The following Style Bases would be appropriate for the asset classes shown below:

- Domestic Equity: Russell Generic Corners; Russell 6 Way Style basis; S&P Pure Style Basis
- International Equity: MSCI Regional Style Basis; MSCI World Ex USA Style Basis; MSCI International Equity Style Basis; S&P Regional International Indexes, S&P International 4 Way Style Basis
- Global Equity: MSCI World Style Basis; MSCI World Regional Indexes; MSCI Global Equity Style Basis
- Fixed income: Citigroup Corporate Bond Indexes; BofA Merrill Lynch Fixed Income Indexes; Citigroup Govt Fixed Income Indexes; Global Bond Indexes

STYLE BENCHMARK: A unique benchmark calculated for each manager/fund based on the Returns Based Style Analysis described above. The "Asset Allocation" chart in Zephyr shows the specific weightings used for the Style Benchmark for each manager or fund.

TRACKING ERROR: A measurement that indicates the standard deviation of the difference between a selected market index and a portfolio's returns. The portfolio's returns are then compared to the index's returns to determine the amount of excess return, which produces a tracking error. A low tracking error indicates that the portfolio is tracking the selected index closely or has roughly the same returns as the index.

UPSIDE CAPTURE RATIO: For each portfolio, this is calculated by (1) identifying the calendar quarters in which the portfolio's benchmark index had positive returns and then (2) for those quarters, dividing the portfolio's annualized net performance by the benchmark index's performance. A percentage less than 100% indicates that the portfolio "captured" less performance than the benchmark index, while a percentage greater than 100% indicates the portfolio captured more performance than the benchmark index. For investors, the higher the upside capture ratio, the better. For example, if the annualized performance of an benchmark index during "up" markets (when its returns were zero or positive) is 20.8% and the portfolio's annualized performance during the same period is 16.8%, then the portfolio's upside capture ratio is $16.8\% / 20.8\% = 80.7\%$, meaning the portfolio "captured" 80.7% of the upside performance of the index. Stated another way, the portfolio in this example performed almost 20% worse than the market during up periods.

VARIANCE: A measure of how spread out a distribution is. It is computed as the average squared deviation of each number from its mean.

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For index, indicator and survey definitions referenced in this report please visit the following:

<https://www.morganstanley.com/wealth-investmentsolutions/wmir-definitions>

An investment cannot be made directly in a market index.

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Equity Managers Meeting Report

Megan Anderson

Nuveen

Ms. Anderson focuses her expertise in managing institutional client relationships and consultant relations. She works closely with the Firm's Portfolio Managers to communicate the Firm's investment process, outlook and positioning to institutional clients and consultants across all geographies. Ms. Anderson is a member of Winslow Capital's Executive Committee and Management Committee.

Ms. Anderson joined Winslow Capital Management in 2016 as a Managing Director and Institutional Client Relationship Manager. Prior to that, she was Managing Director, Head of Corporate Access at KeyBanc Capital Markets. She also served as Director, Head of Midwest Research Sales and Energy Sector Specialist for ITG.

B.S. Business, Wake Forest University



Equity Managers Meeting Report

October 2025

FPPTA

Megan Anderson
Managing Director | Chief Client Officer

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The 4 Key Components

- People
- Philosophy
- Process
- Performance

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A global, diversified firm example

Serving and investing alongside our clients

BY THE NUMBERS

Top 25
largest global asset
manager,¹ including
\$300B in our own
strategies²

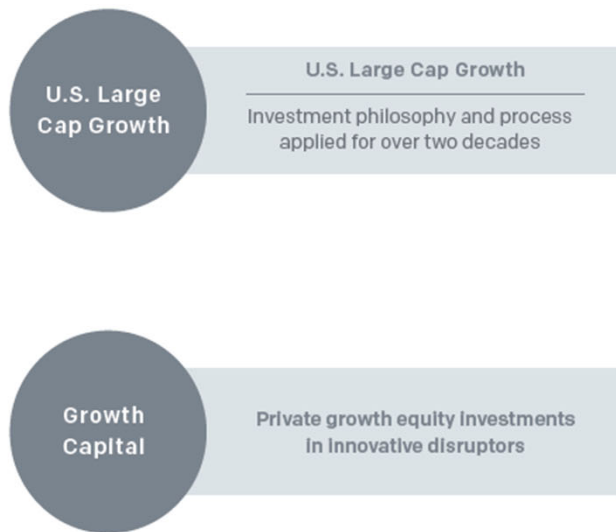
Managing for
5 of the 10
world's largest
pension funds³

More than
500
institutional
clients in
25 countries⁴



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1 Pensions & Investments, MM/DD/YYYY. Rankings based on total worldwide assets as of MM/DD/YYYY reported by each responding asset manager.
2 As of MM/DD/YYYY. Nuveen assets under management (AUM) is inclusive of underlying affiliates. Totals may not equal 100% due to rounding.
3 As of DD MMM YYYY; world's largest pension funds based on research study from Willis Towers Watson, Thinking Ahead Institute | Pensions & Investments 300, MM/DD/YYYY, rankings based on fund data as of MM/DD/YYYY.
4 As of MM/DD/YYYY.
5 Multi-asset AUM includes fixed income, equity and alternatives assets within target date, target risk and other multi-asset products.
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Manager platform example



PEOPLE

Client-centered culture and a tenured team

INFORMATION

Ability to identify shifts in a fast changing digital world

PROCESS

Unique No Preferred Habitat approach to growth investing

SAMPLE DISCLOSURE:

¹Source: eVestment based on U.S. Large Cap Growth Equity universe using manager preferred benchmark for the time period of MM/DD/YYYY-MM/DD/YYYY, rating ran on MM/DD/YYYY. The Portfolio Management Team has used the same investment process since MM/DD/YYYY. Compensation has been provided by the Manager for access to the rating. Performance results are gross of management fees.

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Portfolio management and research team example

Portfolio management



Portfolio Manager
XX years of industry experience



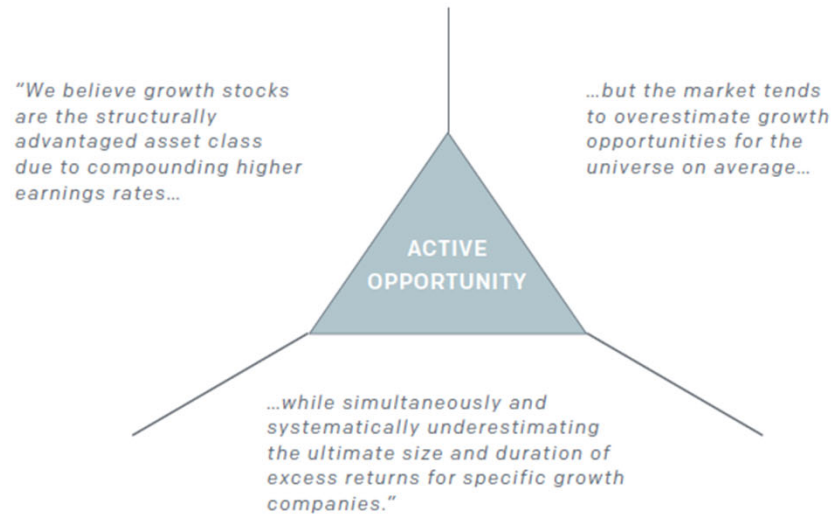
Portfolio Manager
XX years of industry experience

U.S. Large Cap Growth Investment Resources

Sector PM/Analyst	Healthcare
Sector PM/Analyst	Technology
Sector PM/Analyst	Private Market Insights
Sector PM/Analyst	Consumer
Sector PM/Analyst	Technology, Communication Services
Sector PM/Analyst	Industrials & Materials
Sector PM/Analyst	Financials & Energy
Quantitative Analyst	

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Equity investment philosophy example



Manager focuses on discovering companies with identifiable and sustainable competitive advantages, strong management teams and improving fundamentals driving long-term shareholder value. We invest when our perspective differs from the current implied market valuation as a result of the consensus view not properly discounting the growth potential, timing or sustainability.

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Key facts of investment strategy example

Our Approach



No Preferred Habitat

Consistent Growth	→	Diversification
Dynamic Growth		Flexibility
Cyclical Growth		Consistency

Manager Perspective

Industry Dynamics Analysis identifies potential winners and losers
Research Ecosystem drives differentiated view
Governance & Controversy Analysis mitigate business risk
Artful Valuation focused on identifying market implied dislocations
Manager Science supports deep fundamental work

Experienced Investment Team

Investment professionals specializing in the U.S. Large Cap Growth asset class
XX-member Team averaging over XX years of investment experience

SAMPLE DISCLOSURE:

There is a risk that the Manager will not successfully execute the strategy even after applying its investment process and sell discipline. There can be no guarantee that the Manager's decision will provide the intended result, and there can be no assurance that the investment strategy will succeed.

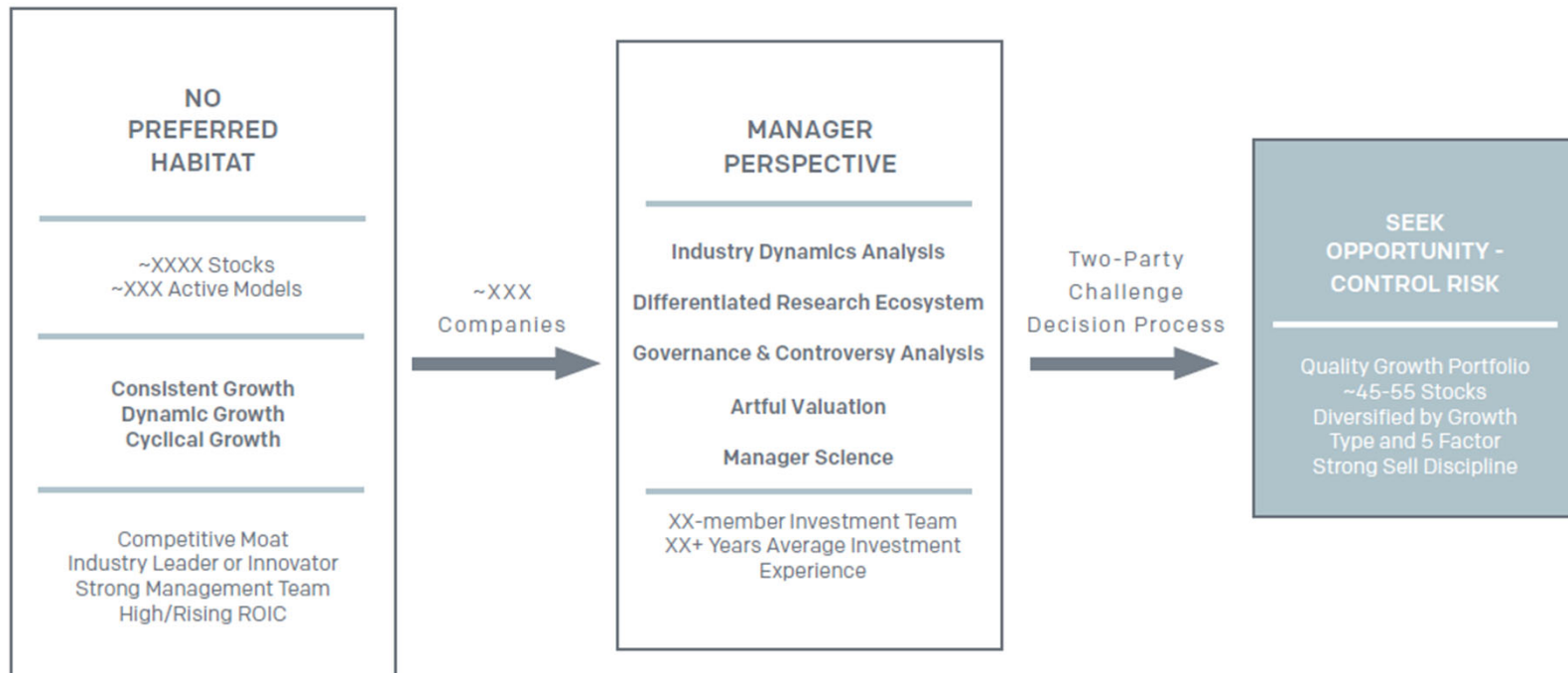
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Key facts

Number of positions	45-55 ¹
Key parameters	\$4 billion (at time of purchase)
Expected turnover range	50% – 60% annually
Strategy assets	\$25 billion ¹

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1. As of MM/DD/YYYY.
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Investment process example



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Equity Manager Types and Benchmarks

A benchmark is a standard or measure that can be used to analyze the allocation, risk, and return of a given portfolio.

Types of Equity Managers

Large Cap
Mid Cap
Small Cap
Value
Core
Growth
International
Global
Emerging Market

Style type

Value | Core | Growth

Common Benchmarks

SP500, R1000
Russell MidCap
R2000
R1000V, R2000V
SP500, R1000
R1000G, R2000G
MSCI EAFE, MSCI World ex US
MSCI World
MSCI EM Index

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Portfolio summary example

As of MM/DD/YYYY
Reporting Currency: USD

Performance	Portfolio Gross of Fees	Portfolio Net of Fees*	Russell 1000* Growth	Excess Return*
Quarter to Date	X.X%	X.X%	X.X%	X.X%
Year to Date	X.X	X.X	X.X	X.X
Last 1 Year	X.X	X.X	X.X	X.X
Last 3 Years Annualized	X.X	X.X	X.X	X.X
Last 5 Years Annualized	X.X	X.X	X.X	X.X
Last 10 Years Annualized	X.X	X.X	X.X	X.X
Last 20 Years Annualized	X.X	X.X	X.X	X.X
Since Inception (XX/XX/XXXX)				
Cumulative	XXX.X%	XXX.X%	XXX.X%	XX.X%
Annualized	XX.X%	XX.X%	XX.X%	X.X%

*Net of fees
Past performance is not indicative of future results.

Market Value		Significant Cash Flows 2024	
Market Value at Inception (XX/XX/XXXX)	\$ 10,000,000	Net Cash Inflows	\$ 0
Current Market Value	\$ 30,000,000	Net Cash Outflows	\$ (0)
		Net Cash Flows	\$ 0

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*Performance results are net of management fees. Net of fee performance is calculated by deducting the contracted rate as a percentage of assets, compounded monthly. Past performance is no guarantee of future results. Index returns include reinvestment of income but do not reflect taxes, transaction costs, advisory fees or other expenses that would reduce the performance of an actual account. Please refer to the applicable GIPS® Report for performance, AUM and disclosures.
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Attribution sector analysis

As of MM/DD/YYYY

Sectors

Sector	Portfolio Average Weight	Russell Average Weight	Sector Allocation	Issue Selection	Attribution
Industrials	4.0%	7.8%	0.3%	0.5%	0.8%
Communication Services	8.4	7.8	0.0	0.4	0.5
Consumer Staples	3.8	5.7	0.3	0.1	0.4
Real Estate	0.0	1.4	0.2	0.0	0.2
Energy	0.0	1.2	0.2	0.0	0.2
Utilities	0.0	0.0	0.0	0.0	0.0
Healthcare	14.5	11.6	0.0	0.0	-0.1
Consumer Discretionary	14.7	14.3	0.0	-0.1	-0.1
Materials	2.1	1.2	0.0	-0.1	-0.1
Financials	7.5	6.6	-0.1	-0.1	-0.2
Information Technology	44.4	42.4	0.2	-1.5	-1.3
[Cash]	0.7	0.0	-0.1	0.0	-0.1
Total	100%	100%	1.1%	-0.7%	0.4%

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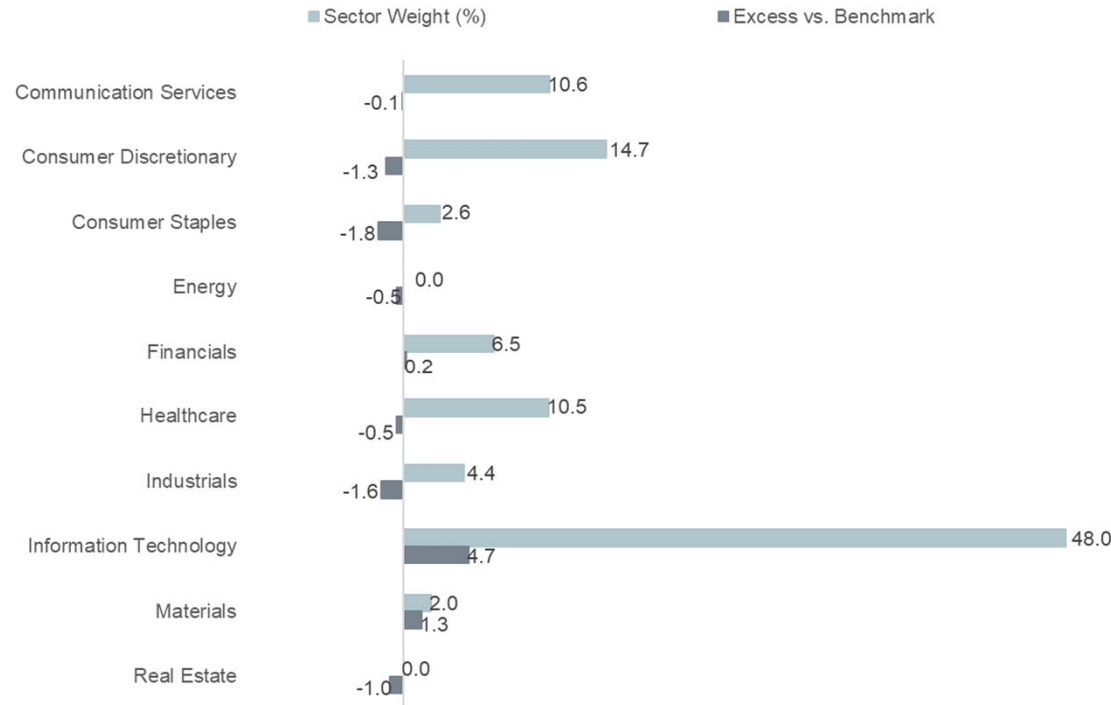
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Attribution results may differ from actual gross performance results based on the treatment of cash flow activity within the Representative Account in FactSet during the period in review. Manager weights and characteristics are based on a U.S. Large Cap Growth representative account as of MM/DD/YYYY. All accounts are modeled in line with the Manager's representative account. The benchmark against which the portfolios are managed is the Russell 1000® Growth Index. Account holdings and weights may differ from this representative account. The representative account holdings are subject to change without notice. Percents may not sum to totals due to rounding. Source: FactSet Research Systems – Average Sector Weights for the period.

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Sector allocation example

As of MM/DD/YYYY



Information is fictitious and for illustrative purposes only.

SAMPLE DISCLOSURE:

Manager weights and characteristics are based on a U.S. Large Cap Growth representative account as of MM/DD/YYYY. All accounts are modeled in line with the Manager's representative account. The benchmark against which the portfolios are managed is the Russell 1000® Growth Index. Account holdings and weights may differ from this representative account. The representative account holdings are subject to change without notice. The outlook presented is the opinion of the Manager and is subject to change without notice. The specific securities listed above do not represent all of the securities the Manager has purchased, sold or recommended for clients in this Strategy within the past year. The reader should not assume that the investments in securities presented in this outlook were or will be profitable.

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Top holdings example

As of MM/DD/YYYY

Top 10 holdings (%)

Holding 1	12.1
Holding 2	7.9
Holding 3	6.6
Holding 4	5.3
Holding 5	5.3
Holding 6	4.4
Holding 7	3.7
Holding 8	3.6
Holding 9	2.8
Holding 10	2.7

Information is fictitious and for illustrative purposes only.

SAMPLE DISCLOSURE:

Portfolio weights and characteristics are based on a representative account as of MM/DD/YYYY and derived from FactSet. All accounts are modeled in line with the representative account. Holdings of individual accounts may differ from this representative account. The representative account holdings are subject to change without notice. The benchmark is the Russell 1000® Growth Index.

Weights are calculated including cash. Percent weights may not sum to total due to rounding. The specific securities identified do not represent all of the securities purchased, sold or recommended for advisory clients. The reader should not assume that investments in the securities identified and discussed were or will be profitable.

FOR EDUCATIONAL PURPOSES ONLY.

Equity portfolio holdings example (by sector)

As of MM/DD/YYYY

Security	Portfolio Wt.	Index Wt.	Active Wt.	Security	Portfolio Wt.	Index Wt.	Active Wt.	Security	Portfolio Wt.	Index Wt.	Active Wt.
Communication Services				Healthcare				Information Technology			
Holding 1	5.3%	6.2%	-0.8%	Holding 14	1.1%	0.0%	1.1%	Holding 24	1.5%	0.5%	1.0%
Holding 2	4.4	2.9	1.4	Holding 15	1.0	1.8	-0.8	Holding 25	1.6	0.0	1.6
Holding 3	0.9	0.9	0.0	Holding 16	1.2	0.2	1.1	Holding 26	7.9	13.4	-5.5
Total	10.6%	- 10.0%	= 0.6%	Holding 17	3.7	0.6	3.1	Holding 27	2.5	0.0	2.5
Consumer Discretionary				Holding 18	1.7	1.7	-0.1	Holding 28	1.2	0.1	1.1
Holding 4	5.3%	5.4%	-0.2%	Holding 19	1.9	0.4	1.5	Holding 29	1.0	1.6	-0.7
Holding 5	2.8	0.3	2.5	Total	10.6%	- 4.7%	= 5.9%	Holding 30	1.3	0.1	1.2
Holding 6	1.0	0.1	1.0	Industrials				Holding 31	2.7	0.4	2.3
Holding 7	1.3	0.2	1.1	Holding 20	1.1%	0.1%	1.0%	Holding 32	12.1	11.7	0.4
Holding 8	1.3	0.4	0.8	Holding 21	2.0	0.0	2.0	Holding 33	1.0	0.1	0.9
Holding 9	1.4	0.3	1.1	Holding 22	1.3	0.4	0.9	Holding 34	6.6	4.6	2.0
Holding 10	1.1	0.2	0.9	Total	4.4%	- 0.5%	= 3.9%	Holding 35	2.2	0.7	1.5
Holding 11	0.5	3.3	-2.8	Materials				Holding 36	3.6	0.5	3.1
Total	14.7%	- 10.2%	= 4.5%	Holding 23	2.0%	0.1%	1.9%	Holding 37	1.6	0.3	1.3
Consumer Staples				Total	2.0%	- 0.1%	= 1.9%	Holding 38	1.3	0.2	1.1
Holding 12	1.6%	1.1%	0.5%	Financials				Total	48.1%	- 34.2%	= 13.9%
Holding 13	1.0	0.0	1.0	Financials				Holding 39	2.6%	1.5%	1.0%
Total	2.6%	- 1.1%	= 1.5%	Financials				Holding 40	1.2	0.2	1.0
								Holding 41	1.0	0.1	0.9
								Holding 42	1.8	1.8	0.0
								Total	6.6%	- 3.6%	= 3.0%

Information is fictitious and for illustrative purposes only.

SAMPLE DISCLOSURE:

Source for Index weights: FactSet.

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Equity portfolio characteristics example

As of MM/DD/YYYY

	Portfolio	Benchmark
Number of holdings	42	444
Weighted average market capitalization	\$899 billion	\$1,053 billion
P/E Trailing 1 year (LTM)	43.3x	35.2x
P/E 1 year forecast (NTM)	31.1x	26.6x
Return on equity	24.6%	29.9%
Debt-to-capital	39.3%	44.4%
Price/book ratio	10.0x	11.3x
Est. 5 year EPS growth rate forecast ¹	18.9%	17.1%

Information is fictitious and for illustrative purposes only.

SAMPLE DISCLOSURE:

Sources: FactSet.

¹ This measure is not a forecast of the portfolio's future performance.

Characteristics have been determined using a representative account deemed appropriate
FOR EDUCATIONAL PURPOSES ONLY.

Disclosures

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Financial professionals should independently evaluate the risks associated with products or services and exercise independent judgment with respect to their clients.

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The Fixed Income Manager Report

Ryon Acey

Agincourt Capital Management

Ryon is a member of Agincourt's investment team and is a portfolio manager with over 20 years of investment experience. He concentrates on the mortgage/structured products market as well as quantitative portfolio analytics. His research responsibilities include the MBS/CMBS/ABS markets and real estate investment trusts. Ryon is a shareholder of the firm.

Previously, Ryon was with BB&T Capital Markets where he was a Vice President and supervisory credit analyst. He has earned the Chartered Financial Analyst designation. Ryon received a BS in Architecture from the University of Virginia, and an MBA from the University of Maryland.





Presentation to:

Florida Public Pension Trustees Association

Ryon H. Acey, CFA—Director

Agenda

- Introduction
- 1st: Fundamentals of Fixed Income Investing
- 2nd: Introducing Credit Risk & Interest Rate Risk
- 3rd: Discussion about Credit Risk
- 4th: Discussion about Interest Rate Risk
- Summary

Fundamentals of FI Investing

- A **Bond** is a loan of a fixed amount w/ a fixed maturity, and regular coupon (interest) payments
- Borrowers are corporations (AAPL), governments (UST), agencies (FNMA) etc.; Lenders are pension funds, insurance companies, endowments, hedge funds etc.
- Prices move inversely w/ interest rates
- **Coupon Yield $\neq$ Yield to Maturity (YTM)**

Fundamentals of FI Investing

Issuer	Apple	Apple
Coupon Yield	4.30%	4.30%
Maturity	5/10/2033	5/10/2033
Price	\$103.22	\$96.13
Rating	Aaa/AA+	Aaa/AA+
Yield to Maturity (YTM)	3.85%	4.85%

Credit Risk & Interest Rate Risk

- **Credit Risk** is the potential for loss due to a counterparty failing to repay amount owed
 - Prices/yields reflect credit risk well before default
- **Interest Rate Risk** is the potential for loss due to changes in interest rates
 - Prices move inversely w/ interest rates

Credit Risk & Interest Rate Risk

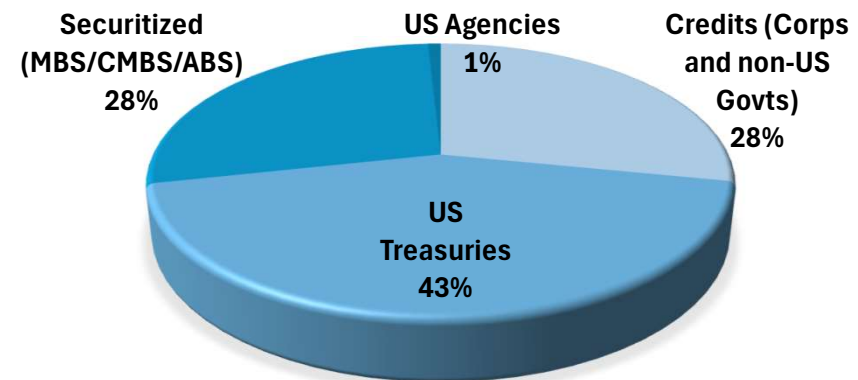
- Think about active versus passive management
- Strategies that active managers employ:
 - Credit Risk: Over/underweight Sector / Security
 - “Sector Management” / “Security Selection”
 - Interest Rate Risk: Adjust sensitivity to interest rates
 - “Duration Management” / “Yield Curve Management”

Credit Risk

- Sector Management – **Yield**
 - Treasuries are (credit) risk-free, so yields are lower than other sectors
 - US Treasuries represent 40%+ of the Aggregate Index and 60%+ of the Government/Credit Index
 - Opportunity to outperform using **Sector Management** is material
 - Difference in yield between Treasuries (4.19%) and Credits (5.09%) is .9%, or 90bps!

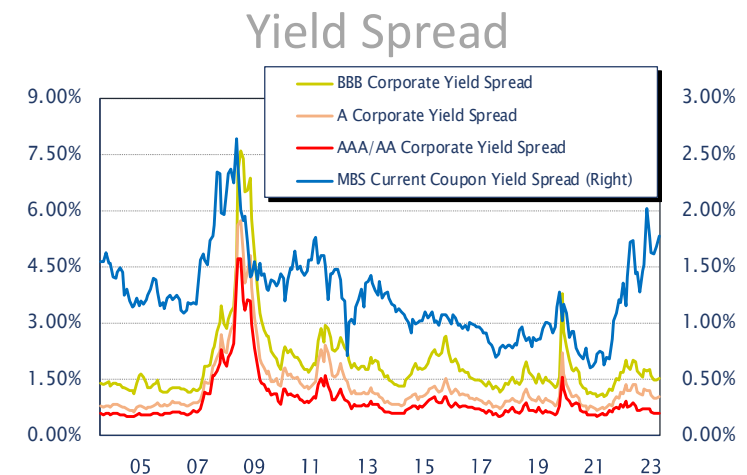
Yields @ 7/31/24

US Agg Index	4.64%
Treasuries	4.19%
Agencies	4.59%
Securitized	4.89%
Credits	5.09%



Credit Risk

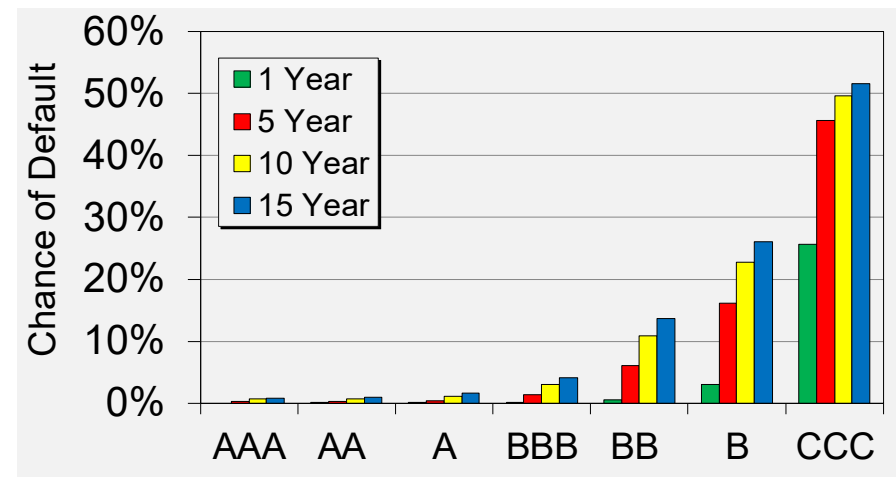
- Sector Management – **Yield Spread**
 - Difference in yield between a sector, industry or bond over and above (credit) risk-free Treasuries of same maturity
 - Changes over time; Influenced by business cycle, Fed policy, \$ flows
 - Popular measure of value (similar to P/E); Increase allocation when spreads are wide, reduce when tight



Credit Risk

- **Default Risk** increases
 - The lower the bond's rating
 - The more time passes

Cum. Default Rates: 1981-2022



Credit Risk

Moody's

Aaa

Aa

A

Baa

Ba

B

Caa

Ca

C

D

S&P

AAA

AA

A

BBB

BB

B

CCC

CC

C

D

Ability to Pay Principal and Interest

Extremely Strong

Very Strong

Strong

Adequate

Speculative Grade

In Default

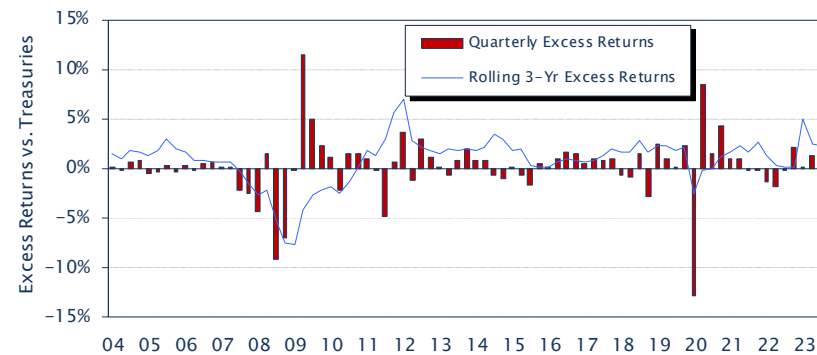
Credit Risk

Issuer	Apple	Apple
Coupon Yield	4.30%	4.30%
Maturity	5/10/2033	5/10/2033
Price	\$103.22	\$96.13
Rating	Aaa/AA+	Baa3/BBB-
Yield to Maturity (YTM)	3.85%	4.85
Yield (Credit) Spread	6	106

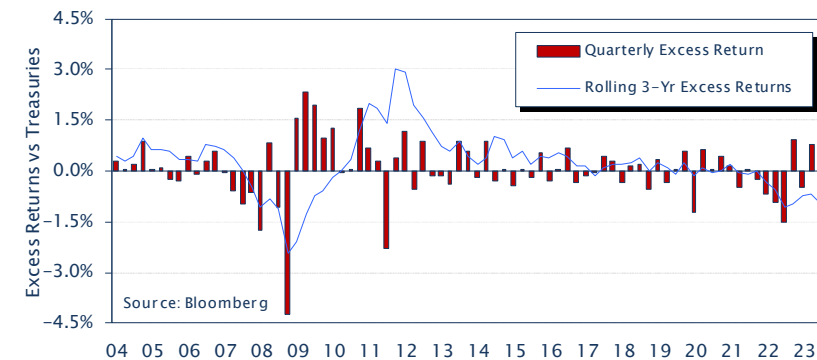
Credit Risk

- Sector Management – **Excess Return**
 - Difference in return between a sector, industry or bond over and above (credit) risk-free Treasuries of same maturity
 - Corporates tied to economic cycle
 - MBS tied to economic cycle, but even more to Fed policy
 - Both tied to supply/demand factors, changing risk sentiment, and credit ratings changes

Credit Excess Returns



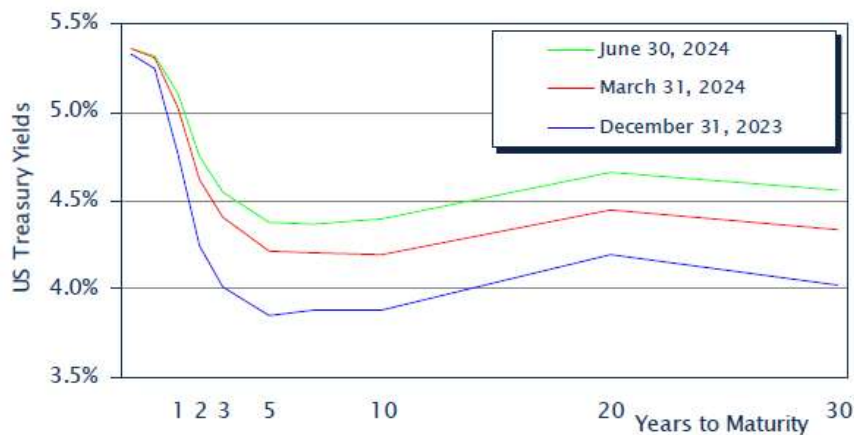
MBS Excess Returns



Interest Rate Risk

- Interest Rate Risk is the biggest risk facing a FI portfolio
- All bonds carry interest rate risk
- Yields are constantly changing
- When yields change, so do bond prices AND bond returns

U.S. Treasury Yields

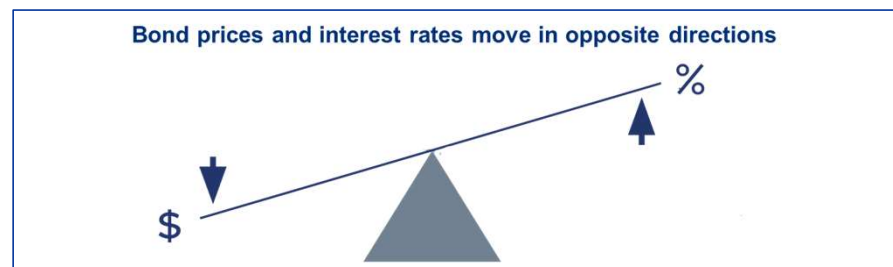


U.S. Treasury Total Returns



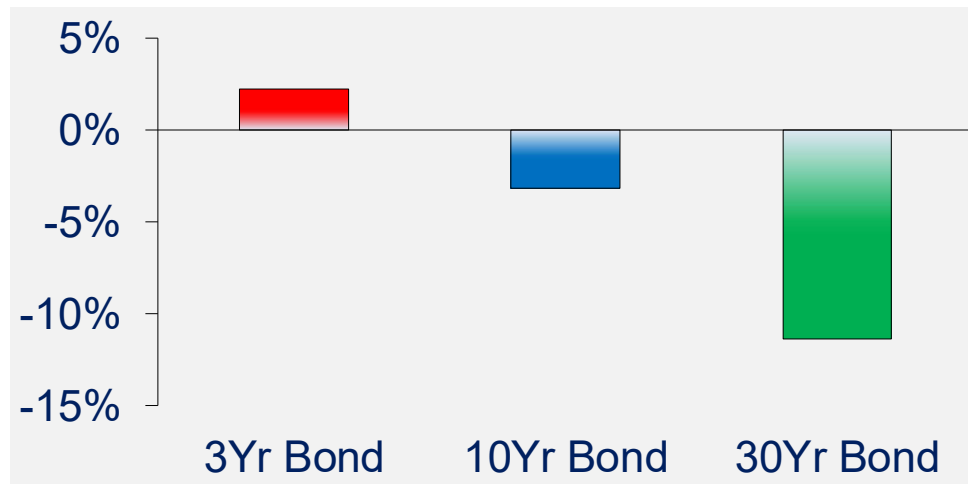
Interest Rate Risk

- The (inverse) relationship between a bond's price and its yield is mathematically related
- Generally, the longer the maturity of a bond, the more sensitive (volatile) its price is to interest rate changes



Interest Rate Risk

Total return for bonds due in 3, 10, and 30 years (4% coupon), if rates rise by 1% (over one-year):



Coupon Return =	4.0%	4.0%	4.0%
Price Return =	-1.8%	-7.2%	-15.4%
Total Return =	2.2%	-3.2%	-11.4%

Interest Rate Risk

- **Duration** is the best measure of a bond's price volatility – its sensitivity to changes in interest rates
 - Maturity is a quick, but inaccurate measure of a bond's price volatility
 - Duration takes into account not only the maturity of a bond, but also the magnitude and timing of cash flows

$$D = \frac{\sum_{t=1}^N \frac{t \cdot C_t}{(1+r)^t}}{\sum_{t=1}^N \frac{C_t}{(1+r)^t}}$$



Interest Rate Risk

Issuer	Apple	Apple
Coupon Yield	4.30%	4.30%
Maturity	5/10/2033	5/10/2033
Price	\$103.22	\$96.13
Rating	Aaa/AA+	Baa3/BBB-
Yield to Maturity (YTM)	3.85%	4.85%
Yield (Credit) Spread	6	106
Duration	7.0	7.0
Change In Price	--	-6.87%

Interest Rate Risk

- While not as popular as Sector Management, investment managers still employ **Duration Management**
 - A shorter/longer duration than the index has a measurable impact on relative returns
 - If you can “time the market,” there are significant gains to be made; Get it wrong, and you can underperform by a wide margin
 - As a result, most bond managers only fine-tune their duration vs. their index
- Be aware of your bond manager’s duration strategy
- Consider placing limits (index +/- 10%) on duration

Interest Rate Risk

Through June 30, 2024		Annualized					
		2nd Qtr	YTD	1 Year	3 Years	5 Years	Since 1/31/06
	(gross of fees)	0.19%	-0.41%	3.05%	-2.63%	0.27%	3.74%
	(net of fees)	0.13%	-0.54%	2.79%	-2.87%	0.02%	3.49%
Bloomberg Aggregate Index		0.07%	-0.71%	2.63%	-3.02%	-0.23%	3.03%

Q: Why were returns negative in the YTD periods ending 6/30/24?

A: Price depreciation—yields rose and prices fell enough to wipe out coupon income

Interest Rate Risk

- Duration: Portfolio vs Index/Benchmark
- Note:
 - Total duration slightly less than Index
 - Notice sector mix differences

June 2024

Sector Strategy

US Treasuries
US Agency Notes
Mortgage-Backed Securities
ABS/CMBS
Industrials
Utilities
Finance
Non-Corporates
Cash Equivalents

Total

Yield to Maturity
Average Quality

Duration Strategy

Governments

Mortgages

ABS/CMBS

Corporates

Total

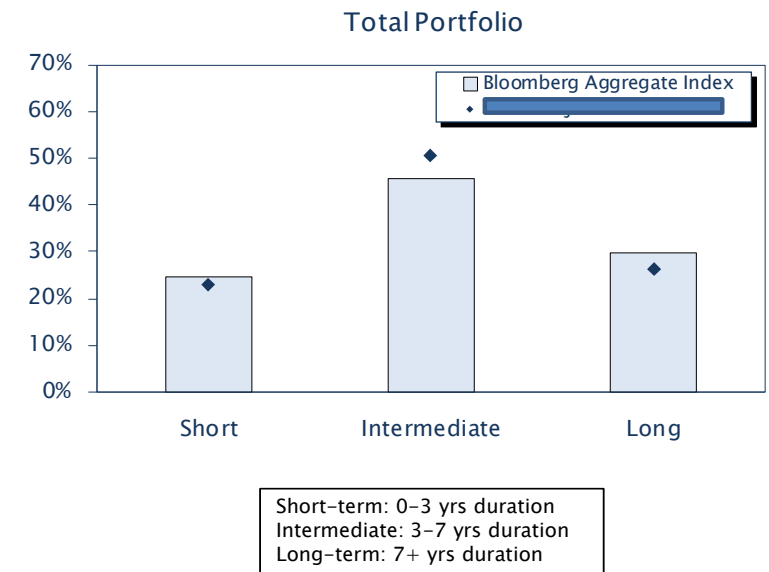
Average Maturity

Yield Curve Strategy

		Bloomberg Aggregate Index
	15%	43%
	0%	1%
	36%	26%
	3%	2%
	26%	14%
	4%	2%
	15%	8%
	0%	4%
	1%	0%
Total	100%	100%
Yield to Maturity	5.3%	5.0%
Average Quality	A+	AA
Duration Strategy		
Governments	1.6 Yrs	2.6 Yrs
Mortgages	2.1	1.4
ABS/CMBS	0.1	0.1
Corporates	2.2	2.0
Total	6.0 Yrs	6.1 Yrs
Average Maturity	8.3 Yrs	8.4 Yrs
Yield Curve Strategy	Neutral	

Interest Rate Risk

- **Yield Curve Management** (vs index) is very important, since yield curve moves are never parallel
- **Barbelled** - Overweight long and short maturities
- **Bulleted** – Clustered around intermediate maturities
- **Neutral** - Roughly same as index)



Bonus: Major Bond Indexes (7/31/24)

	Bloomberg <u>Aggregate</u>	Bloomberg <u>Gov't/Credit</u>	Bloomberg Intermed. <u>Gov't/Credit</u>
Average Maturity	8.4 yrs	8.8 yrs	4.3 yrs
Duration (Effective)	6.1 yrs	6.3 yrs	3.8 yrs
Yield to Maturity	4.6%	4.5%	4.4%
Ratings (Avg. Quality)	AA2/AA3	AA2/AA3	AA2/AA3
% in US Gov'ts	44%	61%	64%
% in Credits	28%	39%	36%
% in Securitized	28%	---%	---%
<u>Annualized Returns:</u>			
1 Year	5.1%	5.1%	5.9%
5 Years	0.2%	0.3%	1.1%
10 Years	1.6%	1.7%	1.8%

Real Estate Performance Report

Maya Packer Barings

Maya Packer is a member of Barings Real Estate, a global real estate platform with extensive capabilities across both debt and equity strategies. Maya is an Associate Director for the Real Estate Client Portfolio Management team, responsible for client management, product development, capital raising and external communication of real estate equity investments. She has worked in the industry since 2018. Maya holds a B.A. in Economics from Davidson College.

Real Estate Performance Report

FPPTA Trustees School – Intermediate

September 2025

Maya Packer, Client Portfolio Manager, Barings Real Estate

Maya.Packer@Barings.com



Name of Account/Fund

Quarterly Report

Month Year

CONFIDENTIAL

This quarterly report contains confidential information, including trade secrets about the investment strategy and operations of the Fund and confidential commercial and financial information which, if disclosed, could cause competitive harm to the Fund and its partners. Such confidential information is exempt from disclosure under public records laws to certain Firm clients and investors, and is subject to the confidentiality requirements of the Fund's Limited Partnership Agreement.

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ESG / Sustainability	17
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Financial Statements.....	23
Notes	27



Overview & Highlights

1

7

Overview & Highlights			
OVERVIEW		HIGHLIGHTS	
Fund Currency / Geography	USD / U.S. only	TOTAL / NET ASSETS	\$3.5B / \$2.6B
Fund Structure	Open-end Commingled Fund, Structured as a Limited Partnership	MARKET VALUE OF INVESTMENTS GROSS / NET	\$3.5B / \$2.7B
Strategy/Risk Profile	Core (with up to 20% Non-Core)	NUMBER OF INVESTMENTS	43
Investment Types	Apartment, Office, Industrial, Retail, Hotel, Self-Storage	AVERAGE INVESTMENT SIZE	\$81.3M
Target Return	5% real return (before advisory fees)	CORE ASSETS ¹	93.4%
Target Leverage	20% - 25% of GAV, maximum of 35%	LEASED (CORE-COMMERCIAL)	96.3%
Benchmark	NCREIF Fund Index Open-End Diversified Core Equity (NFI-ODCE)	CASH TO GAV ²	0.8%
Inception Date	July 1, 2004	TOTAL LEVERAGE RATIO (MV DEBT/TOTAL ASSETS)	25.8%
NET AND GROSS TOTAL RETURNS			
	BCPF Net of Fees	BCPF Gross of Fees	NFI-ODCE
Q1 2020	1.24%	1.42%	0.96%
1-Year	5.58%	6.34%	4.88%
3-Year	6.54%	7.35%	6.81%
5-Year	8.05%	8.90%	8.46%
10-Year	9.83%	10.74%	11.45%
Since Inception (7.1.2004)	6.97%	7.88%	7.87%
INVESTMENT STRATEGY			
The Barings Core Property Fund is managed with Barings Real Estate's belief that a return premium can be achieved through the application of our research findings along with active asset management. The barrier market focus of the Fund is a result of a Barings Real Estate Research study that indicates barrier markets have generated higher returns over time. Another research-driven strategy utilized by the Fund is that core property investment in growth markets at certain times in the cycle can provide excess return. The Fund's investment style incorporates this strategic research approach in the selection and management of assets. The Fund designates up to a 20% tactical allocation to value-added investments. Value-added strategies can include lease-up, development, repositioning, and to-be-built assets. The current Fund leverage target is 20% to 25%, with a maximum of 35% of gross asset value.			
1. Defined as a percentage of Net Market Value for those assets that have occupancy greater than 75%. 2. Cash as a percent of GAV excludes restricted cash and capital commitments received in advance, if any. 3. Represents the number of signed subscription agreements.			
Confidential	3	Overview & Highlights	

OVERVIEW

Fund Currency / Geography

1

USD / U.S. only

Fund Structure

2

Open-end Commingled Fund, Structured as a Limited Partnership

Strategy/Risk Profile

3

Core (with up to 20% Non-Core)

Investment Types

4

Apartment, Office, Industrial, Retail, Hotel, Self-Storage

Target Return

5

5% real return (before advisory fees)

Target Leverage

6

20% - 25% of GAV, maximum of 35%

Benchmark

7

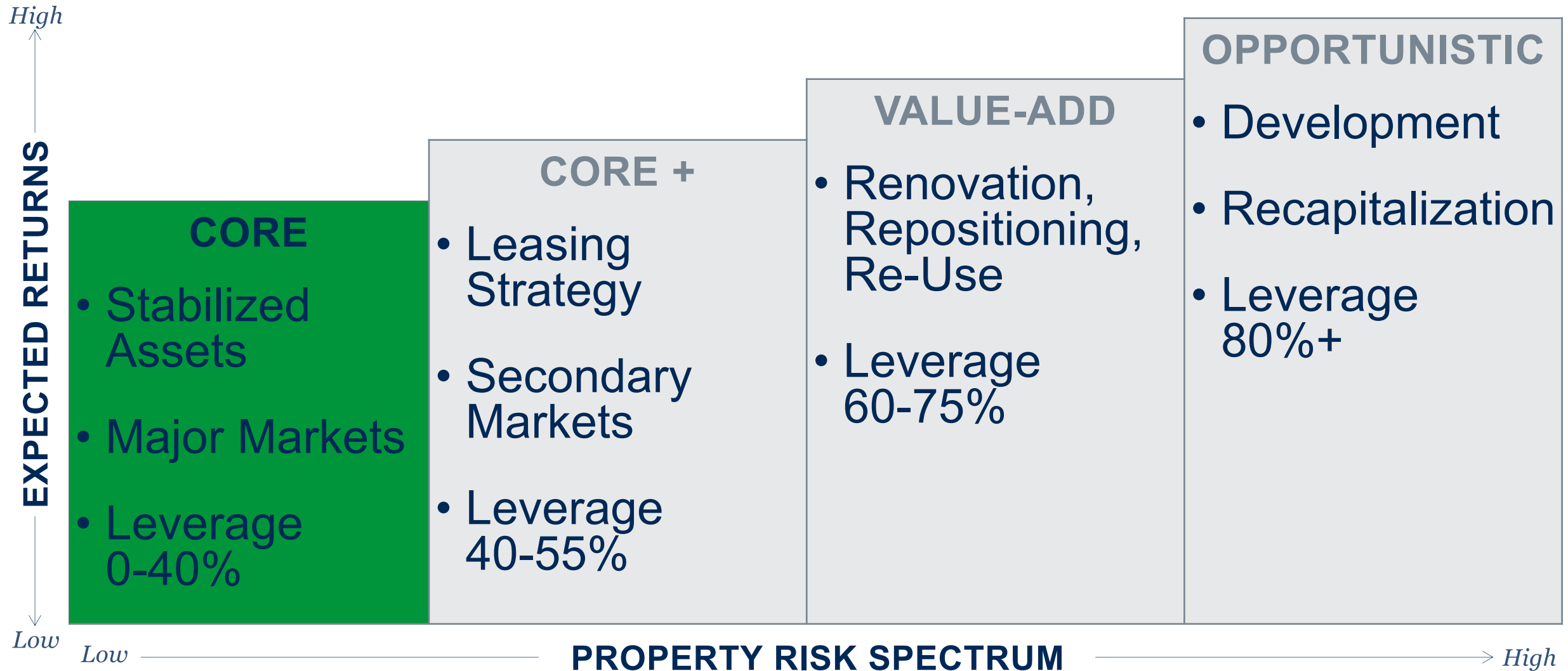
NCREIF Fund Index Open-End Diversified Core Equity (NFI-ODCE)

Inception Date

July 1, 2004

Real Estate Risk Spectrum

3



Core Managers

3

- Narrow real estate segment with the least risk
- Important to know how to read a quarterly report to see nuances between funds
- Some investors only have 1-2 managers for their exposure while others pair multiple funds to complement each other

NCREIF Fund Index – Open End Diversified Core Equity

- Capitalization-weighted, time-weighted quarterly return index
- Created in 2005 with 13 funds and now includes 25 funds (as of 6/30/2025)
- Size: \$278B (as of 6/30/2025)

Fund Size

8

10

Overview & Highlights

OVERVIEW

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HIGHLIGHTS

TOTAL / NET ASSETS

\$3.5B / \$2.5B

MARKET VALUE OF INVESTMENTS

**GROSS / NET
\$3.5B / \$2.7B**

NUMBER OF INVESTMENTS

43

AVERAGE INVESTMENT SIZE

\$81.3M

CORE ASSETS¹

93.4%

LEASED (CORE-COMMERCIAL)

96.3%

CASH TO GAV²

0.8%

TOTAL LEVERAGE RATIO (MV DEBT/TOTAL ASSETS)

25.8%

ONE-YEAR DIVIDEND YIELD (GROSS AS OF 3/31/20)

4.22%

SUBSCRIPTION QUEUE

\$0

REDEMPTION QUEUE (AS OF 4/1/20)

\$95.4M

NUMBER OF INVESTORS³

113

Confidential

3

Overview & Highlights

HIGHLIGHTS
TOTAL / NET ASSETS \$3.5B / \$2.6B
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CASH TO GAV ² 0.8%
TOTAL LEVERAGE RATIO (MV DEBT/TOTAL ASSETS) 25.8%
ONE-YEAR DIVIDEND YIELD (GROSS AS OF 3/31/20) 4.22%
SUBSCRIPTION QUEUE \$0
REDEMPTION QUEUE (AS OF 4/1/20) \$95.4M
NUMBER OF INVESTORS ³ 119

HIGHLIGHTS

8

TOTAL / NET ASSETS

\$3.5B / \$2.6B

9

MARKET VALUE OF INVESTMENTS

GROSS / NET

\$3.5B / \$2.7B

10

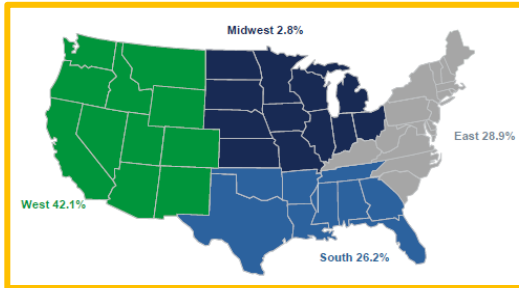
NUMBER OF INVESTMENTS

43

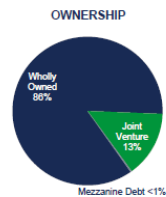
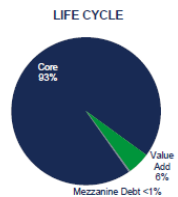
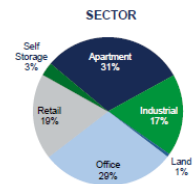
Diversification

10

Portfolio Overview - Diversification



	EAST		MIDWEST		SOUTH		WEST	
NMV	\$M	% of Total	\$M	% of Total	\$M	% of Total	\$M	% of Total
Apartment	\$335.0	12.2%	\$76.0	2.8%	\$125.8	4.6%	\$111.9	11.4%
Industrial	158.7	5.7%	-	-	224.9	8.2%	94.0	3.4%
Office	261.3	9.5%	-	-	224.4	8.2%	320.3	11.7%
Retail	40.4	1.5%	-	-	134.4	4.9%	333.4	12.1%
Other	-	-	-	-	8.2	0.3%	97.0	3.5%
Total	\$793.4	28.9%	\$76.0	2.8%	\$717.7	26.2%	\$1,156.6	42.1%

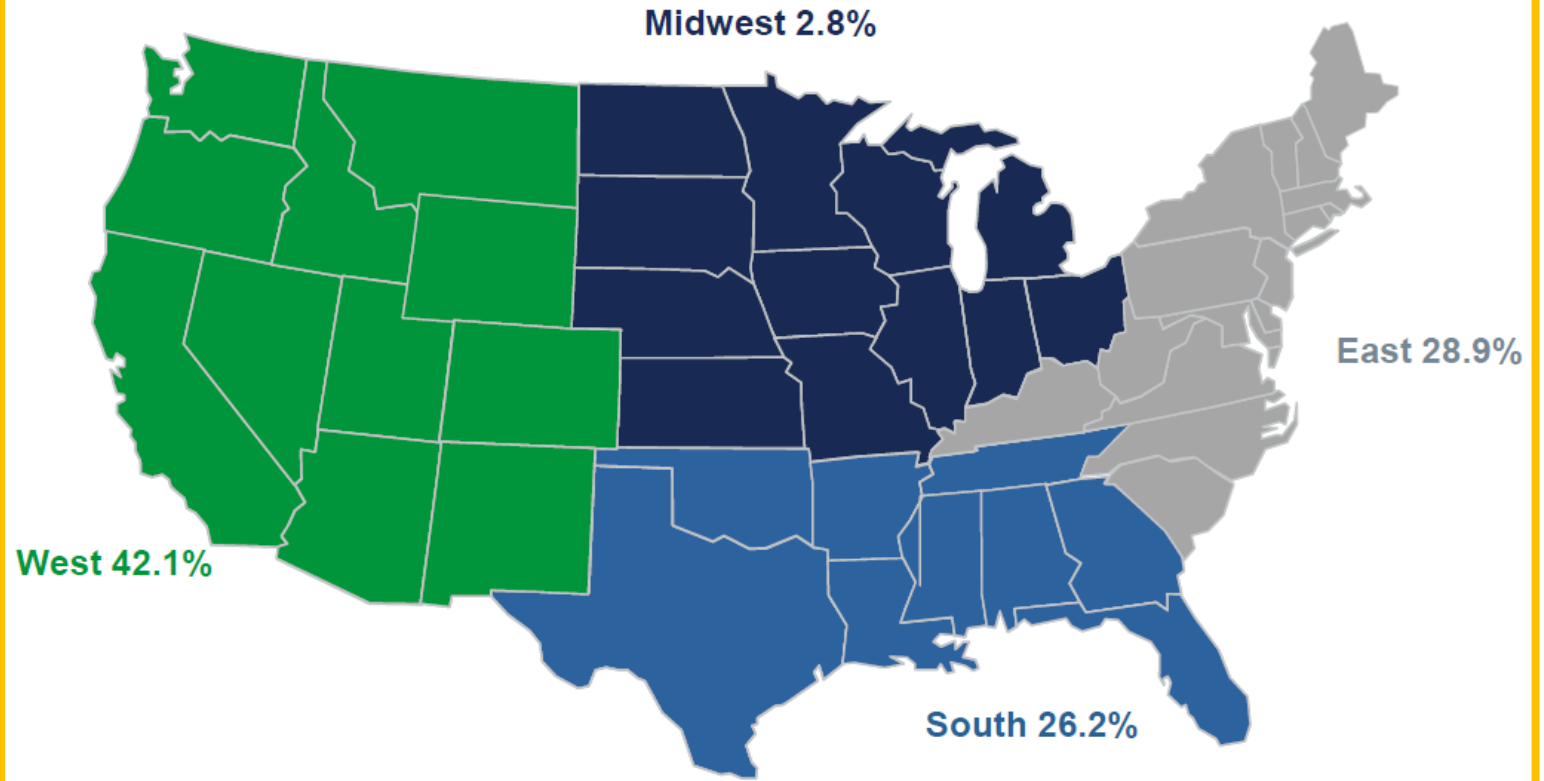


Diversification is based on Net Market Value of \$2.7 billion as of Q1 2020

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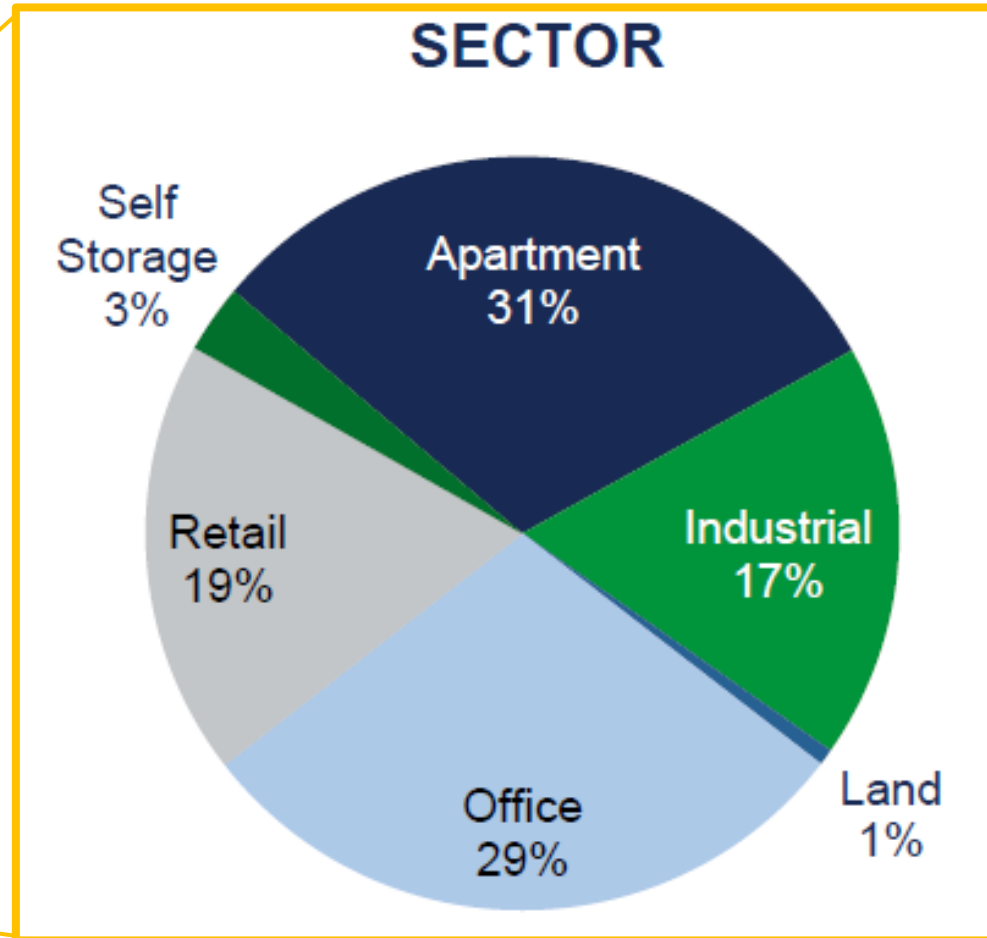
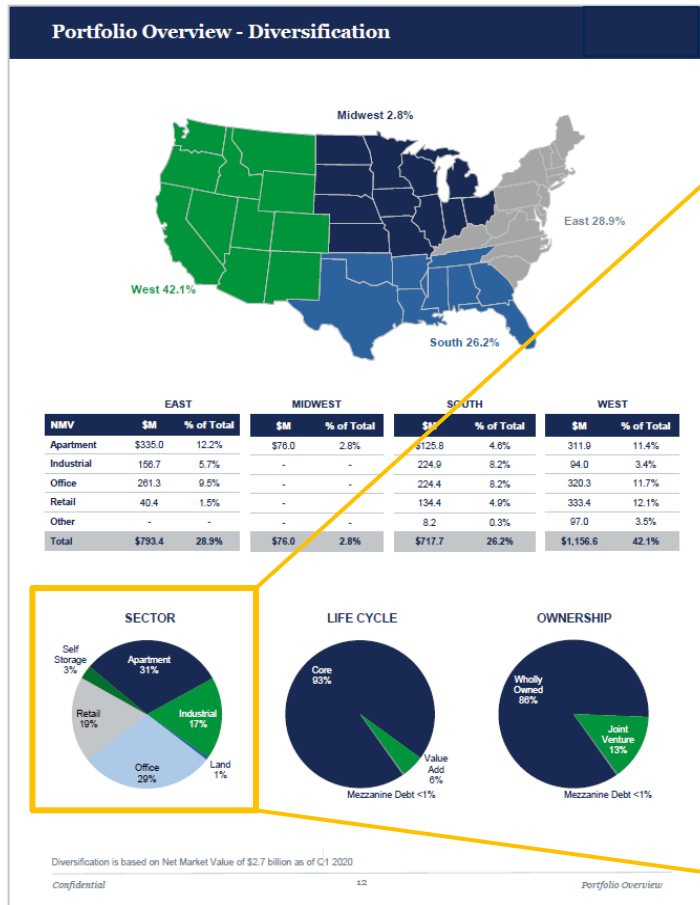
12

Portfolio Overview



Diversification

10



Capital Flows

11

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Overview & Highlights

OVERVIEW

Fund Currency / Geography	USD / U.S. only
Fund Structure	Open-end Commingled Fund, Structured as a Limited Partnership
Strategy/Risk Profile	Core (with up to 20% Non-Core)
Investment Types	Apartment, Office, Industrial, Retail, Hotel, Self-Storage
Target Return	5% real return (before advisory fees)
Target Leverage	20% - 25% of GAV, maximum of 35%
Benchmark	NOREIF Fund Index Open-End Diversified Core Equity (NFI-ODCE)
Inception Date	July 1, 2004

NET AND GROSS TOTAL RETURNS

	BCPF Net of Fee	BCPF Gross of Fee	NFI-ODCE
Q1 2020	1.24%	1.42%	0.98%
1-Year	5.58%	6.34%	4.88%
3-Year	6.54%	7.35%	6.81%
5-Year	8.05%	8.90%	8.46%
10-Year	9.83%	10.74%	11.45%
Since Inception (7.1.2004)	6.97%	7.88%	7.87%

INVESTMENT STRATEGY

The Barings Core Property Fund is managed with Barings Real Estate's belief that a return premium can be achieved through the application of our research findings along with active asset management. The barrier market focus of the Fund is a result of a Barings Real Estate Research study that indicates barrier markets have generated higher returns over time. Another research-driven strategy utilized by the Fund is that core property investment in growth markets at certain times in the cycle can provide excess return. The Fund's investment style incorporates this strategic research approach in the selection and management of assets. The Fund designates up to a 20% tactical allocation to value-add investments. Value-added strategies can include lease-up, development, repositioning, and to-be-built assets. The current Fund leverage target is 20% to 25%, with a maximum of 35% of gross asset value.

1. Defined as a percentage of Net Market Value for those assets that have occupancy greater than 75%.
2. Cash as a percent of GAV excludes restricted cash and capital commitments received in advance, if any.
3. Represents the number of signed subscription agreements.

HIGHLIGHTS

TOTAL / NET ASSETS

\$3.5B / \$2.6B

MARKET VALUE OF INVESTMENTS

GROSS / NET

\$3.5B / \$2.7B

NUMBER OF INVESTMENTS

43

AVERAGE INVESTMENT SIZE

\$81.3M

CORE ASSETS¹

93.4%

LEASED (CORE-COMMERCIAL)

96.3%

CASH TO GAV²

0.8%

TOTAL LEVERAGE RATIO (MV DEBT/TOTAL ASSETS)

25.8%

ONE-YEAR DIVIDEND YIELD (GROSS AS OF 3/31/20)

4.22%

SUBSCRIPTION QUEUE

\$0

REDEMPTION QUEUE (AS OF 4/1/20)

\$95.4M

NUMBER OF INVESTORS³

119

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3

Overview & Highlights

HIGHLIGHTS
TOTAL / NET ASSETS \$3.5B / \$2.6B
MARKET VALUE OF INVESTMENTS GROSS / NET \$3.5B / \$2.7B
NUMBER OF INVESTMENTS 43
AVERAGE INVESTMENT SIZE \$81.3M
CORE ASSETS ¹ 93.4%
LEASED (CORE-COMMERCIAL) 96.3%
CASH TO GAV ² 0.8%
TOTAL LEVERAGE RATIO (MV DEBT/TOTAL ASSETS) 25.8%
ONE-YEAR DIVIDEND YIELD (GROSS AS OF 3/31/20) 4.22%
SUBSCRIPTION QUEUE \$0
REDEMPTION QUEUE (AS OF 4/1/20) \$95.4M
NUMBER OF INVESTORS ³ 119

11 ONE-YEAR DIVIDEND YIELD
(GROSS AS OF 3/31/20)

4.22%

12 SUBSCRIPTION QUEUE

\$0

13 REDEMPTION QUEUE
(AS OF 4/1/20)

\$95.4M

14 NUMBER OF INVESTORS³

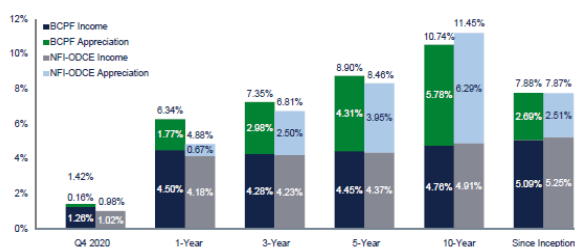
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Performance Components

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Portfolio Overview - Attribution

GROSS INCOME AND APPRECIATION



QUARTERLY PERFORMANCE BY PROPERTY TYPE

Property Type	BCPF Unleveraged	Index Unleveraged
Apartment	0.78%	1.13%
Industrial	2.32%	2.65%
Office	1.52%	1.23%
Retail	0.56%	-0.53%

QUARTERLY PERFORMANCE BY REGION

Region	BCPF Unleveraged	Index Unleveraged
East	0.66%	1.34%
Midwest	-0.77%	0.45%
South	1.43%	1.19%
West	1.82%	1.69%

Based on property-level returns, calculated using NCREIF methodology.
Index performance based on NCREIF NPI database, NFI-ODCE properties; retail includes only community center and neighborhood properties, and industrial includes only warehouse properties.

SAME STORE NOI

Property Type	Same Store Net Market Value \$ Millions	Percent Included in Same Store Calculation	TTM NOI Q1 2020	TTM NOI Q1 2019	Same Store Change
Apartment	\$668.9	79.5%	\$37.2	\$36.0	3.3%
Industrial	377.2	79.3%	18.7	16.3	14.2%
Office	806.0	100.0%	49.6	45.6	8.9%
Retail	508.2	100.0%	28.6	29.1	-1.9%
Total	\$2,360.3	86.3%	\$134.1	\$127.0	5.5%

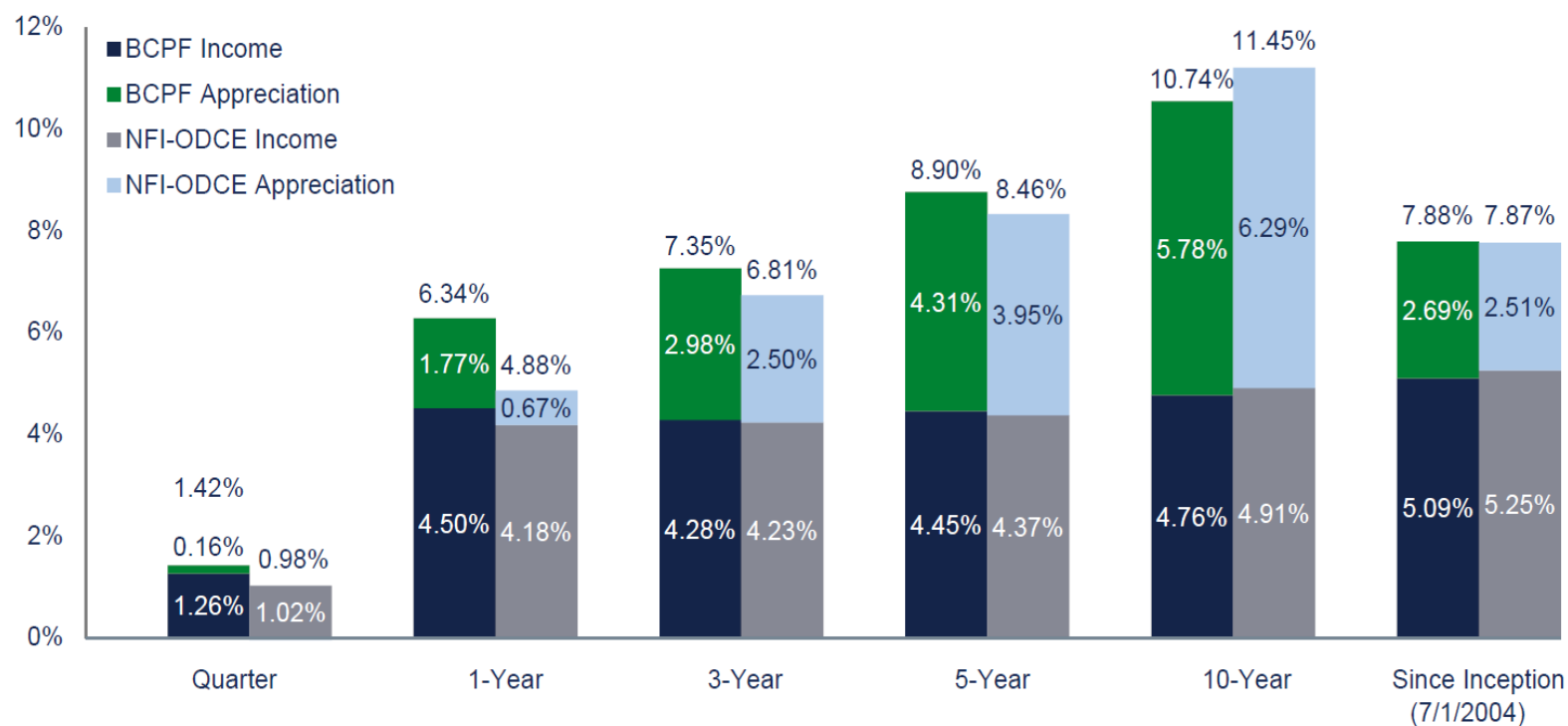
Same store portfolio includes only operating properties; TTM NOI excludes non-recurring items such as tax rebates and lease termination fees.

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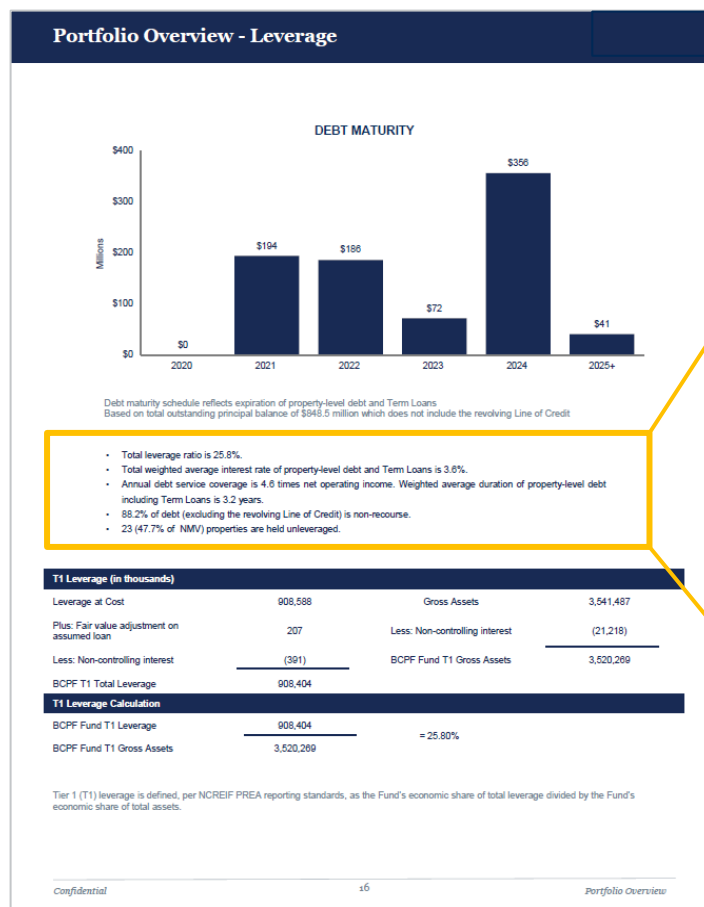
Portfolio Overview

GROSS INCOME AND APPRECIATION



Leverage

16



- Total leverage ratio is 25.8%
- Total weighted average interest rate is 3.6%
- Annual debt service coverage ratio is 4.6 times
- Weighted average duration is 3.2 years

Leasing & Occupancy

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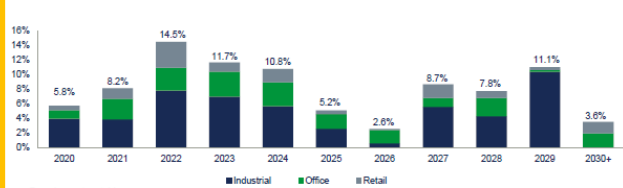
Portfolio Overview - Leasing / Tenants

PORTFOLIO OCCUPANCY BY PROPERTY TYPE

Property Type	Core Net Market Value \$M	Core Occupancy Q1 2020	Core Occupancy Q4 2019	Quarterly Same Store Occupancy Change
Apartment	\$819.5	93.6%	93.5%	0.1%
Industrial	450.0	98.4%	97.8%	0.6%
Office	784.3	90.2%	91.6%	-1.4%
Retail	508.2	94.1%	94.8%	-0.7%
Total	\$2,562.0	94.9%	95.0%	-0.1%

Same store changes exclude property sales and acquisitions. Core commercial leased includes industrial, office, and retail properties that are greater than 75% occupied.

COMMERCIAL LEASE EXPIRATIONS



TOP TEN TENANTS BY BASE RENT

Tenant	Property	Percent Of Portfolio's Base Rent	Percent Of Portfolio's S.F.
Tenant 1	215 Blair Road, Promenade at Town Center, Renaissance Creek	2.4%	4.0%
Tenant 2	Renaissance Creek, Torrance Crossroads	2.2%	2.1%
Tenant 3	Sun Valley Industrial Park	2.2%	3.9%
Tenant 4	801 South Figueroa	1.9%	1.2%
Tenant 5	811 Barton Springs	1.9%	1.1%
Tenant 6	100 Wall Street	1.7%	0.6%
Tenant 7	Chevy Chase Plaza	1.6%	0.6%
Tenant 8	33 New Montgomery, Boca Office	1.5%	0.4%
Tenant 9	Riverpark 500-800	1.4%	0.2%
Tenant 10	Chevy Chase Plaza	1.4%	0.6%
Total Top 10 Tenants		18.0%	20.7%

Source: Baring.

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Portfolio Overview

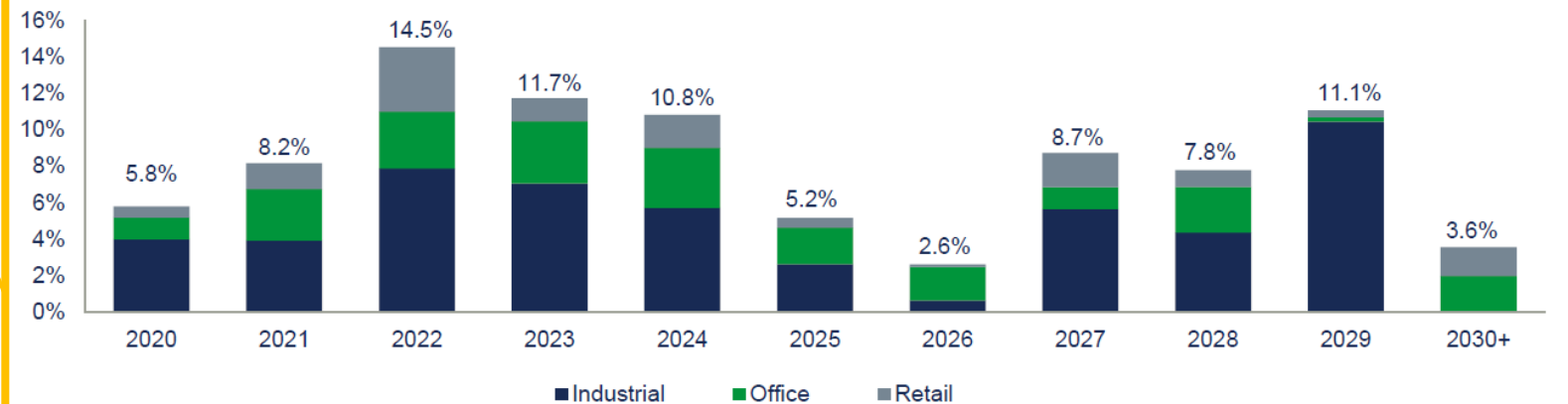
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Total	\$2,562.0	94.9%	95.0%	-0.1%

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COMMERCIAL LEASE EXPIRATIONS



Financial Statements

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Financial Statements	Financial Statements	Financial Statements
CONSOLIDATED STATEMENT March 31, 2020 (1) Assets Real estate investments at fair value (cost: \$2,856,876 and \$2,869,135, respectively) Loan investments at fair value (cost: \$7,344 and \$7,100, respectively) Cash Restricted cash Other assets Total assets Liabilities and Net Assets Liabilities: Mortgage loans payable at fair value (cost: \$748,472 and \$746,444, respectively) Revolving line of credit payable, at fair value (principal: \$60,325 and \$325, respectively) Term line of credit payable, at fair value (principal: \$100,000 and \$100,000, respectively) Fair value of interest rate swaps Accounts payable and other liabilities Capital contribution received in advance Security deposits Total liabilities Net assets: Attributed to Barings Core Property Fund Attributed to noncontrolling interests Net assets Units outstanding (not rounded) Unit value Cash flows from operating activities: Net investment income (loss) Adjustments to reconcile net investment income (loss) to net cash provided by (used in) operating activities: Capitalized interest on loan investments Amortization of assumed mortgage premium Changes in assets and liabilities: (Increase) decrease in other assets Increase (decrease) in accounts payable and other liabilities Increase (decrease) in security deposits Net cash provided by (used in) operating activities Cash flows from investing activities: Net proceeds from real estate investment transactions Additions to properties Net cash provided by (used in) investing activities Cash flows from financing activities: Proceeds from revolving line of credit Paydown of revolving line of credit Proceeds from mortgage loans payable Principal payments on mortgage loans payable Increase in restricted cash for capital contribution received in advance Capital contribution received in advance Contributions to Fund Reinvestment in Fund from distributions Distributions for advisory fees from Fund Distributions from Fund Redemptions from Fund Contributions from noncontrolling interests Distributions to noncontrolling interests Net cash provided by (used in) financing activities Net increase (decrease) in cash and restricted cash Cash and restricted cash - beginning of period Cash and restricted cash - end of period	CONSOLIDATED STATEMENT For the Quarter Ended March 31, 2020, (1) Quarter Ended March 31, 2020 Investment income: Income from properties Interest and origination fees from loan investments Other income Total investment income Expenses: Property operating expenses Interest and financing expenses Nonoperating expenses Total expenses Net investment income (loss) Net realized and unrealized gain (loss): Realized gain (loss) from sales of real estate investments Less: previously recorded unrealized gain (loss) on sales Net realized gain (loss) from sales of real estate investments Change from net unrealized gain (loss) on real estate investments Change from net unrealized gain (loss) on property incentive fee Change from net unrealized gain (loss) on mortgage loans Change from net unrealized gain (loss) on interest rate swaps Net change in unrealized gain (loss) Net realized and unrealized gain (loss) Increase (decrease) in net assets resulting from operations Less portion attributable to noncontrolling interests Net increase (decrease) in net assets attributable to Fund Amounts attributable to Fund: Net investment income (loss) Net realized gain (loss) Net unrealized gain (loss) Net increase (decrease) in net assets attributable to Fund	CONSOLIDATED STATEMENT OF OPERATIONS For the Quarter Ended March 31, 2020, in thousands (unaudited) Quarter Ended March 31, 2020 \$ 64,138 169 164 64,471 23,238 8,208 751 32,195 32,276 2,274 (4,350) (2,076) 10,600 633 21 (2,750) 8,504 6,428 38,704 (2,492) 36,212 32,167 (2,076) 6,121 36,212
Confidential 23	Confidential 26	Confidential 24 Financial Statements

For illustrative purposes only.

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The Actuarial Report

Sara Carlson

Foster & Foster Consulting Actuaries

Sara Carlson joined Foster & Foster in 2011 and is currently a consulting actuary to over 60 governmental retirement plans in Florida. Sara's experience includes topics such as actuarial valuations, plan redesign studies, accounting under GASB standards, statutory requirement disclosures, plan experience studies and assumption/method recommendations, actuarial audits, forecasting, and individual retirement benefit calculations. Sara has a Bachelor of Science in Mathematics from the University of Florida and a Master of Science in Mathematics from the University of North Florida. Sara is an Associate of the Society of Actuaries, an Enrolled Actuary under ERISA, and a member of the American Academy of Actuaries.



The Actuarial Report

How to Read and Understand

Presented By:

Sara Carlson, ASA, EA, MAAA



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

1. Annual Actuarial Valuation of the Pension Plan
 - Develops Plan's Liability and Assets
 - Determines the Annual Required Contribution
2. Disclosure Information Required under FS 112.664
3. Valuation in Accordance with GASB 67/68
4. Benefit Calculations and Annual Benefit Statements
5. Special Studies (e.g., Experience Studies, Forecasts, etc.)

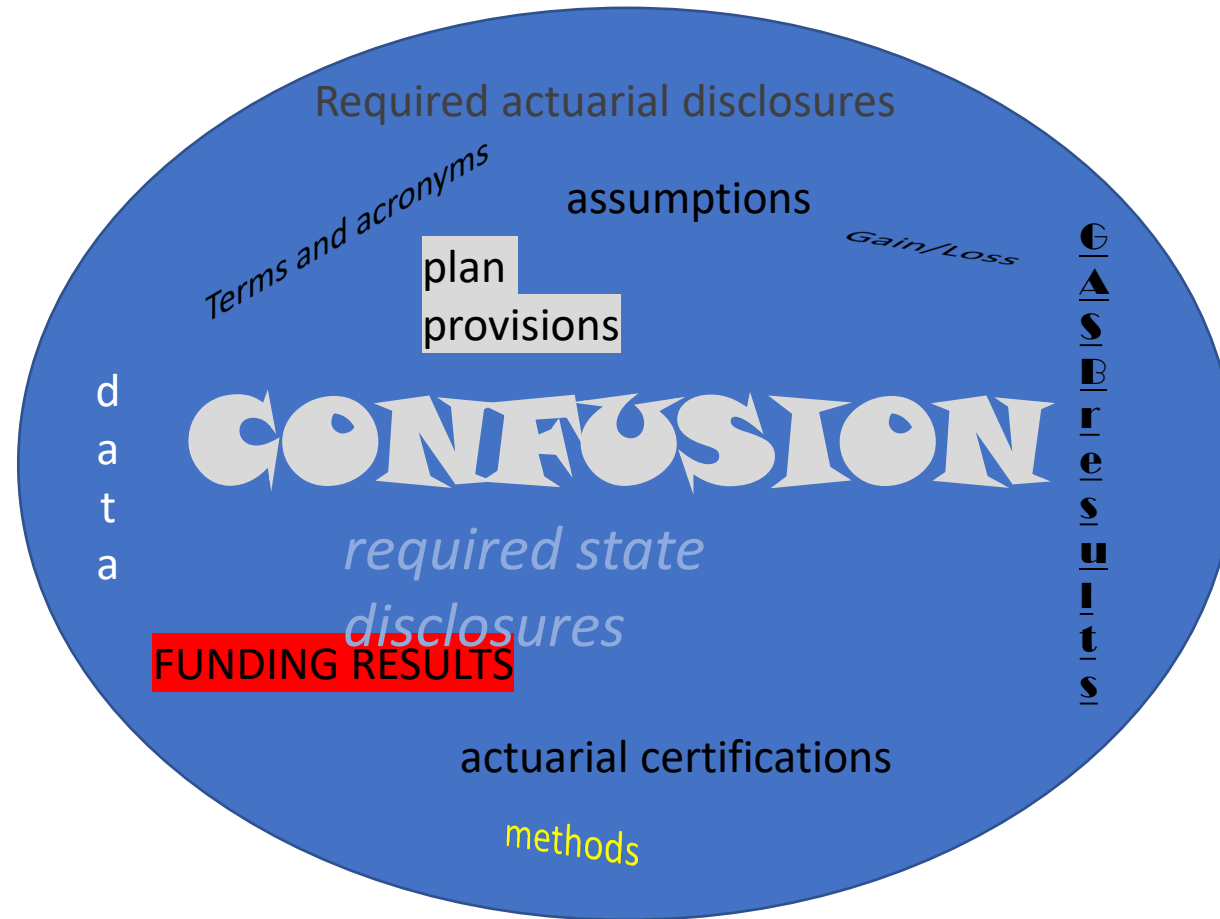
Overview

Actuarial reports include valuation results plus a lot of required information:

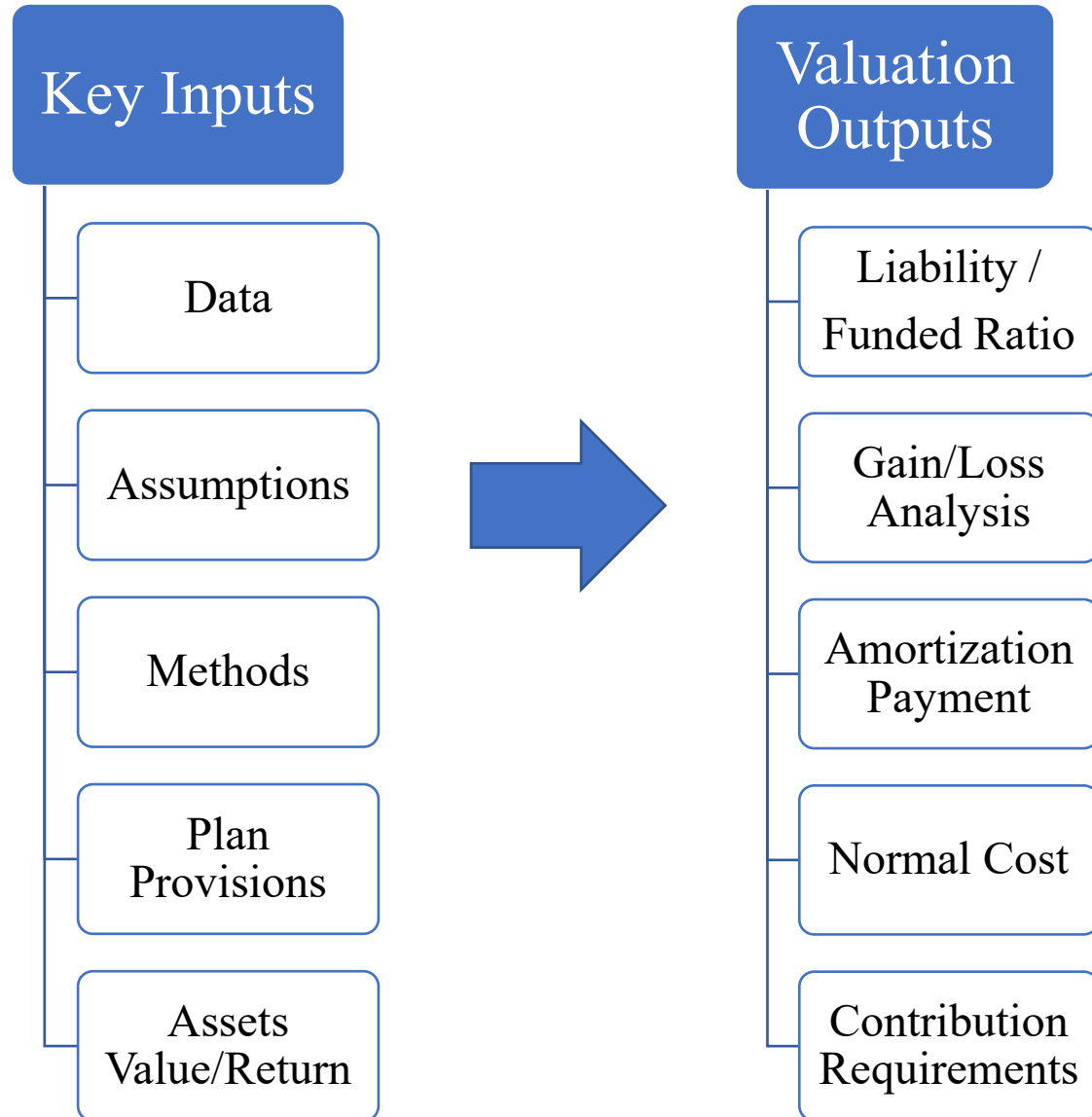
- Disclosures provided by the Actuarial Standards of Practice
 - ASOP 41 devoted to actuarial communications
- Disclosures required by State laws
 - Vary greatly from State to State
- Accounting under GASB
 - Use different terminology (e.g., fiduciary net position = market value of assets)

The Report Jumble

Lots of Requirements + Unfamiliar Content = Confusion



Sorting it Out – Focus on the Basics



Reading the Report

Focus on Key Results and Inputs

- Key Results should be summarized, usually beginning of report, followed by further breakdown and details
- Key Inputs usually have sections devoted to them, such as assets, data, assumptions, methods and plan provisions

Sample Report

Key Valuation Result:

Written Summarized Results (p. 5)

- Contribution Requirements
- Plan Experience

Sample Report

Key Valuation Result:

Summary of Results (p. 8 - 10)

- Liabilities
- Normal Cost
- Unfunded Actuarial Accrued Liability (UAAL)
- Funded Ratio

Sample Report

Key Valuation Result:

Contribution Requirements (p. 11)

- Normal Cost
- Administrative Expenses
- UAAL Payment

Contribution Impact of Annual Changes (p. 12)

- Summary of Impact by component

Sample Report

Key Valuation Results:

Gain and Loss Analysis (p. 15)

- Summary of (Gains) and Losses by component

Amortization Schedule (p. 16 - 17)

- UAAL Reconciliation
- UAAL Amortizations

Sample Report

Key Valuation Inputs:

Assets (p. 19 - 25)

- Two asset values:
 - Market Value of Assets
 - Actuarial Value of Assets
- Contribution Reconciliation

Sample Report

Key Valuation Inputs:

Overview of Member Data (p. 26 - 28)

- Counts
- Income
- Reconciliation

Sample Report

Key Valuation Inputs:

Actuarial Assumptions and Methods (p. 29 - 33)

Plan Provisions (p. 34 – 36)

Summary of Key Ideas

Focus on summarized results followed by review of details as needed. Recommend always reviewing:

- Details of gains and losses
- Changes of assumptions and methods (ASOPs require disclosure of any changes and basic reason for changes)
- Member data (pay attention to headcounts, average ages and salaries for reasonability)
- Assets, including the difference between actuarial and market values

Other Actuarial Reports

1. GASB 67/68 Reports
 - Accounting disclosures
 - Sometimes included with valuation report
2. Experience Studies
 - Typically performed every 5 years
 - Compare plan experience to assumptions
 - Recommend assumption changes
 - Provide actuarial impact on liabilities and contributions

Other Actuarial Reports

3. Actuarial Impact Statements

- Required by State Law
- Assess the impact of benefit changes to Pension Plan
- Ordinance or Statutorily (e.g., cancer presumption)
- Provide actuarial impact on liabilities and contributions

Other Actuarial Reports

4. FS 112.664 Disclosures

- Required by State Law
- Hypothetical contributions and liabilities under pessimistic scenarios

5. Financial Forecasting

- Project contributions and liabilities under different scenarios, such as:
 - Varying investment returns
 - Additional contributions

Rebalancing Your Portfolio

Aaron Lally & Shawn Bowen

Meketa Investment Group

Aaron Lally, CFA, CAIA, CIPM – Managing Principal/Consultant

Mr. Lally joined Meketa in 2013 and has been in the investment industry since 2008. Based in South Florida, Mr. Lally leads a number of client relationships primarily in the southeast. He works with non profits, public pension funds, healthcare organizations, and multi employer clients. He also serves as a member of Meketa's Endowment & Foundation Practice Group. In addition, he contributes to the firm's marketing and business development efforts.

Prior to joining the firm, Mr. Lally spent three years at JP Morgan Chase and two years at Westfield Capital Management. Mr. Lally earned an undergraduate degree in economics from Boston College. Mr. Lally holds the Chartered Financial Analyst® (CFA) designation, the Chartered Alternative Investment Analyst (CAIA) designation, and the Certificate in Performance Measurement designation (CIPM).

Mr. Lally is a frequent speaker at the Florida Public Pension Trustees Association (FPPTA) and is a member of the Texas Association of Public Employee Retirement Systems (TEXPERS). Mr. Lally also serves as a Trustee for his city's general employees' pension plan.

Shawn Bowen – Senior Vice President/Consultant

Mr. Bowen started his career in the investment industry in 2010 and joined Meketa Investment Group in 2012. He is based in Florida and serves as a consultant and advisor for a variety of plan sponsors, including public, corporate, Taft-Hartley retirement plans, healthcare organizations, operating pools, non US clients, and other institutional investors. His consulting work includes helping clients with investment policy design, asset allocation modeling, investment manager evaluation and selection, and ongoing due diligence of client portfolios invested in public and private markets. He also serves as a member of Meketa's Pension Practice Group.

Prior to joining the firm, he was employed at ULLICO Investment Company, where he provided analysis and support for Taft Hartley investor relations and business development. Mr. Bowen earned his bachelor's degree in business management from Assumption College.



Rebalancing Your Portfolio

Fall 2025

Shawn Bowen
Senior Vice President
Meketa Investment Group

Aaron Lally, CFA, CAIA
Managing Principal
Meketa Investment Group

Table of Contents

- What is asset allocation?
- What is rebalancing?
- Why is rebalancing important?
- How do you do it?
- Conclusion

What is Asset Allocation?

Asset Allocation Is...

- The single most important investment choice.
- Setting target weights to asset classes.
- A discussion on how much risk to accept.
- A discussion on how much return to seek.
- Agreement on permissible “policy ranges”.

Example ...

Asset Allocation Policy Target

	<u>Target</u> (%)	<u>Ranges</u> (%)
Public U.S. Equity	30	25% - 35%
Public International Equity	25	20% - 30%
Private Equity	5	2% - 8%
Investment Grade Bonds	20	15% - 25%
High Yield Bonds	5	2% - 8%
Emerging Market Debt	5	2% - 8%
Real Estate	10	7% - 13%
Total	100%	

What is Rebalancing?

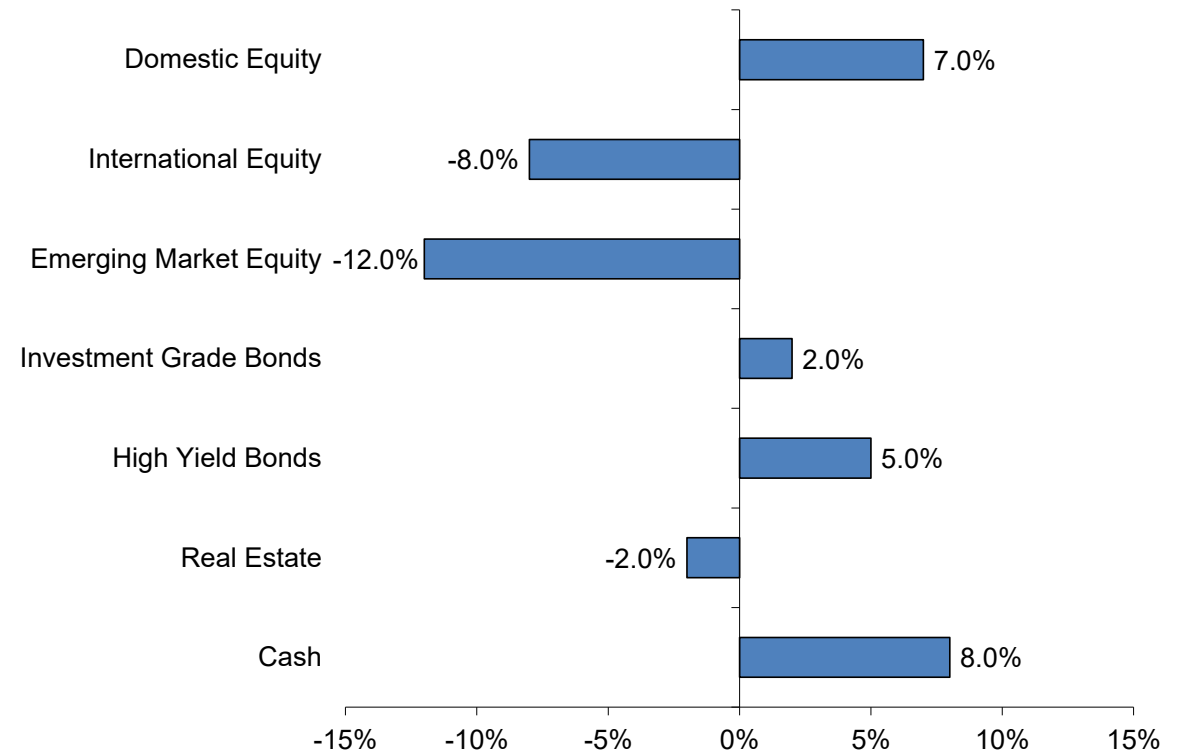
Rebalancing Is...

- Returning a portfolio back to its target allocation (or close to target) after a period of portfolio drift.
- Rebalancing is done in response to market movements.

Rebalancing Is...

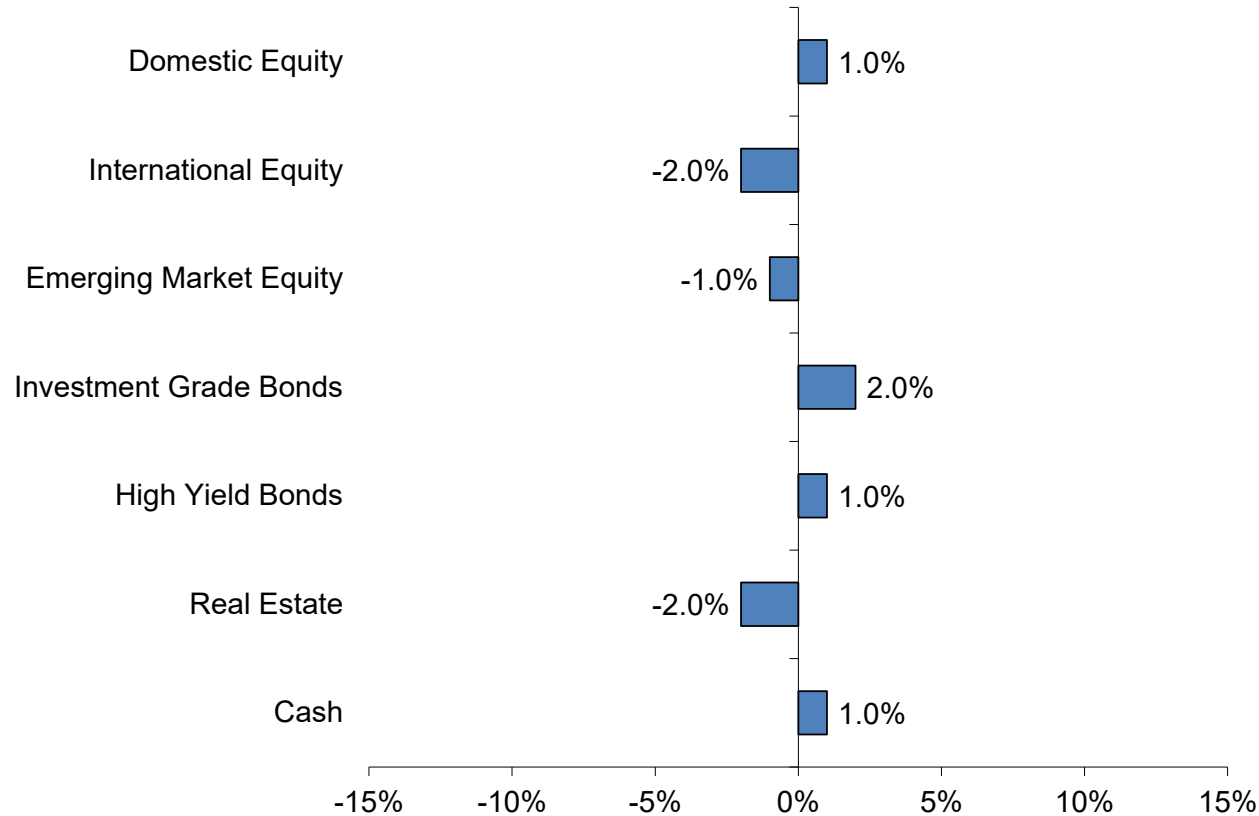
- Reducing overweight asset classes & adding to underweight asset classes.

Weight vs. Target Before Rebalancing



Rebalancing Is...

Weight vs. Target After Rebalancing



Why is Rebalancing Important?

Rebalance Because...

- Rebalancing seeks to control risk.
- Rebalancing helps trustees avoid taking unplanned risks.
- Rebalancing helps Trustees keep their pension plans asset mix closer to target.

Rebalance Because...

- Rebalancing helps reduce the chances of the roller coaster ride.



Rebalance Because...

- Trustees have a Fiduciary Responsibility to the plan participants.



- Don't gamble with your colleagues' retirement.

How Do You Do It?

Rebalancing Policy

- Provide details in your IPS.
- There are different types of Rebalancing:
 - Calendar Rebalancing,
 - Range Rebalancing,
 - Combination,
 - Tactical.

Calendar Rebalancing

- Monthly
- Quarterly
- Annually

Range Rebalancing

Allocation vs. Targets and Policy					
	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?
US Equity	\$138,649,172	22.8%	24.0%	17.0% - 31.0%	Yes
Developed Market Equity	\$68,895,357	11.3%	12.0%	7.0% - 17.0%	Yes
Emerging Market Equity	\$40,745,063	6.7%	10.0%	5.0% - 15.0%	Yes
Frontier Market Equity	\$10,297,426	1.7%	2.0%	1.0% - 3.0%	Yes
Investment Grade Bonds	\$69,898,326	11.5%	10.0%	5.0% - 20.0%	Yes
TIPS	\$38,728,689	6.4%	5.0%	3.0% - 7.0%	Yes
Emerging Markets Bonds (local)	\$21,208,343	3.5%	4.0%	2.0% - 6.0%	Yes
Emerging Markets Bonds (major)	\$24,247,121	4.0%	2.0%	1.0% - 3.0%	No
High Yield Bonds	\$45,441,727	7.5%	4.0%	2.0% - 6.0%	No
Bank Loans	\$16,542,362	2.7%	2.0%	1.0% - 3.0%	Yes

- Rebalance once assets have moved outside an acceptable range.

Combination Rebalancing

- Exactly what it sounds like.
- Combination of the calendar rebalancing and range rebalancing.

Tactical Rebalancing

- Don't do it!
- Trying to time the market.
- Challenging.
- Potential to get whipsawed.

Implementation

- Rebalancing costs money (most directly in the form of trade costs).
- Minimize costs by using ordinary cash flows.
- Money coming into the plan? If so, add to underweight asset classes.
- Index funds are often easy to trade.

Conclusions

Remember...

- **Set** asset allocation, **rebalance** back to target.
- Rebalancing is designed to control risk. Not enhance returns.
- Use ordinary cash flows to reduce trading costs.
- Common types = calendar rebalancing, range rebalancing, or a combination of both.

Rebalancing Your Portfolio

Questions?

Shawn Bowen
Senior Vice President
Meketa Investment Group

Aaron Lally, CFA, CAIA
Managing Principal
Meketa Investment Group

Understanding Non-Traditional Assets

Elizabeth Bowen Asset Consulting Group

Beth is a Consultant who works primarily with our institutional clients. She works on all aspects of the client relationship, including plan design and investment policy development, investment manager review and due diligence, and ongoing portfolio analysis and performance evaluation. Beth has over 17 years of experience in the financial services arena, where she has worked as an Investment Advisor Analyst for the Investment Management Consulting group at A.G. Edwards & Sons, as Vice President of Operations at Meramec Valley Bank, and as a Bank Examiner for the Missouri Division of Finance. Beth earned her Bachelor of Arts degree in Finance from Truman State University and her MBA from Webster University. She is a holder of the Charter Financial Analyst designation and is a member of the CFA Society of St. Louis and the CFA Institute.

Fall Trustee School

Understanding Non-Traditional Assets

Beth Bowen, CFA
Vice President

Traditional Assets

- Ready liquidity
- Frequently traded at high volume on organized exchanges
- Public equities, fixed income, cash

Non-Traditional Assets

- Broadly classified as alternative investments
- Does not fall into one of the traditional asset classes
- Often less liquid, private (although some vehicles trade on public exchanges)
- Private equity, hedge funds, **opportunistic investments**

Defining Non-Traditional, Opportunistic Investments

- Investments that are expected to have low correlation to traditional public or private market returns
- Returns tend to be driven by idiosyncratic factors rather than changes in the business cycle
- Opportunistic assets can generally be divided into three broad segments: Real Assets, Private Credit and Alternative Private Markets

Opportunistic Asset Types		
Real Assets	Private Credit	Alternative Private Markets
Farmland	Music and Healthcare Royalties	Infrastructure and AI
Timberland	Hard Asset Leasing	Blockchain and Cryptocurrency
Aquaculture	Litigation Finance	Gaming
Water Infrastructure and Rights	Catastrophe Bonds	Intellectual Property
Sustainable Food	Life Settlements	Collectibles
Conservation Easements	Specialty Lending	Sports Franchises

Source: ACG Research

Note: Table above is for illustrative purposes only. Asset type list is not meant to be all inclusive, and certain asset types may cross over more than one category.

Defining Opportunistic Investments

- Non-opportunistic assets often have relatively high correlations, except for U.S. bonds and core real estate
- Due to their unique qualities, opportunistic assets can help further diversify a portfolio beyond traditional alternative investments
- Certain opportunistic assets not shown below, such as music royalties and intellectual property, are difficult to model but are often still driven by factors uncorrelated to the traditional economic cycle

Correlation of Opportunistic Investments						
	U.S. Large Cap Equity	U.S. Bonds	Commodities	Core Real Estate	Private Equity	Private Debt
Non-Opportunistic Assets*						
U.S. Large Cap Equity	1.00					
U.S. Bonds	0.32	1.00				
Commodities	0.42	-0.28	1.00			
Core Real Estate	-0.07	-0.12	0.08	1.00		
Private Equity	0.76	0.15	0.57	0.14	1.00	
Private Debt	0.59	-0.17	0.66	0.10	0.74	1.00
Opportunistic Assets*						
Bitcoin	0.38	0.13	0.15	0.13	0.40	0.31
Catastrophe Bonds	0.35	0.36	0.08	-0.16	0.16	0.40
Farmland	0.38	0.41	-0.04	-0.24	0.24	-0.02
Timberland	0.10	0.18	0.08	0.07	0.27	0.02

Source: ACG Research

Note: Table above is for illustrative purposes only. Asset type list is not meant to be all inclusive, and certain asset types may cross over more than one category.

Blockchain Defined

Traditional System is Centralized



- One party controls the information
- Lower security and greater risk of impropriety

Blockchain System is a Decentralized, Distributed System



- Each user has real-time access to the same information
- Changes can only be made with group consensus

Blockchain Defined

- A blockchain is a decentralized database that securely stores information and distributes it across a shared network of computers
- Blockchains allow multiple parties to confidentially store and exchange information without the need for a trusted intermediary
- This exchange of information can come in different forms, including financial transactions, supply chain tracking, and record keeping
- When used appropriately, blockchains can offer greater trust, security and efficiency versus traditional, centralized databases



Currently, a primary use of blockchain technology is to facilitate cryptocurrency transactions

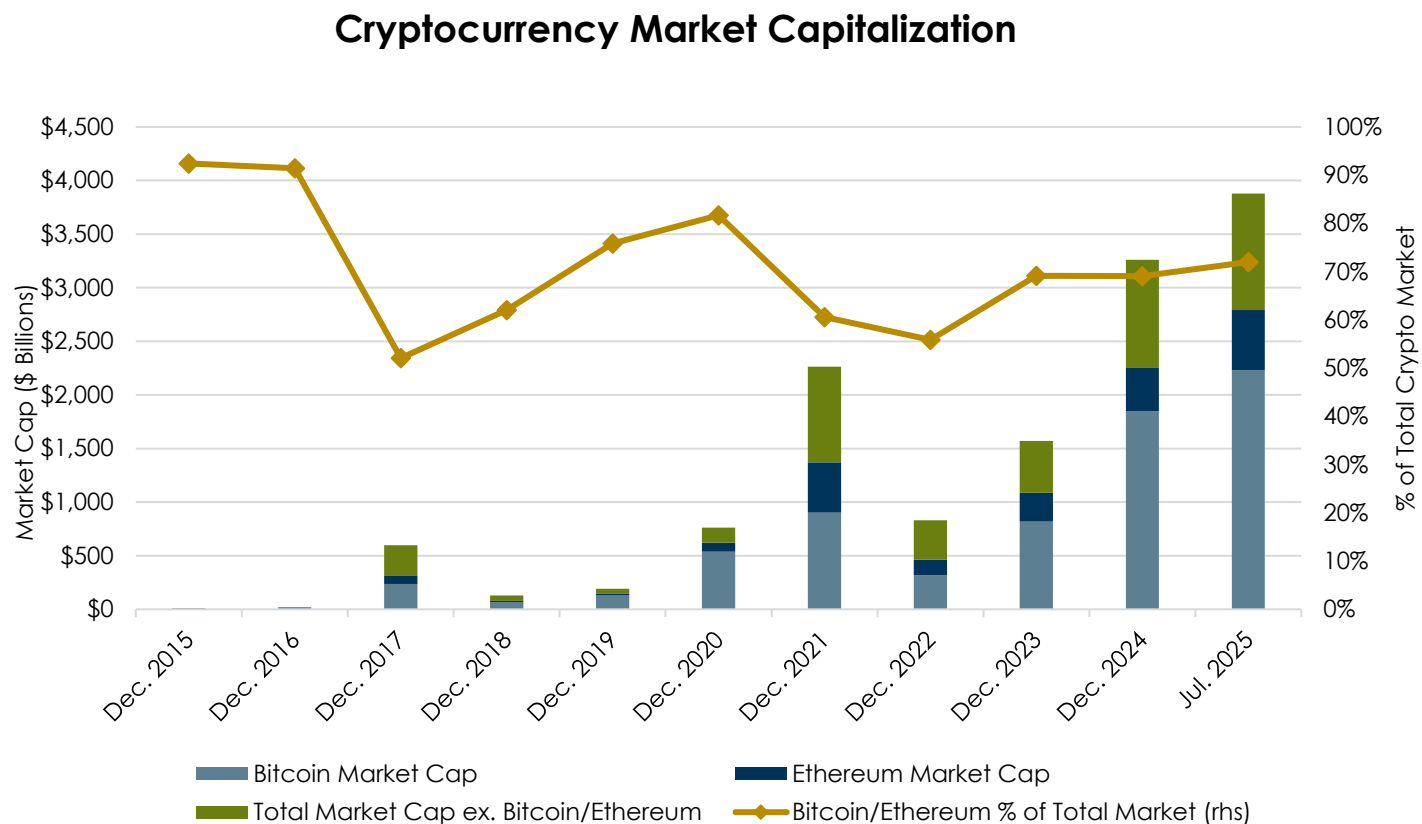
Blockchain - Cryptocurrency

*“A cryptocurrency is any kind of **peer-to-peer** digital money powered by the **Blockchain technology**. Since Bitcoin's appearance in 2009, hundreds of new cryptocurrencies have been created... The Blockchain itself is based on the **principles of cryptography**, hence the name "cryptocurrencies".”*

Source: Cointelegraph

- This technology means that crypto can provide an avenue for more consumers to access the global financial system, particularly in developing countries
- This possibility has helped drive strong investor interest in crypto, along with its high potential return and low correlation to traditional assets
- However, there are risks that investors should evaluate before considering an allocation to crypto, such as:
 - Volatility
 - Regulation (lack of/threat of/regional regulations)
 - Cyberthreats

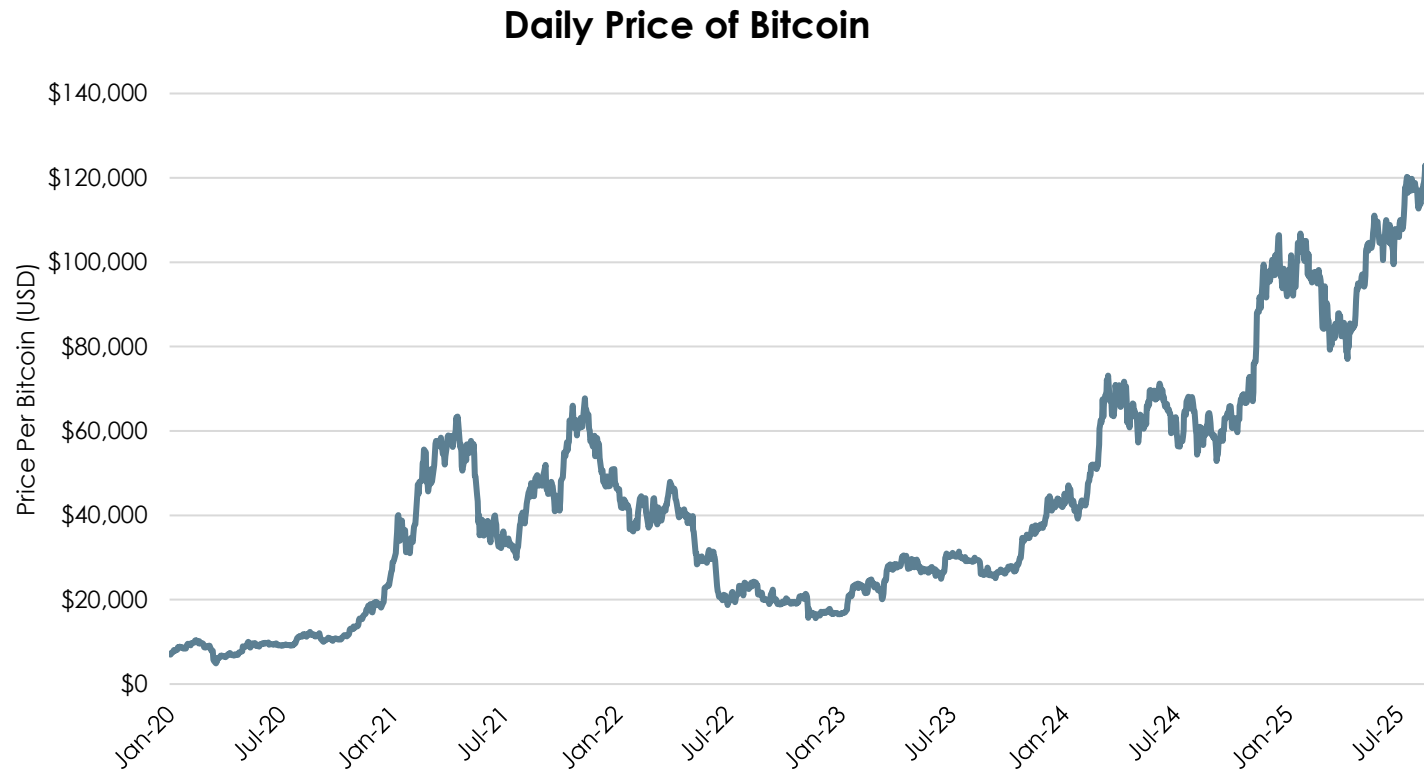
Cryptocurrency Growth in Popularity



Source: CoinMarketCap, ACG Research

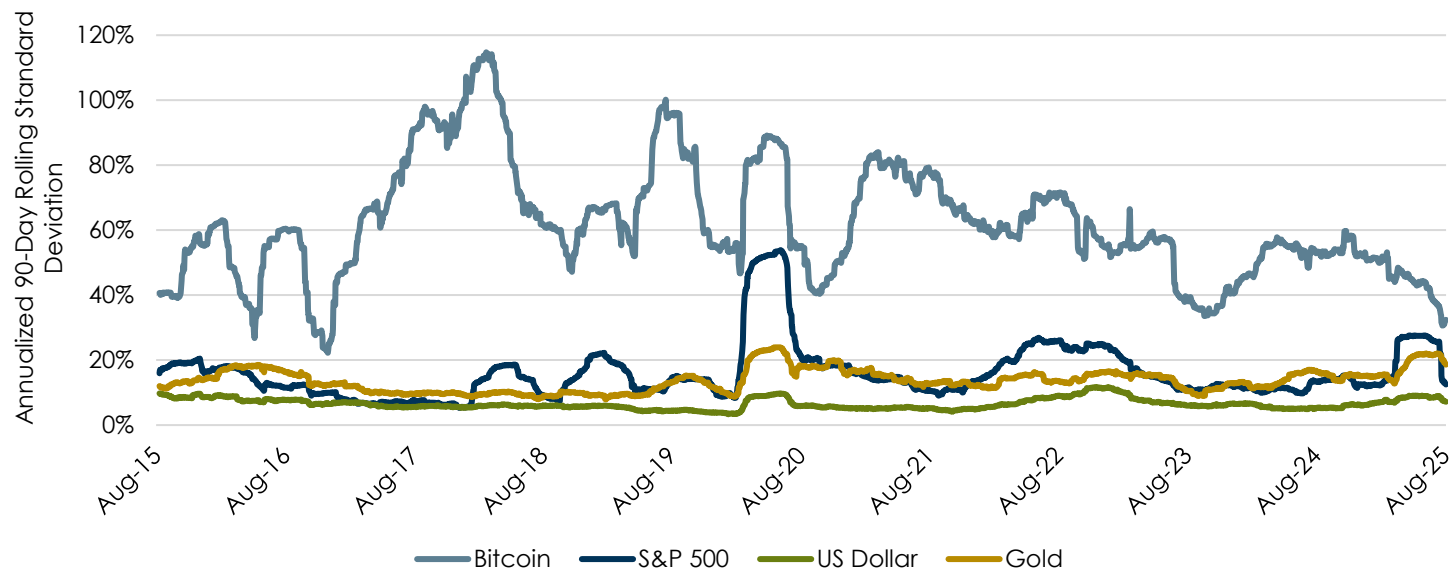
Bitcoin Price

- Broader market adoption and support for Bitcoin have helped drive substantial price appreciation for most of 2020 and parts of 2021
- However, Bitcoin continues to exhibit high volatility, with multiple drawdowns in 2021 and 2022 of greater than 20%:



Bitcoin – A Volatile Asset

- **Bitcoin continues to exhibit high realized volatility, particularly versus a traditional store of value such as gold**
- This can result in outsized losses during certain periods—in 2018, Bitcoin's price fell by 74% versus a 2% decline for gold and a 4% decline for the S&P 500
- **Bitcoin may still be a viable store of value for consumers in developing countries with high levels of inflation**, but its volatility likely remains too high for it to play this role for many investors today



Stablecoin & The GENIUS Act

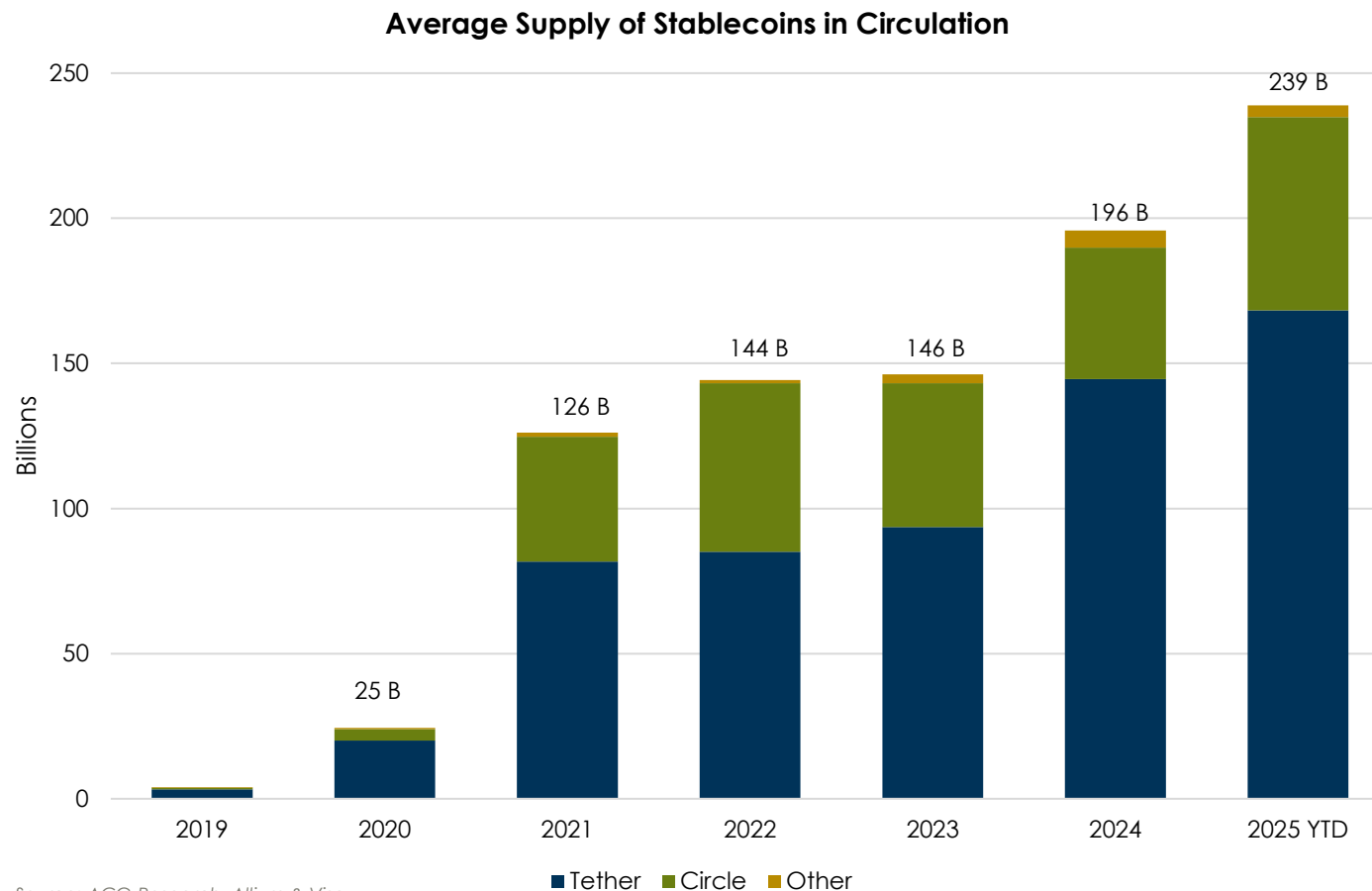
Stablecoins – a bridge between traditional finance and crypto

- Maintaining a stable value pegged to a fiat currency, mostly the USD
- Offering a faster, cheaper way to make payments through blockchain
- Avoiding traditional payment processors to reduce fees on merchants (and consumers)

The GENIUS Act – Guiding and Establishing National Innovation for US Stablecoins – 7/18/2025

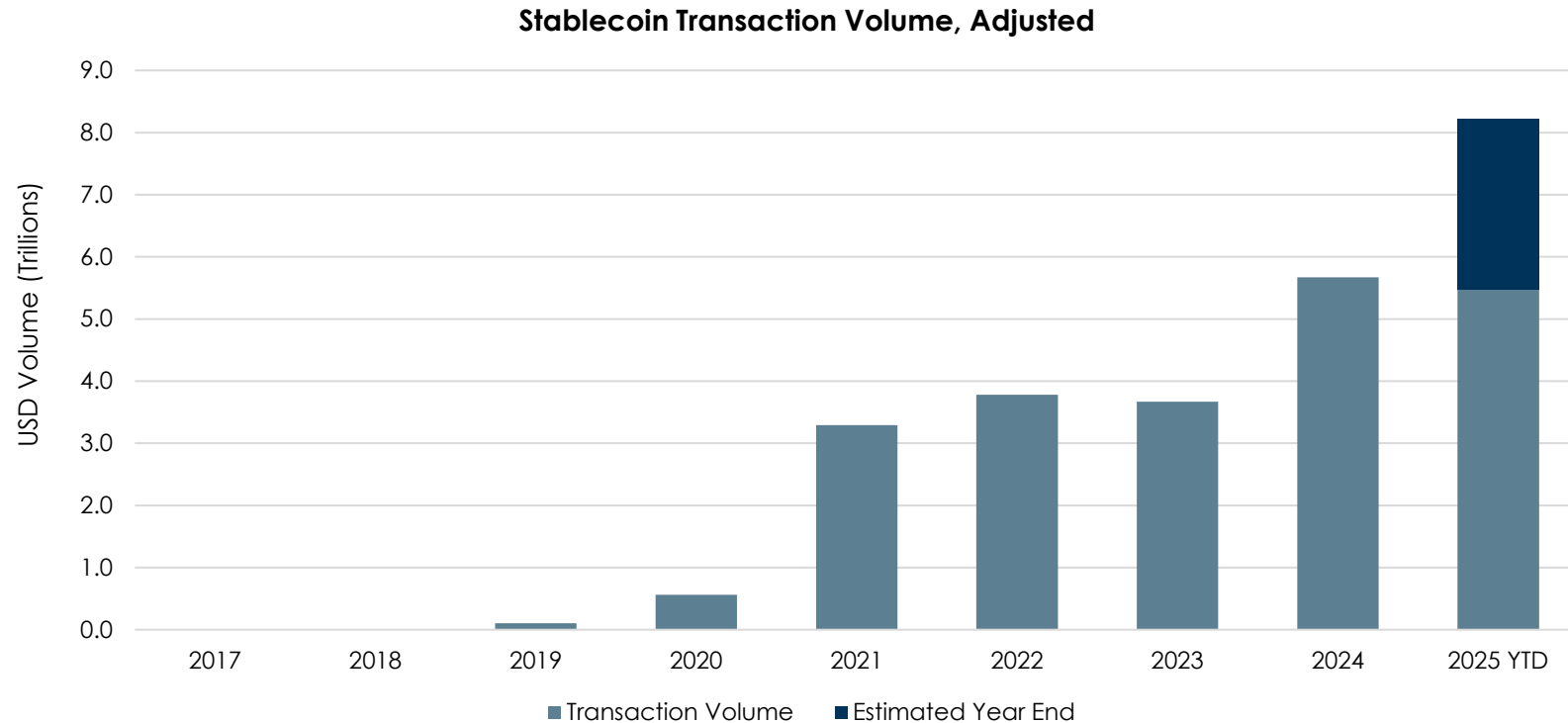
- Stablecoins must be 100% backed by liquid assets like US dollars and short-term t-bills
- Monthly disclosures from issuers on composition of reserves
- Strict marketing rules to protect consumers from deceptive practices
- Subjects stablecoin users to Bank Secrecy Act – (anti-money laundering and sanctions compliance)

Stablecoin Supply – two lead players



- **Tether** USDT currently fails to meet GENIUS Act requirements, which will require a second stablecoin offering or exiting the US market
- **Circle** (Ticker: CRCL), is already more aligned with regulators and the biggest benefactor of the GENIUS Act

Stablecoin Transaction Volume



–The rise of the stablecoin market has coincided with increasing transaction volume

–For comparison, PayPal's annual transaction volume is \$1.6 trillion and Visa's is \$13 trillion

Investing in Cryptocurrency

Representative Cryptocurrency Investment Vehicles			
Type	Advantages	Disadvantages	Examples
Direct Ownership	▪ High degree of customization and control ▪ Institutions can now partner with a qualified custodian to hold assets	▪ Complexity around trading, custody and taxes ▪ Concentration risk	▪ Bitcoin ▪ Ethereum ▪ CME Futures
Liquid Funds	▪ Partner with professional managers ▪ Access without the complexity of direct ownership	▪ Fees can be high and some only have monthly or quarterly liquidity ▪ Often new firms formed in the last several years	▪ Single-Asset Funds ▪ Diversified Funds ▪ Spot ETFs
Hedge Funds	▪ Active management with the ability to take both long and short positions ▪ Access to less liquid strategies such as Decentralized Finance	▪ Fees and liquidity ▪ Opaque strategies in an already complex space	▪ Multiple firms to consider
Venture Capital	▪ Offers access to crypto without betting on a particular currency or technology ▪ Access to infrastructure opportunities like exchanges and custodians	▪ Illiquidity and duration ▪ Manager selection is critical	▪ Diverse list of firms to consider

Infrastructure Defined

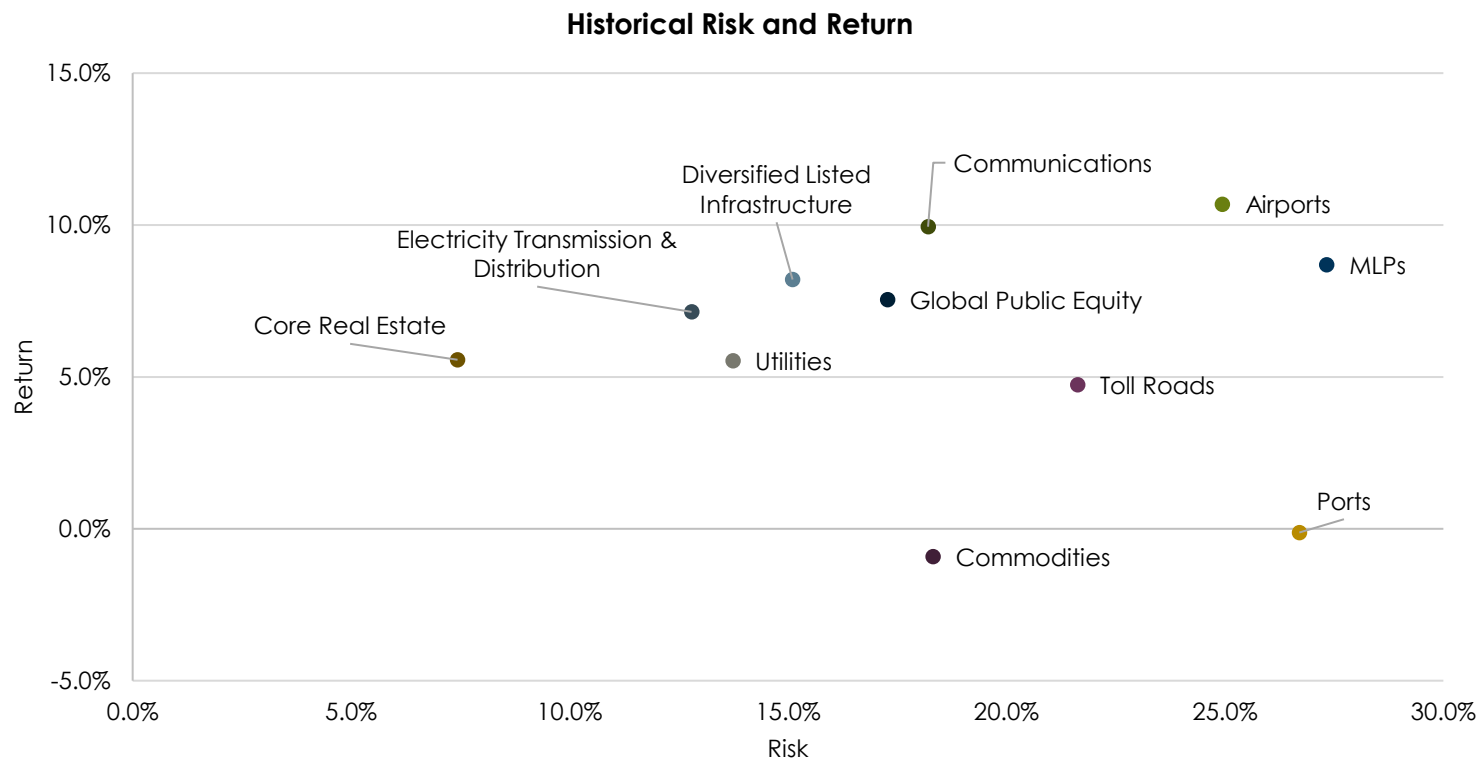
- Infrastructure refers to the basic physical systems needed for the operation of a society or enterprise
- Infrastructure assets can be categorized across three primary groups: **Utilities/Power, Transportation and Communications**
- However, there are many **different types of infrastructure assets** within each of these groups, **all with varying degrees of risk and return**
- There are also strategies that focus on social infrastructure (schools, hospitals, etc.), but these assets tend to have a high degree of government reliance and an allocation can often be achieved through niche private real estate strategies

Infrastructure Categories		
Utilities and Power	Transportation	Communications
Electricity	Toll roads and bridges	Cell towers
Water	Airports	Fiber networks
Gas	Rail networks	Data centers
Renewable energy	Ports	Wireless spectrum

Infrastructure – Risk and Return

Historical Risk and Return

12/31/05 – 6/30/25



Source: Bloomberg, NCREIF, PitchBook, ACG Research

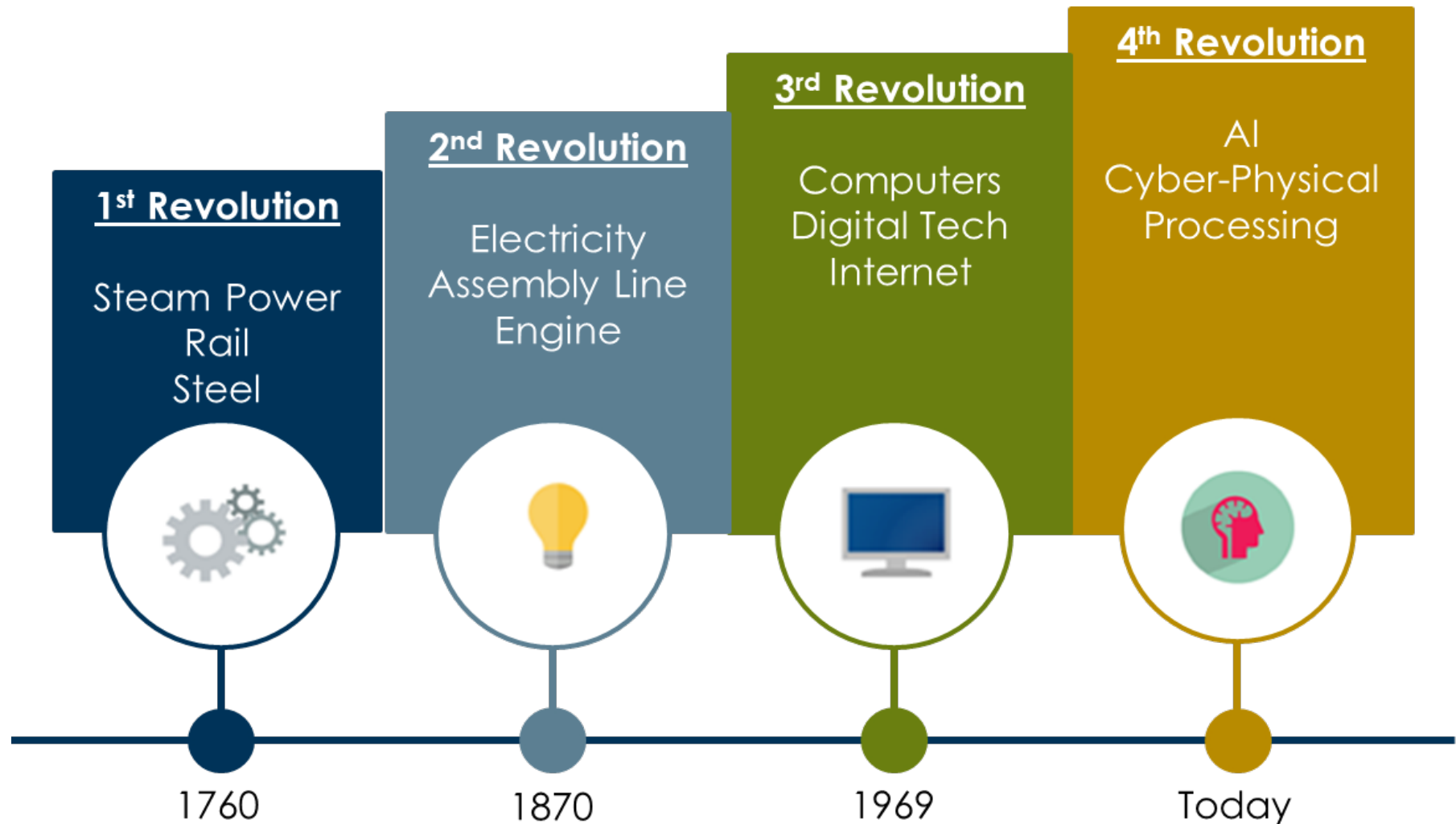
Infrastructure Investing

- In a diversified real assets portfolio, core real estate offers a steady foundation that can be complemented by **infrastructure strategies**
- **Listed infrastructure** has performed favorably versus global public equity and public infrastructure options like utilities
- **Private infrastructure** can enhance returns and reduce volatility versus listed options, but strategies are illiquid and have high minimums
- **Technology-driven** assets like communications can potentially deliver meaningful outperformance, though risk can also be higher
- **MLPs** offer an attractive current yield (~8%), but experience meaningful volatility

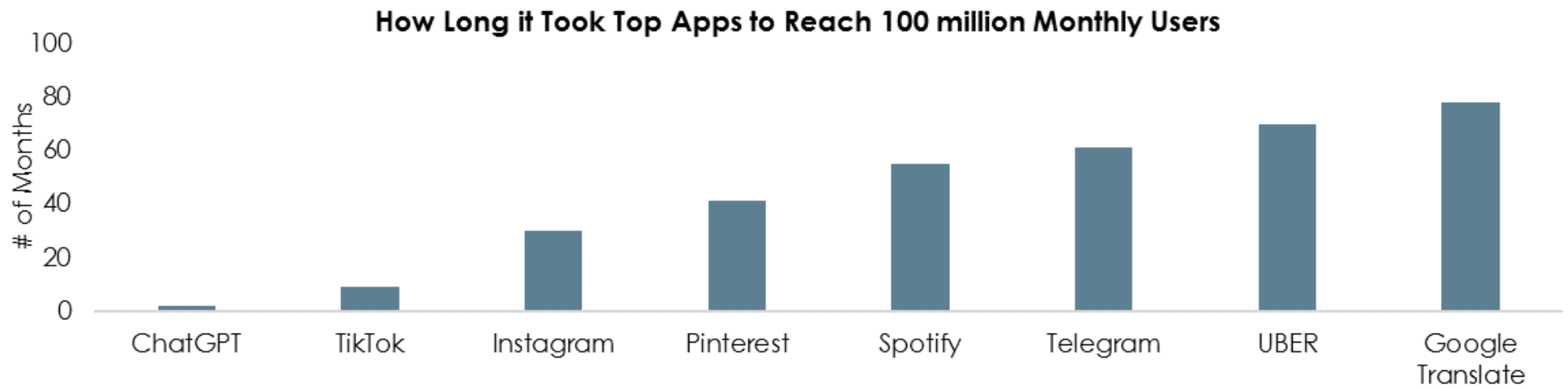
Infrastructure Investing

- **Generalists** invest in a broad range of infrastructure assets and often target core/value-added returns driven by steady income
- **Sector specialists** pursue specific asset types like digital infrastructure or renewable energy and often emphasize total return
- **Private equity** strategies tend to allow for greater specialization and offer broader access to non-traditional or less liquid asset types
- **Public equity** strategies often emphasize utilities and pipelines over assets like airports and rail networks that are less liquid

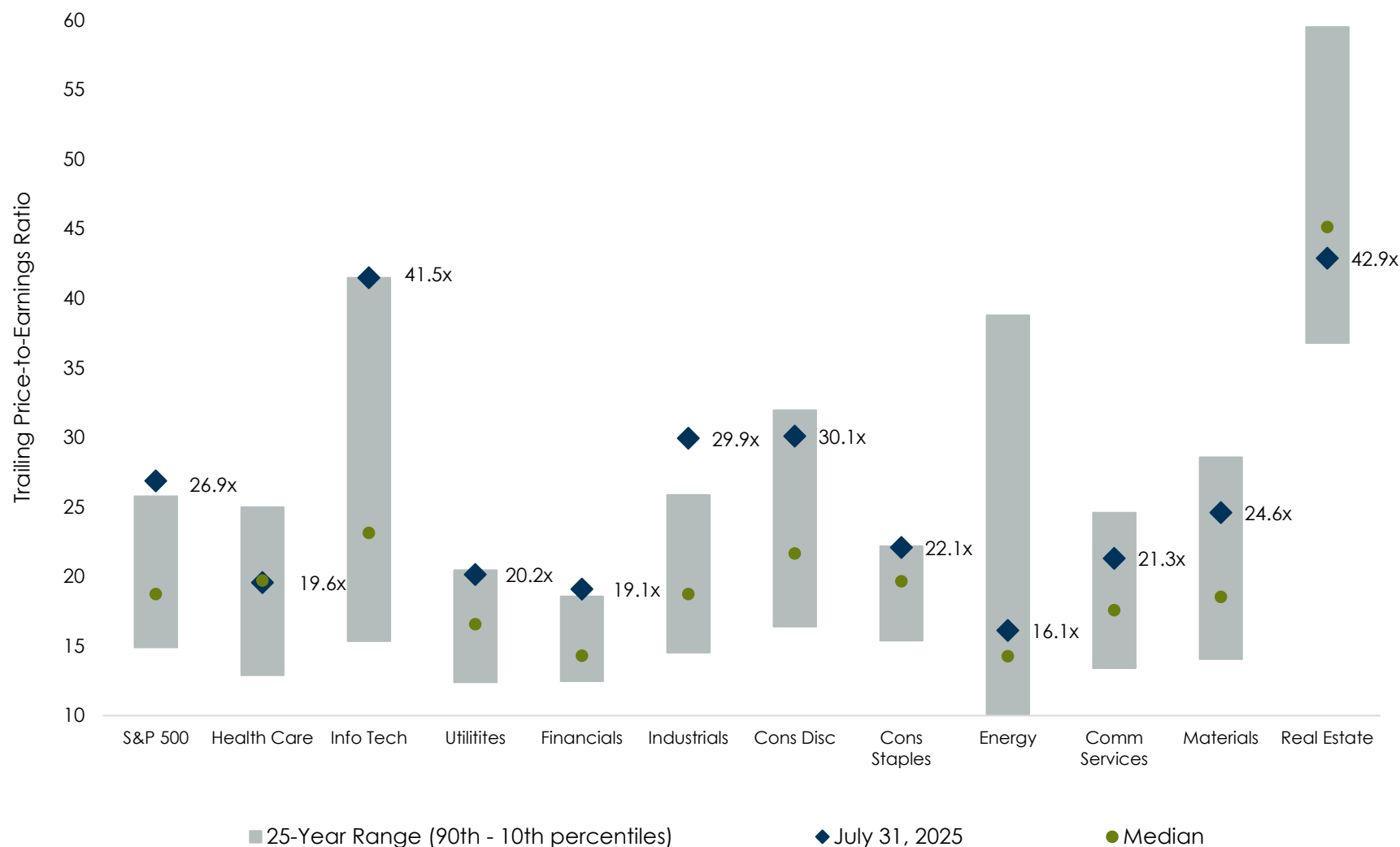
Artificial Intelligence – The Fourth Industrial Revolution



Artificial Intelligence – Excitement Moving Markets



Artificial Intelligence – More than just a tech play



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Understanding Wall Street

Dr. Mary Kelly

Commander/Dr. Mary Kelly, US Navy (retired) spent 25 years of active duty in the Navy. She was a military professor at the Naval Academy and a civilian professor at the Air Force Academy. She learned lessons in leadership in the first and second gulf wars and during 911. She uses real-world military and industry examples that resonate with participants.

From her days as a naval intelligence officer to her role as one of today's most influential economists, Commander/Dr. Mary C. Kelly has carved out an unforgettable career in leadership. Former chief of police, professor, realtor and HR Director – Mary has spent over 25 years teaching and training more than 40,000 military and civilian personnel. Mary is now on a mission to spread her message of success with audiences worldwide, sharing with them the secrets to being a true leader in today's workplace.

A high-energy keynote speaker, Mary is focused on using research, laughter, and experience to show professionals how to excel. Mary's relatable, no-nonsense approach inspires audiences to embrace their roles, surpass their goals, and plan for the future.

Mary is the author of 15 books on business growth, leadership, and today's economy. She is a speaker, coach, and trainer who has worked with hundreds of organizations and companies across the globe.



Wall Street: Enduring Impact on the Economy

Wall Street is more than just a street in Manhattan—it's a global financial powerhouse that shapes economies worldwide.

This presentation explores Wall Street's history, influence, controversies, and its role in both the U.S. and global markets.

Shaping the Future - Trustee by Trustee





Commander/Doctor Mary Kelly

CPAE, CSP, US Navy (ret)



Agenda

- ✓ What Is Wall Street?
- ✓ Understanding Wall Street
- ✓ Wall Street's Global Impact
- ✓ How Wall Street Influences the Economy
- ✓ Wall Street as a Bellwether
- ✓ Reactions to Economic Indicators & Company Results
- ✓ Criticisms
- ✓ Wall Street's Role & Legacy
- ✓ Key Takeaways



What Is Wall Street?

Wall Street is a metonym (word used as a substitute) for the U.S. financial industry, centered in lower Manhattan, New York City.

It's seen as the world's most important financial center, symbolizing both immense wealth and the complexities of capitalism.

Wall Street's influence extends far beyond its physical location.

Key Takeaways

- ✓ Wall Street refers to the financial district in Manhattan.
- ✓ It now represents the entire U.S. investment and financial industry.
- ✓ Wall Street's actions affect global financial systems.
- ✓ It acts as a bellwether for economic trends.
- ✓ Wall Street is both admired and criticized as a symbol of capitalism.





Wall Street's Physical and Symbolic Presence

Wall Street is just a few blocks long, but its symbolic power is immense.

The iconic Charging Bull sculpture epitomizes its aggressive financial spirit.

While many firms are headquartered elsewhere, "Wall Street" remains shorthand for the entire U.S. financial sector.

Who Makes Up Wall Street?

Wall Street includes investment banks, commercial banks, hedge funds, mutual funds, asset management firms, insurance companies, broker-dealers, currency and commodity traders, and other financial institutions.

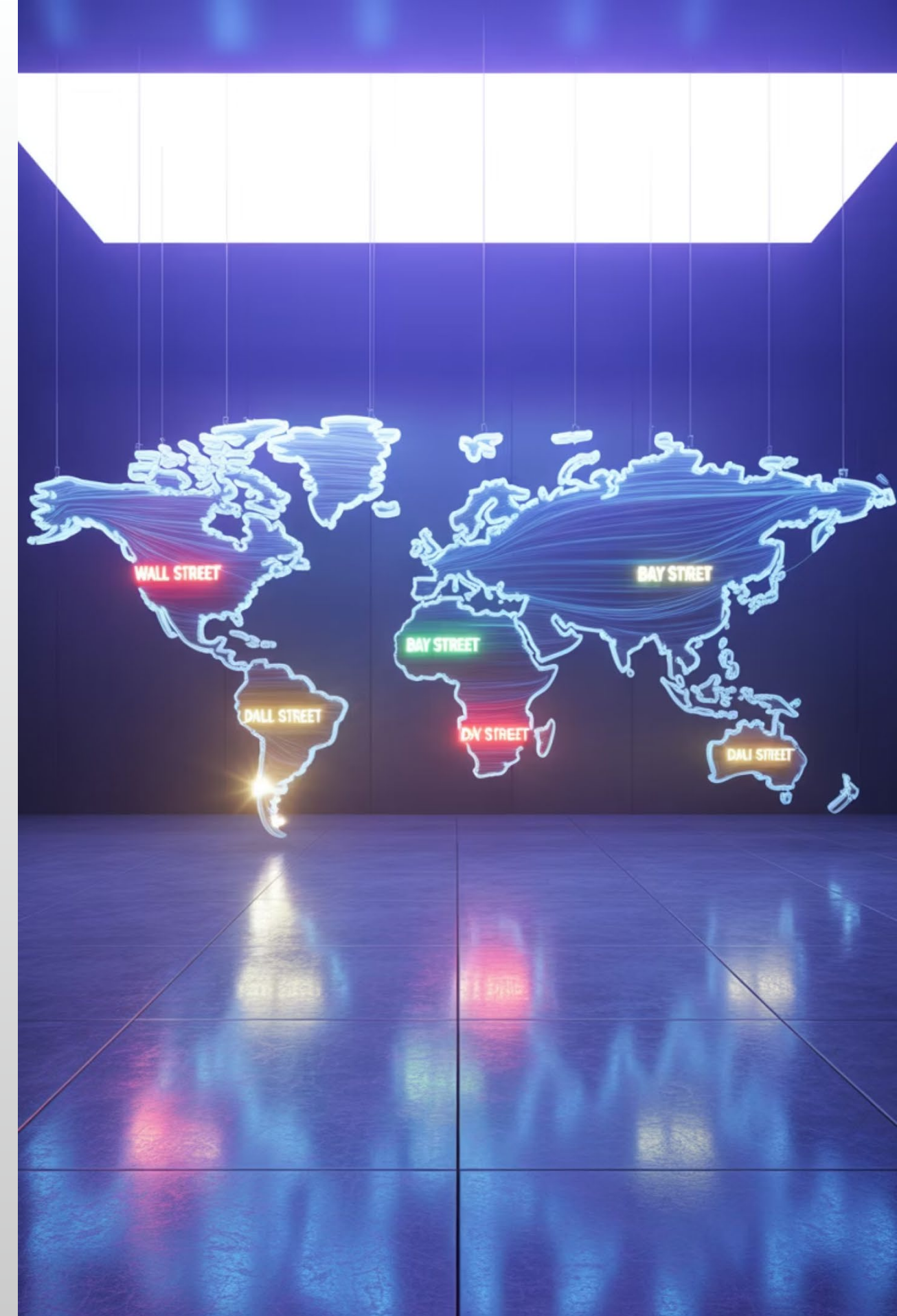
Its reach extends to cities like Chicago, Boston, and San Francisco, but the media still refers to the industry as "Wall Street."



Wall Street Around the World

The term "Wall Street" has inspired similar nicknames globally, such as Bay Street in Canada and Dalal Street in India, representing each nation's financial sector.

This reflects Wall Street's status as a global financial archetype.



A person in a suit stands on a city street, looking up at glowing blue energy lines that swirl and curve through the air. The background shows tall city buildings under a clear sky.

GLOBAL
MARKETS

Wall Street's Global Impact

The U.S. is the world's largest economy, with a 2024 GDP of \$29 trillion. Its market capitalization-to-GDP ratio is 155.6%, far ahead of Canada (143.8%) and India (111%).

Wall Street's dominance makes it a central hub for global financial activity.

Home to Major Stock Exchanges

Wall Street is not only home to the NYSE but also the Nasdaq Stock Exchange, the second-largest exchange globally.

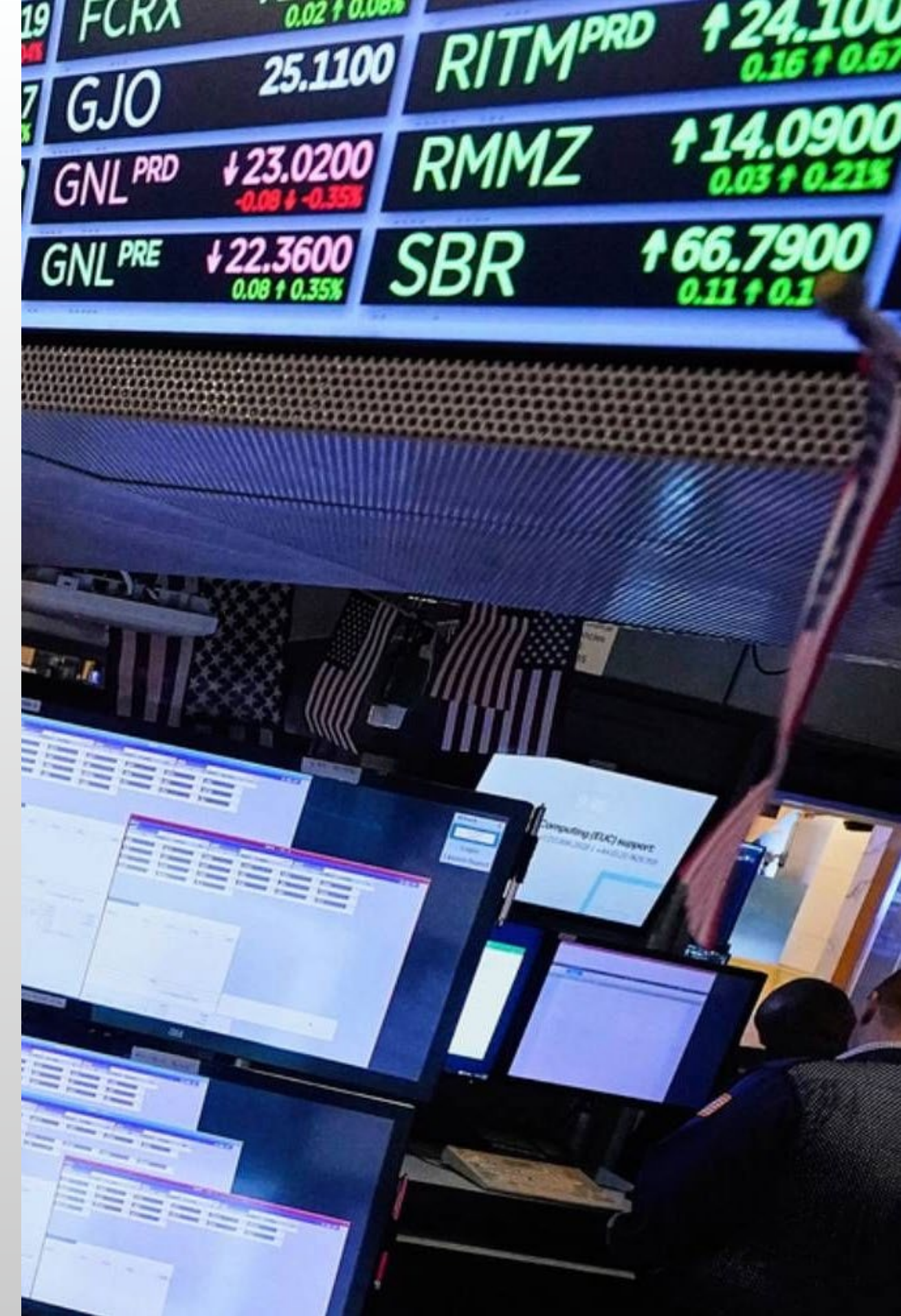
This concentration of financial power cements Wall Street's position as the epicenter of global finance.



How Wall Street Impacts the Economy

Wall Street influences the U.S. economy through the wealth effect, consumer confidence, and business investment.

Booming stock markets can make consumers feel wealthier, encourage spending, and enable companies to raise capital for expansion.



The Wealth Effect

When stock markets rise, consumers may feel richer and more willing to spend on big-ticket items.

Although some economists argue this effect is stronger during real estate booms, a hot stock market can still drive consumer spending and economic growth.



Invest in your dreams

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Consumer Confidence and Spending

Bull markets typically occur when economic conditions are favorable.

High consumer and business confidence leads to increased spending, which is crucial since consumer spending accounts for nearly 70% of the U.S. economy.



Business Investment

During bull markets, companies can raise capital by selling stock.

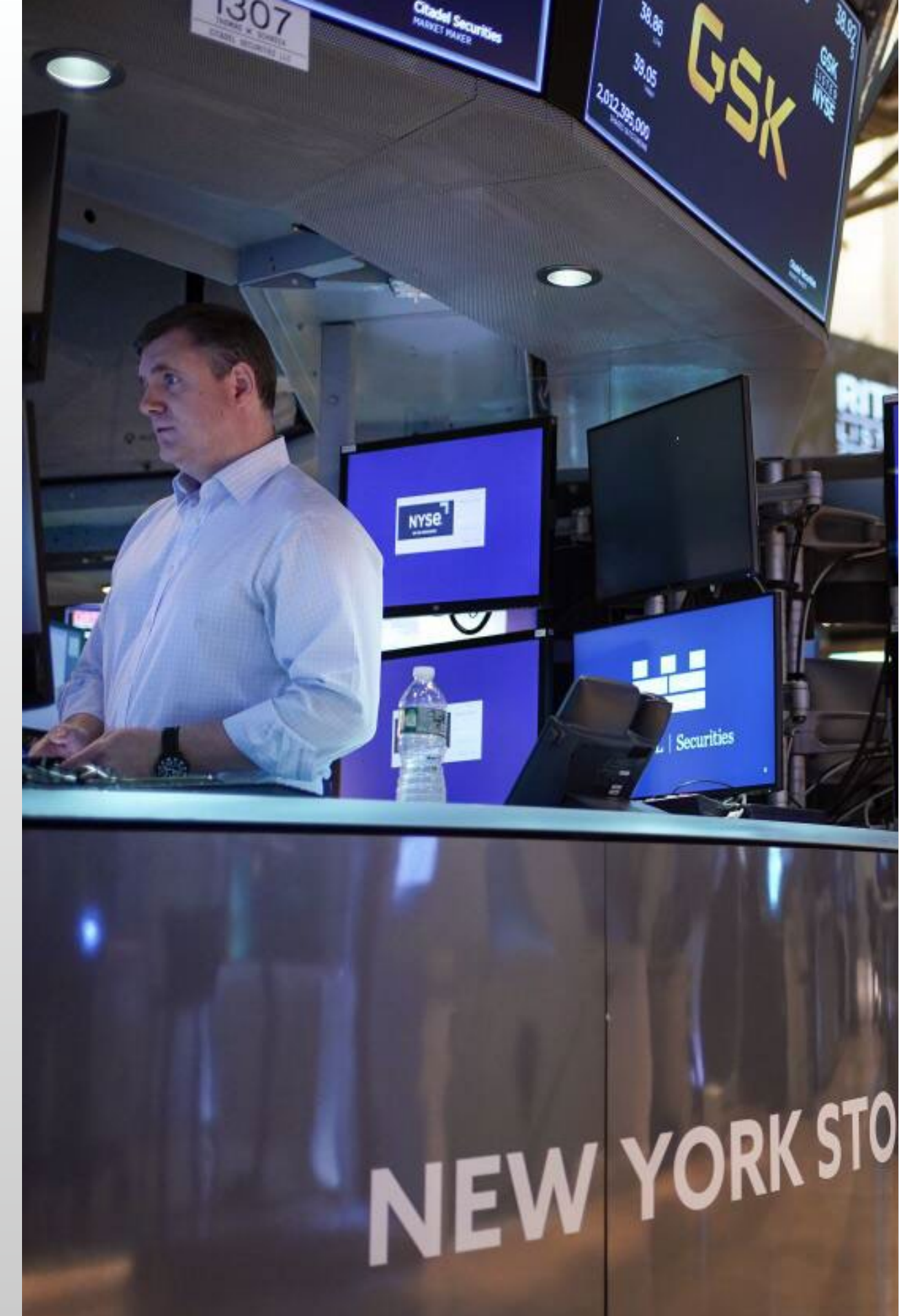
This capital is used to acquire assets, invest in growth, or buy competitors. Increased business investment boosts economic output and creates jobs.

Wall Street as a Global Bellwether

The stock market and the economy are closely linked.

In good times, they reinforce each other in a positive feedback loop.

However, downturns can signal or even trigger recessions, making Wall Street a key economic indicator worldwide.



Stock Market Crashes and Recessions

Major crashes, like the 1929 Wall Street crash, led to the Great Depression.

However, not all crashes predict recessions. Nobel laureate Paul Samuelson joked that the stock market had predicted "nine of the last five recessions," highlighting the market's imperfect forecasting ability.



Wall Street's Role in Global Recessions

The 2000-02 and 2008-09 global recessions both began in the U.S., triggered by the bursting of the technology bubble and the housing collapse, respectively.

Wall Street's influence means its downturns can ripple across the world.

2008 Financial Crisis



Recessions in the United States: A Data-Driven Journey

Nearly two centuries of American economic downturns, from the earliest financial panics to modern-day crises, through comprehensive data analysis and visual insights.



Goal: Learning from History to Navigate the Future

Historical Insights

Understanding recession patterns provides policymakers and businesses with crucial preparation tools for future economic challenges.

Improved Detection

Data-driven indicators like GDP-based recession indexes enable earlier identification and faster policy responses.

Emerging Risks

New challenges require vigilance: persistent inflation, geopolitical tensions, and technological disruptions reshaping the economy.

Proven Resilience

Two centuries of data demonstrate America's capacity for recovery and adaptation through informed policy action.



Shaping the Future - Trustee by Trustee



What is a Recession? What is a Depression?

Defining Economic Downturns



Recession is

A period of temporary economic decline during which trade and industrial activity are reduced, generally identified by a fall in GDP in two successive quarters as determined by the National Bureau of Economic Research.

Key Indicators

Measured by GDP, employment levels, personal income, industrial production, and retail sales performance across the economy.

Depression typically more severe and last longer than recessions

The Great Depression: The Deepest Economic Crisis

12

Years Duration

1929 to 1941 with intermittent partial recoveries

30%

GDP Decline

Economic output contracted by over 30% at its peak

25%

Peak Unemployment

One in four Americans was unemployed at the crisis peak



Post-WWII Recessions: Shorter and Less Frequent

The post-war era brought more stable economic cycles with improved policy tools and institutions.



Reduced Duration

Average recession length 1945-2001: 10 months versus 22 months pre-1919, showing improved economic management.



Early 1980s Double-Dip

Severe anti-inflation measures led to back-to-back recessions with unemployment peaking at 10.8%.



1973-75 Oil Crisis

16-month recession with 3.2% GDP decline and 9% unemployment peak, triggered by energy price shocks.



2007-2009 Great Recession

Longest since Great Depression at 18 months, 4.3% GDP decline, 10% unemployment from housing bubble collapse.

GDP Growth and Recession Periods (1967-2025)

Federal Reserve economic data shows sharp contractions during the 2008 financial crisis and the brief, but severe, COVID-19 recession in 2020 stand out prominently.

- ❏ The GDP-based recession indicator helps economists identify turning points in the business cycle more accurately than traditional methods.



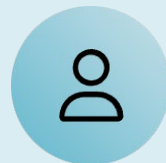
ECONOMIC RESILIENCE: A PATH FORWARD

The COVID-19 Recession: The Shortest on Record



Duration: 2 Months

February to April 2020 - the shortest recession in U.S. history, demonstrating unprecedented policy response speed.



GDP Impact

9.1% annualized decline in Q2 2020, showing the immediate severity of pandemic-induced economic shutdown.



Labor Market Shock

Unemployment spiked to 14.8% in April 2020, the highest since Great Depression data collection began.

Unprecedented government stimulus packages and coordinated reopening efforts led to the fastest economic recovery from recession in American history.



Wall Street as a Catalyst for Growth

Wall Street can also drive global economic expansion.

The 2003-07 boom began with a rally on Wall Street, and the recovery from the 2008-09 recession also started with a strong market rebound in March 2009.

Why Wall Street Reacts to Economic Indicators

Stock prices are based on current information and future expectations.

When economic indicators are released, Wall Street reacts if the results differ from expectations, causing shifts in equity indices like the Dow Jones or S&P 500.



Consensus Forecasts and Market Reactions

If economic data matches expectations, markets are usually stable.

Better-than-expected data can boost markets, while disappointing results can trigger declines.

For example, weak payroll numbers may prompt investors to sell, lowering stock indices.



Institutional Investors and Market Moves

Large institutional investors, such as pension funds and mutual funds, closely follow Wall Street forecasts.

If analysts lower growth targets, these investors may exit long positions, leading to significant market movements.



Why Wall Street Reacts to Company Results

Wall Street analysts develop financial models and forecasts for companies.

When a company reports earnings that beat or miss these "Street expectations," its stock price can rise or fall sharply in response.



Wall Street Criticisms

Wall Street has faced significant criticism, including accusations of being a rigged market, encouraging excessive risk-taking, and creating financial instruments that contributed to crises.

These criticisms have fueled public distrust and movements like Occupy Wall Street.



Risk-Taking and Windfall Profits

The Wall Street business model can encourage risky bets, as traders can earn huge profits if successful but may not bear the full consequences of losses.

This dynamic contributed to the 2008-09 mortgage-backed securities meltdown.



Disconnect from Main Street

Critics argue that Wall Street is disconnected from the real economy, with highly paid middlemen who don't generate value for Main Street.

This disconnect fuels resentment and perceptions of inequality.



Wall Street's Impact on Ordinary Americans

Most Americans invest their retirement savings in 401(k)s, IRAs, SEPs, or similar accounts, which are tied to the stock market.

When markets fall, retirement savings shrink.

Stock values also affect companies' ability to invest and hire.





Wall Street's Enduring Legacy

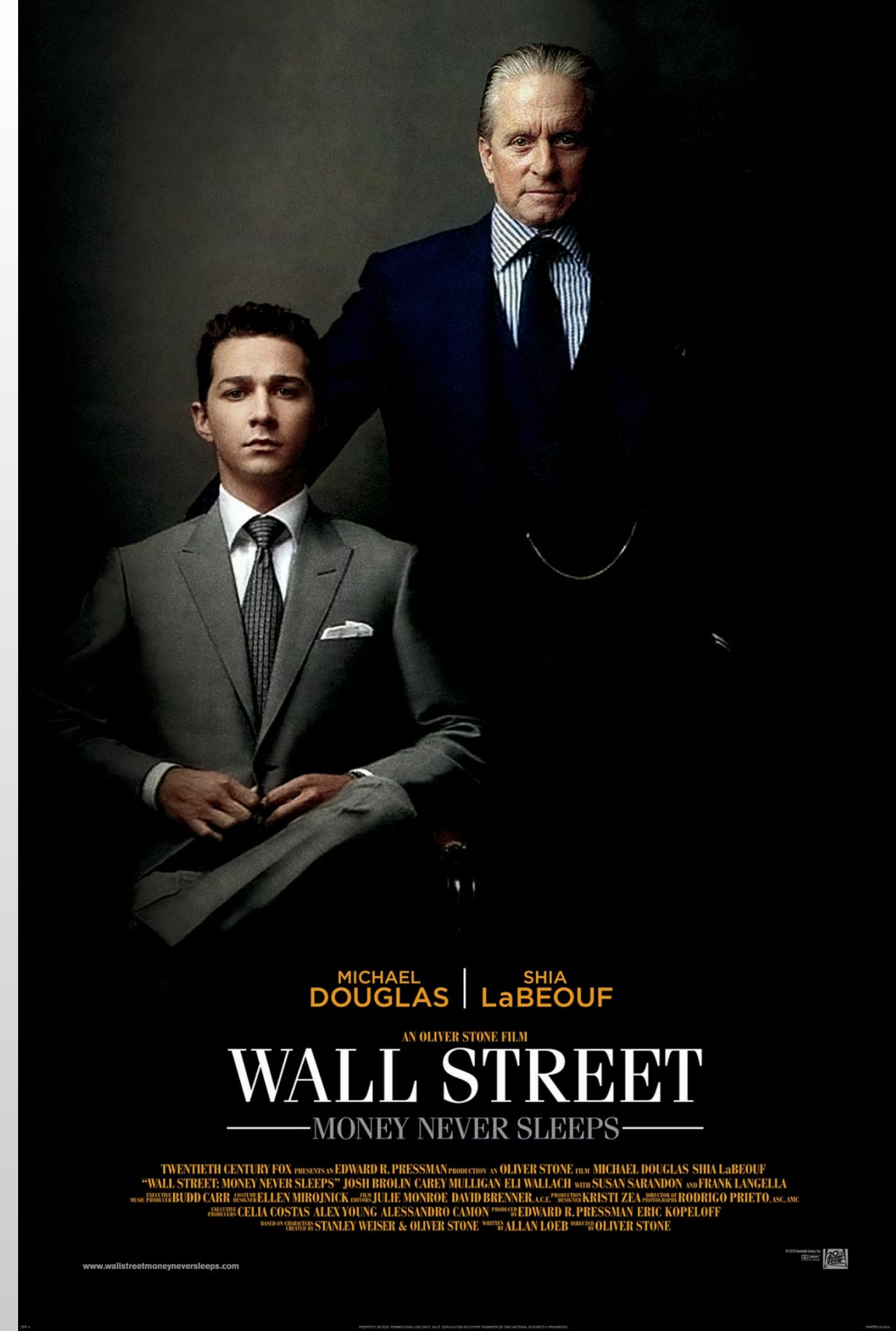
Wall Street consists of the largest stock exchanges and financial firms, employing thousands.

As the trading hub of the world's biggest economy, its impact is felt not just in America, but globally.

Wall Street in Popular Culture

Wall Street's influence extends to movies, books, and media, shaping public perceptions of finance.

Films like "Wall Street" and "The Wolf of Wall Street" highlight both the allure and excesses of the industry.





FAQs: Wall Street

✓ What does Wall Street do?

It invests, manages funds, and provides financial services.

✓ How does it affect the economy?

Through investment, capital raising, and market signals.

✓ Why is it called Wall Street?

Named after a protective wall built by Dutch settlers.



Your world. Your investments.

Key Takeaways

Wall Street is the heart of global finance.

It drives economic growth and signals downturns.

Its actions affect everyone, from investors to ordinary Americans.

Wall Street faces both admiration and criticism for its power and influence.



The Bottom Line

Wall Street is more than a place—it's a powerful force shaping economies, livelihoods, and the future.

Understanding its role, influence, and controversies is essential for anyone interested in finance or the broader world economy.

Improve productivity and morale!



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FPPTA Glossary of Terms

12(b)-1 Fees: Named for the SEC rule that permits investments companies that sell mutual funds to charge an additional, ongoing fee for advertising and marketing the funds.

218 Agreement: An agreement between the Social Security Administration and state government to provide Social Security coverage for public employees in accordance with state statutes.

401(a) Qualified Plans: A retirement plan that meets the requirements of IRC 401(a) and certain other sections. The plan, its employees, its employers, and its retirees receive favorable tax status.

401(a)(17) Limit: An annual limit on the amount of compensation used to calculate an employee's contributions to a pension plan to maintain plan's qualified status under IRC.

401(h) Retiree Medical Account: An account that contains money contributed on a pre-tax basis. A retiree may use the money to pay medical expenses for himself or herself, spouse, or dependents. The IRC does not tax the retiree on this money.

401(k) Plan: An employer-sponsored retirement saving account that permits employees to divert part of their pay into the plan and avoid current taxes on that income. Money directed to the plan may be partially matched by the employer, and investment earnings within the plan accumulate tax until they are withdrawn. The 401(k) is named for the section of the federal tax code that authorizes it.

403(b) Plan: Section 403(b) of the Internal Revenue Code permits employees of certain non-profit organizations such as schools and hospitals to set up tax-deferred retirement saving accounts. The plans are designated to compensate for the absence of profit-sharing plans at these organizations. Many such plans permit investments in mutual funds or annuities.

414(d): An IRC provision that defines governmental as a plan established and maintained for its employees by the government of the United States, by the government of the United States, by the government of any state or political subdivision, or by an agency or instrumentality of any of the foregoing.

414(h)(2) Pickup: An IRC provision that permits state or local government employers to treat employee contributions to a retirement plan as though the employer made them. The pickup allows an employee to exclude such contributions in gross income for tax purposes until the individual draws a retirement benefit.

415 Limits: An IRC provision that limits benefit payments from and contributions to pension plans. If plans fail to follow these limits, they may lose their qualified status. Section 415(b) sets an annual dollar limit on the benefit that can accrue or be paid to participants through a defined benefit plan in a given year, whereas Section 415(c) limits the total amount of employee and employer contributions that can be made annually to an individual's defined contribution plan.

415(m) Plan: An IRC provision that allows a retirement plan to pay a benefit that exceeds the 415 limits, but is otherwise lawful under statute of the state or local government.

457 (b) Plan: A defined contribution plan, also called a deferred compensation plan, available to all state and local governmental entities. Such plans permit employees to defer (that is, move into a tax-favored account) a portion of their pay. The employee typically directs the investments. Because of the tax-favored treatment, the employee pays no tax on contributions and earnings until the individual separates from service or meets other criteria. The IRC limits the amount of the yearly deferrals. The limit is adjusted for inflation.

529 Plans: Qualified state-administered tuition programs developed by state legislatures to encourage savings for postsecondary education. There are two types of plans: savings plans and prepaid tuition plans; both provide tax-free earnings on their investments.

8-k: A report required by the SEC of companies that announces unscheduled significant events of interest to shareholders and investors. Filed as soon as these events occur (rather than at the time of your next quarterly report) and available free on the SEC's website.

10-k: An audited annual report required by the SEC that provides a comprehensive summary of a company's financial performance and its outlook for the future and is available free on the SEC's website. Often called the annual report, the 10-k typically contains more detailed information about the company's financial condition than the annual report.

10-q: A quarterly report required by the SEC that offers an unaudited financial statement and continuing view of the company's financial position. Filed for each of the first three quarters of the company's fiscal year, and copies are available free on the SEC's website.

Absolute Return: Measures the actual rate of return of assets in a fund without regard for how that return compares to other funds. (See rate of return, relative return)

Accrual Rate: The percentage of salary level at which a pension benefit builds up, or accrues, over years of credited service in a typical defined benefit plan.

Accrued Benefit: The pension benefit an employee earns through participation in a plan as of a specific date. In a defined benefit plan, once vested, this is the annual benefit an individual receives at normal retirement age. In a defined contribution plan this is the balance in the plan account, whether vested or not.

Accrued Interest: Since bonds pay a fixed coupon on a regular schedule, bonds will, at any point, possess interest that is due to the bond holder. This accrued interest is bought and sold along with the principal amount when the bonds are traded. Accrued interest should be added to any accounting of portfolio market value; if the portfolio is liquidated, the account receives the accrued interest from each issue that is sold.

Accrued Liability: The actuarial present value of the plan's pension obligations as determined by an actuarial cost method. It projects the total obligation to cover the costs to provide pensions for former and present employees and builds these assets over time to cover the liabilities.

Active Management: An investing approach that aims to focus on specific investments to create a portfolio that outperforms the broad market benchmark for the targeted securities.

Active Participant: An employee not yet retired, participating in a retirement plan, whereby contributions are made to the plan by the active participant, the employer, or both.

Actuarial Assumptions: Projections of anticipated behavior associated with certain plan variables (such as mortality rates) that are developed by an actuary and then used to make estimates of future plan costs.

Actuarial Cost Method: A formal actuarial process used to measure the present value of future pension benefits and perhaps administrative expenses. Its purpose is to develop an allocation of pension costs and needed contributions to ensure that the plan is sufficiently funded to meet all pension obligations.

Actuarial Gains and Losses: Measures of the differences between actual plan experience and the experience that the plan's actuary had predicted based on the actuarial assumptions.

Actuarial Impact Statement: A description of the liabilities and funding requirements related to a proposed change in the retirement system.

Actuarial Valuation: The amount of pension contributions the employer will have to make each year to fund the actuarial liability.

Actuarial Value of Assets: The total value of a plan's assets used for performing an actuarial valuation.

Actuary: Professional who guides the fiduciaries of a pension fund with information for making sound short and long range planning decisions for events that might occur next year, 5, 10 or more years from now. Using actuarial, accounting, legal, financial, investment and human resource planning assumptions to assist with the projections.

Adjusted Gross Income (AGI): Taken from the individual's income tax return, this term means total annual income, less tax-exempt income, less other 'adjustments to income' such as deductible IRA contributions, self-employed health insurance premiums.

Administrator: The person appointed by a court to administer and settle the estate of a person dying without a will or the estate of a person whose will appoints an executor who cannot serve.

After-Tax Contributions: The Contributions to a retirement plan from wages that have been subject to income taxes.

Age Discrimination in Employment Act (ADEA): The 1967 federal law that prohibits discrimination in employment on the basis of age with respect to individuals who are 40 years of age or older. It specifically prohibits denying employment benefits to older employees, including long-term and short-term disability benefits, severance benefits, pension, or other retirement benefits, and early retirement incentives. The EEOC administers the ADEA.

Aggregate Cost Method: An actuarial cost method that spreads any unfunded present value of future benefits as a level percentage of future payrolls.

Alpha: The alpha is the premium or loss that a manager adds or subtracts by active management above or below the equivalent theoretical decision to be invested in the market represented by a select market index and "risk free" US Treasury Bills.

Alternative Investments: An investment in a nontraditional asset class typically not traded on a public market.

American Depositary Receipts (ADR): A security, created by a US bank and representing shares of a foreign security held in trust by the bank, that can be bought and sold like other US securities on domestic exchanges, thereby providing investors access to foreign securities without having to trade on foreign markets.

American Stock Exchange (AMEX): A private, not-for-profit organization located in New York City that handles roughly one-fifth of all securities transactions in the United States.

Annual Report: A report detailing the retirement plan's performance, including financial status and, typically, a summary of investments and investment performance. The annual report can also be the document issued by the public companies to disclose corporate information such as assets, liabilities, and profits to their shareholders.

Annual Required Contribution (ARC): The employer's periodic required contributions to a defined benefit plan, as defined by GASB. If an employer's contributions fall below the ARC, the shortfalls must appear in the employer's financial statements.

Annualized Return: Rate of return calculated for an interval of greater than 1 year, such as 2 years or 5 years, expressed in terms of the "average" return for each of the years in the period. (See rate of return)

Annuitant: An individual entitled to receive or receiving benefits from a plan.

Annuitize: The process of converting a sum of money into a series of payments by essentially trading its present value for future guaranteed periodic payments for a certain time period or for life.

Annuity: A series of regular payments, usually from an insurance company, guaranteed to continue for a specific time, usually the annuitant's lifetime, in exchange for a single payment to the company. With a deferred annuity, payments begin sometime in the future.

Asset: Something with a monetary value, e.g., stocks, real estate, accounts payable. Net assets are assets minus liabilities.

Asset Allocation: Proportion in which investments are divided among various types of securities, such as equities, bonds, cash equivalents or other assets. There are different levels of risk associated with different asset allocations. Overall risk, however, is reduced with an allocation to more than one type of security.

Asset-Backed Security: A bond backed by a pool of assets, often loan instruments that are usually hard to trade in their individual form. These assets are turned into tradable securities by their issuers and include, for example, home equity loans and credit card receivables.

Asset Class: Groupings of securities by type, such as equities, bonds, cash, etc.

Asset Valuation: The value of the assets of the plan, determined by using a standard methodology.

Average Life: For a bond with early redemption features (such as mortgage pass-through bonds) the average life is when, under typical conditions, half the principal has been returned to the bond holder. Non-callable bonds' average life is the same as their maturity.

Back End Load: A sales charge or commission due when an investment is sold; also called an exit or redemption fee, or a deferred sales charge. .

Balanced Fund: A diversified fund that holds a combination of different types of investments such as equities, bonds, cash or other assets. (See portfolio)

Balanced Market Index: This unique index is a blended market return benchmark reflecting the precise market equivalent asset mix from a portfolio's actual asset allocating experience. This custom theoretical index is constructed to show the equivalent of investing in the stock, bond and cash market indexes in precisely the same proportion as a real total pension fund has been committed, on average, to its own managed allocations to equities, bonds and cash. The balanced market index can be compared to the fund's actual returns for another measurement of relative performance.

Basis: Your cost, used in figuring gain or loss, when you sell a house or other property, such as stocks, bonds, or mutual funds. On real estate, basis includes the price you paid plus the cost of improvements.

Basis Points (BPS): A term that measures the relation between a bond's price and yield, used in calculating fees or asset performance. Equal to 1/100th of 1%. One basis point = .01% or .0001; think of it as a penny or 100 basis points equals \$1 or 1%. 0.75%, for example, is 75 basis points.

Basis Price: A method of pricing municipal bonds, Treasury bills, and certain other instruments, expressed as yield to maturity.

Bear Market: A declining trend in stock markets.

Bearish: A bear thinks the market is going to go down. This makes bearish the opposite of bullish.

Before-Tax Dollars: Gross earnings before federal and state income taxes and FICA taxes are deducted, thereby reducing the total amount of earnings subject to taxes, also called pre-tax dollars.

Benchmark: An unmanaged group of securities such as market index (Dow Jones Industrial Average Index) whose return can be used to measure investment performance of overall fund as well as that of individual investment managers.

Beneficiary: Person or organization entitled to receive income and/or principal under the terms of a trust, will, or defined benefit retirement plan. The person designated to receive the benefits of an insurance policy or a retirement plan such as an IRA.

Benefit: A payment received from a pension plan, which could include pension, disability, or survivor benefits.

Bequest: A gift or property by will.

Best Execution: Best execution implies that when a manager makes a trade through a broker, the trading strategy must result in the optimum investment decision value for the portfolio. Best execution sometimes includes trading obstacles because the “absolute best price” is not always received or paid in non-retail, institutional trading given the following market conditions: 1) a slight upward price adjustment where liquidity does not permit an easy sale on a difficult trade, 2) a “timing benefit or cost” from rapid variation in price occurring before the trade can actually be completed in the absence of liquidity, as well as other technical situations. Commissions paid on the trade are often dwarfed in comparison to those other benefits or costs associated with these trading obstacles. Also, best execution takes special factors into consideration which are difficult to quantify such as the value of the long standing working relationship between the manager and the broker, or the unique research or other proprietary services provided by the broker for the benefit of the manager’s client.

Beta: A statistical measure of market risk that indicates portfolio or security volatility by measuring how returns vary as the market moves up or down. Beta estimates the proportional change in a security fund’s rate of return corresponding to a given change in the market, where the market may typically be the S&P 500. If the beta is 1.0, a 10% increase in return of the return on the market will predict or estimate, on average, a similar 10% increase in the return of the particular portfolio or security. If beta is less than 1.0, such as .9, the portfolio or security is considered less risky than the market and will increase or decrease less than the market. Conversely, a beta higher than 1.0, such as 1.1, indicates a riskier portfolio and the portfolio or security will increase or decrease more than the market. (See risk, volatility)

Blue Chip Stock: There is not set definition of a blue-chip stock, but most people would agree it has at least three characteristics: It is issued by a well-known, respected company, has a good record of earnings and dividend payments, and is widely held by investors. Blue chips can go down, but, since they are unlikely to go bankrupt, are generally considered more conservative than holding a stock in small companies. Blue– chip stocks are usually high-priced and low-yielding. The term “blue chip” comes from the game of poker in which the blue chip holds the highest value.

Bonds: Fixed income securities formally issued by governments, agencies, corporations, or other entities guaranteeing the payment of the original investment plus interest by a specified future date, greater than 12 months in the future. Securities with maturities of less than 12 months are classified as cash equivalents. (See bond maturity, duration, fixed income)

Bond Fund: Funds that usually have the majority of their assets invested in bonds or cash equivalents. (See portfolio)

Bond Maturity: Specifies the period of time when the scheduled principal repayment is to be made. (See bond portfolio maturity, duration)

Bond Portfolio Maturity: In a bond portfolio, the maturity structure of each bond contributes to the repayment schedule for all the bonds, on average. This average period of years is often referred to as the bond portfolio maturity. (See bond maturity, duration, fixed income)

Bull Market: A rising trend in stock prices.

Bullish: A bull is someone who thinks the market is going up, which makes bullish the opposite or bearish.

Call (Option): An option to buy a certain amount of stock at a set price for a predetermined period of time.

Call /Prepayment Risk: The risk that a bondholder has bonds taken away (in exchange for cash) during a period of declining interest rates. A bond that is callable or a mortgage bond that can be prepaid will have a virtual ceiling on its price when rates fall and prices rise, callable bond's prices will eventually top out, limiting the "upside potential" of these bonds.

Callable Bond: A bond that can be redeemed by the issuer. Often, corporations issue bonds that are callable, giving the issuer the option of paying off the bonds when interest rates drop and issuing new, lower coupon bonds, which will reduce the company's annual expense.

Callable Securities: Investments (typically bonds, preferred stocks, or debentures) that permit the issuer to redeem the security before its maturity date.

Capital Gain: The profit made on the sale of property or securities. A short-term capital gain is made on holdings held less than a year; a long-term capital gain on those held for more than a year.

Capital Gains Distribution: Payments to mutual fund shareholders of gains realized on the sale of the fund's portfolio securities. These amounts are usually paid once a year and should be added to the basis of your investment.

Capital Loss: The loss taken on the sale of property or securities.

Cash/ Cash equivalents: securities (commercial paper, U.S. Treasury Bills, demand notes, short-term investment funds, etc.) with a term to maturity of less than one year. Considered a "risk free" investment when backed by the U.S. Government, in the form of Treasury Bills or Treasury Bonds that have a remaining time to maturity of less than a year.

Certificate of Deposit: Usually called a CD, a certificate of deposit is a short to medium term instrument (one month to five years) that is issued by a bank or savings and loan association to pay interest at a rate higher than that paid by a passbook account. CD rates move up and down with general market interest rates. There is usually a penalty for early withdrawal.

Certified Financial Planner (CFP): An individual trained in all areas of financial planning who has passed a national certifying exam, abides by a professional Code of Ethics, and meets the continuing educational requirements of the professional organization.

Certified Public Accountant (CPA): An individual trained in accounting and taxation who has passed a national certifying exam, abides by a professional Code of Ethics, and meets the continuing educational requirements of the professional organization.

Churning: Excessive buying and selling of investments with the view of earning commissions rather than obtaining optimum investment results.

Cola or Cost of Living Adjustment: A device to prevent inflation from eroding the value of a pension payment. A COLA can be a flat adjustment (e.g. 2% per year) or can be tied to an index. The index can be internal (e.g. adjustments are made if fund performance exceeds actuarial assumptions or other pre-determined levels) or external (e.g. based upon increases in the customer price index). The COLA with which most people are familiar is the one enacted in 1973 for Social Security and Supplemental Security Income Benefits. The Social Security COLA is based upon the Consumer Price Index.

Collateralized Mortgage Obligation: A mortgage-backed, investment-grade bond consisting of pooled mortgages that separates the cash flows into short, medium, and long classes (often called tranches) that are paid off in order of maturity date.

Collectively Bargained Plan: A retirement plan negotiated through a collective bargaining process between an employer and a union or employee representative.

Commercial Paper: An unsecured promissory note issued in the open market by large banks and corporations to raise short-term funds.

Commissions: The fee paid to a broker for trading a stock or bond. This fee may be explicit and separate from the price or it may be implicit and embedded in the price.

Common Stock: A unit of equity ownership in a corporation. Owners of common stock exercise control over corporate affairs and enjoy any capital appreciation. They are paid dividends only after preferred stock. Their interest in the assets, in the event of liquidation, is junior to all others.

Consultant: Registered investment advisory firm that assists fiduciaries with impartial judgment on managers investment performance, meeting objectives, understanding risk, selecting new managers, and long term asset allocation issues. There are two general types of consultants: independent consultants and broker consultants. Independent consultants are typically paid a fixed fee for their services.. Broker consultants are typically paid a variable fee for their services based on commissions generated by the fund.

Contribution: An addition by the sponsor of cash or securities to a fund.

Counsel: Lawyer who guides the fiduciaries' actions, and makes certain that Board actions or decisions are within the rules of the plan document and the laws prescribed by municipal, state and federal regulations.

Coupon: The interest the bond issuer pays to the bond holder, expressed as a percent (e.g., 6 5/8%). Normally half of the coupon is paid twice a year.

CPI (Consumer Price Index): The CPI measures changes in the consumer prices (food, transportation, housing, entertainment, medical care, etc.). It is published monthly by the U.S. Bureau of Labor, and it is used as a gauge for measuring inflation. The CPI is also used as a cost of living index.

Credit Risk: The risk that a bond issuer will become less creditworthy, leading to relative price under performance, or, in extreme circumstances, default. Ratings agencies review companies in order to judge their ability to meet future interest and principal payments and assign corresponding ratings.

Custodian /Trustee: Institution that keeps the independent ownership of assets for the benefit of the sponsor separate from all other sponsor funds. The custodian typically maintains records on financial transactions and assets, collects dividends and interest, settles security transactions, disburses checks, accepts contributions, administers the general cash flow of the fund, and provides statements showing financial details to the fiduciaries.

Data Base/Universe: A large statistical sample of fund information including returns, or other statistics. There are several universes in a data base displaying a variety of interesting information about similar funds, such as managed equity and bond returns. Values are arranged from best, 1st percentile, to worst, 99th percentile, to provide a range of performance with which to compare funds actual results to the specific universe. This investment information is collected from similar investors, and allows important comparisons about how specific investment results compare to similar funds.

Death Benefit: Funds paid to the designated beneficiary of a deceased plan participant.

Default: Occurs when the issuer misses a scheduled interest or principal payment. Generally, companies will take extreme measure to avoid defaulting, since it carries serious legal implications.

Deferred Account: An account that permits the delay of taxation until distributions occur.

Deferred Annuity: An annuity contract that delays the payment of income until some later date, such as when the annuity holder chooses to receive them, or when a specific age has been reached.

Deferred Compensation Plan: A plan that permits a portion of compensation that is earned to be tax-deferred (that is, not yet received for purposes of taxation) along with any money that it earns, with taxes due when the money is paid out of the plan, traditionally at retirement.

Deferred Retirement Option Plan (DROP): A retirement feature allowing an employee, eligible to retire and receive normal retirement benefits from the defined benefit plan, to defer the monthly benefits while continuing to work. The benefit payments are placed in separate account until the deferred retirement period ends. During this time the calculation for years of service and final compensation formula used to calculate pension benefits is frozen. DROPS can be used for phased retirement or to retain experienced employees.

Defined Benefit Plan (DB): A retirement plan in which the amount of the pension benefit is set by a formula established through the plan. Benefits are calculated based on age, length of service, and final salary. The benefit is payable as a lifetime annuity and possibly for the lifetime of the designated beneficiary. Benefits are typically paid out in substantially equal periodic payments. The plan funds these benefits through a combination of employee contributions, employer contributions, and investment returns. There are no individual accounts.

Defined Contribution Plan (DC): A tax sheltered vehicle that provides for an individual account for each participant and the benefits are based solely on the amount contributed to the participant's account plus any income, expenses, gains and losses, and forfeitures of accounts. A 401(k), 403(b) and 457(b) plan are defined contribution plans. At retirement, the account balance is the total funds available to provide an individual's retirement benefits and an individual can outlive the fund's balance.

Disbursements: Payments made directly out of the assets of a fund, such as to pensioners, for management fees, for consultant fees, for actuarial services or legal expenses.

Discount: A price less than par. Generally, demand is stronger for callable bonds if they are selling at a discount to par.

Diversification: Process of reducing or avoiding risk inherent in holding a limited number of securities in a portfolio, a limited number of industry sectors, concentrating in one asset class or in one style of investment management. By holding a variety of asset classes such as equities, bonds, cash, or real estate, or different manager styles, a higher level of diversity is assured. Further, risk of loss to the total asset holdings is reduced by the combination of dissimilar assets or styles.

Dividend: A share of company earnings paid out to stockholders. Dividends are declared by the board of directors and paid quarterly. Most are paid as cash, but they are sometimes paid in the form of additional shares of stock.

Dow Jones Industrial Average (DJIA): An index representing the general price movement of 30 widely held industrial stocks listed on the New York Stock Exchange. The value of the Dow is determined by dividing the sum of per-share prices of the 30 component stocks by an adjusted denominator.

Duration: The best measure of how a bond's price changes when interest rates change. Like maturity, duration is expressed in years: unlike maturity, duration also takes into account the income that a bond generates before maturity. As an example, a bond with a duration of 5.0 years will suffer a price decline of approximately 5.0% if interest rates rise by 1.00% and price rise of approximately 5.0% if interest rates decline 1.00%. Another bond with a duration of 9.0 years will suffer a price decline of approximately 9.0% from the same 1.00% increase in rates and a price increase of 9.0% if rates drop by 1.00%.

Early Retirement Age: The age at which a plan participant can retire and begin to receive reduced benefits under a pension plan's early retirement plan's early retirement provisions.

Early Retirement Incentive: Temporary changes in retirement plan benefits offered by the plan sponsor for a limited period of time, commonly called a retirement window, during which early retirement benefit reductions are usually waived and other incentives are offered to encourage early retirement.

Early Retirement: A provision that permits an employee to begin receiving retirement benefits before reaching normal retirement age, although the benefits will normally be reduced.

Early Withdrawal Penalty: A penalty imposed by the federal government on money withdrawn prematurely from a tax-deferred retirement plan, unless certain special circumstances, often unique to the type of plan, exist.

Equities: Publicly traded securities that represent ownership in companies. A claim on the success or failure of a firm to grow and /or pay dividends, often referred to as stocks.

Equity Fund: Funds that usually have the majority of their assets invested in equities or cash equivalents. (See portfolio)

Fiduciary: Fiduciary is a person who holds a legal or ethical relationship of trust with one or more other parties (person or group of persons). Typically, a fiduciary prudently takes care of money or other asset for another person.

Fixed Income: Securities backed by the promise that interest will be paid to the holder at a fixed rate until sale, maturity, or redemption. Categories include bonds, mortgages, and short-term assets. (See bonds)

Fixed Income Ratings: A grading system for bonds, designed to estimate the credit quality of a bond issue. There are two major ratings agencies, Moody's and Standard and Poor's. Investment grade ratings (from highest to lowest):

Moody's	S&P
Aaa	AAA
Aa	AA
A	A
Baa	BBB

Ratings below Baa/BBB represent non-investment grade ("junk") bonds, and possess a much higher degree of speculation than high-grade bonds.

Foreign Exchange Risk: The risk that a change in a currency's exchange rate (relative to U.S. dollars) will negatively impact the return on a foreign security when translated into dollars.

Gain/Capital Gain: The realized or unrealized increase in market value of a security or a portfolio at the end of a specified time period, excluding the effect of income, contributions and withdrawals.

GASB Statement 25: A statement issued by the Governmental Accounting Standards Board effective for periods beginning after June 15, 1996, establishing financial reporting standards for defined benefit pension plans and for the notes to the financial statements of defined contribution plans of the state and local governmental entities, including a statement of plan net assets, changes in plan net assets, schedule of funding progress, and schedule of employer contributions.

GASB Statement 27: A Statement issued by the Governmental Accounting Standards Board effective for periods beginning after June 15, 1997, establishing standards for the measurement, recognition, and display of pension expenditures/expenses and related liabilities, assets, note disclosures, and, if applicable, required supplementary information in the financial reports of state and local governmental employers.

GASB Statement 43: A statement issued by the Governmental Accounting Standards Board effective for periods beginning after December 15, 2005, for plans maintained by the largest employers, establishing uniform financial reporting standards for plans providing other postemployment benefits (OPEB) offered as part of the total compensation by state and local government employers, such as retiree health care, to include information about the fair value and composition of plan assets, plan liabilities, the funded status of the plan, and employer contributions to the plan.

GASB Statement 45: A statement issued by the Governmental Accounting Standards Board effective for periods beginning after December 15, 2006, for the largest state and local government employers, establishing standards for the measurement, recognition, and display of expenses/expenditures and related liabilities (assets) in the financial reports of state and local governmental employers relating to other postemployment benefits (OPEB) offered as part of the total compensation offered by state and local government employers such as retiree health care, to include information about fair value and composition of plan assets, plan liabilities, the funded status of the plan, and employer contributions to the plan.

Group Insurance: A contract made with an employer or an association that covers a group of persons related to that association.

Growth and Income Fund: A mutual fund which seeks to make shareholders' capital grow and also provide income. There can be wide variations in the relative emphasis on these two objectives.

Growth Fund: A mutual fund which seeks Capital Appreciation, that is, to make its shareholders' capital grow over time by investing primarily in stocks that increase in value. Dividends are a minor consideration.

Index: A measurement of a general market trend that is typically broad based. Examples of indexes are the S&P 500, a proxy for the general equity market; the Consumer Price Index, used to measure aggregate price changes in the economy; and many others noted in this glossary.

Index Fund: Collection of securities in a portfolio uniquely selected to replicate the performance or results of a specific index, such as the S&P 500.

Individual Retirement Account (IRA): A tax-sheltered account ideal for retirement investing because it permits investment earnings to accumulate tax deferred until they are withdrawn. The contribution limit is \$2,000 per year, and penalties usually apply for withdrawals before age 59½.

Inflation: The rate at which prices in general are going up (usually quoted on an annualized basis). The consumer price index (CPI) tracks many consumer goods, the producer price index (PPI) tracks many industrial goods and materials. Inflation is a decrease in the value of money and is thought generally to result from an increase in the supply of money (both actual dollar bills in circulation and readily spendable money such as checking account).

Interest Rate Risk: The degree to which a bond's price will change with movements in interest rates. For investment grade bonds, interest rate risk is by far the most important source of risk. Duration is the best measure of interest rate risk.

Investment Income: Cash dividends on equities, or interest on fixed income securities.

Investment Objective: Desired result against which the progress of an investment program can be measured. May be expressed as an absolute rate of return, percentages above inflation, or returns relative to other funds or indexes.

Keogh Plan: A tax-sheltered retirement account into which self-employed individuals can deposit up to 20% of earnings and deduct the contributions from current income. Investments within the Keogh grow tax deferred until they are withdrawn. Withdrawals from the plan are restricted before age 59½.

Large Cap: A term used to describe companies with between \$10 billion and \$200 billion in capitalization calculated by multiplying the company's current stock price by the number of shares available for trading.

Legal List: Term referring to a list of investments in which certain institutions and fiduciaries may either legally invest or are prohibited from investing.

Barclay /Corporate Bond Index : An index composed of approximately 5,000 publicly issued corporate and U.S. government debt rated Baa or better, with at least one year to maturity and at least \$1 million par outstanding, weighted by the market value of the issues included in the index. Its rates of return reflect total return with interest reinvested. The index is frequently used to represent the bond market.

Life Annuity: A form of annuity that pays monthly benefits during the life of the annuitant, with no residual payments to survivors.

Liquid Investment: An investment easily converted into cash without penalty and with little risk.

Liquidity: The ability to convert an investment into cash, reflecting the capacity of the marketplace to accommodate transactions involving the investment without unreasonable price changes.

Loss/Capital Loss: The realized or unrealized decrease in market value of a portfolio at the end of a specified time period, excluding the effect of income, contributions and withdrawals.

Manager: Investment firm selected to manage the assets of a fund in order to meet the fiduciaries' long range objectives by maximizing returns at minimum risk.

Manager Style: Classification of a portfolio or an investment manager based on the types of securities held, over a period of time. Manager styles include Value, Yield, Growth, Contrarian, Sector or Style Rotator, Undiversified, Small Capitalization, and others.

Mandatory Social Security: A term used to refer to a federal requirement that public employees and their employers that do not currently participate in the Social Security program be required to do so.

Marital Deduction: The amount of property that can be left to a spouse tax-free.

Marital Trust: (Sometimes referred to as a "Trust", "Q-Tip Trust", "Power of Appointment Trust") A trust qualifying as a bequest actually passing to the surviving spouse and therefore qualifying for the estate tax marital deduction. Examples of marital trusts are qualified terminable interest property trusts (QTIP) and general power of appointment trusts.

Market Cycle: Time period over which a broad market index, such as the S&P 500, falls from a high point to a low point and returns to a high point, or reverse (low/high/low). The first type of market cycle is called a peak-to-peak; the latter is called trough-to-trough. A market cycle is typically the shortest time a manager should be judged for relative performance because we are most fairly able to observe the manager's strength or weakness in both the rising and falling market conditions.

Market Risk : The market risk quantifies how much of the variation in a portfolio's rate of return can be explained by the market. Market risk in a security or portfolio is mathematically expressed as beta.

Maturity: See bond maturity.

Maturity or Term: The date that the principal amount of the bond is paid by the issuer to the bond holder (e.g., May 15, 2004). The maturity of a bond is a rough estimate of its price volatility.

Median: The Value of the middle fund in the universe (i.e. the 1500th fund of 3000 funds); not always precisely the arithmetic average. The median holds a ranking of 50th. (See relative return, rankings)

Mega Cap: A term used to describe companies with more than \$200 billion in the capitalization, calculated by multiplying the company's current stock price by the number of shares available for trading.

Micro Cap: A term used to describe companies with between \$50 million and \$300 million in capitalization, calculated by multiplying the company's current stock price by the number of shares available for trading.

Mid Cap: A term used to describe companies with between \$2 billion and \$10 billion in capitalization, calculated by multiplying the company's current stock price by the number of shares available for trading.

Minimum Distribution: The required annual amount that must be distributed from a qualified plan when an employee reaches age 70 1/2, so that the benefits are paid out over the participant's life expectancy.

Minimum Funding: The minimum amount an employer must contribute to adequately fund a defined benefit, money purchase, or target benefit pension plan according to IRS rules.

Money Market Fund: A mutual fund that invests in short-term corporate and government debt and passes the interest payments on to shareholders. A key feature of money-market funds is that their market value doesn't change, which makes them an ideal place to earn current market interest with a high degree of liquidity.

Money Market Indexes: Indexes representing the returns of professionally managed funds investing in cash and cash equivalents securities. (See cash/ cash equivalents).

Mortgage Backed Securities, Mortgages, or MBS: In their most common form, these are bonds (issued by one of three Government agencies) consisting of a large bundle of single-family Residential mortgages with the same interest rate. These are the so-called "pass-through" securities, since the homeowners' monthly principal and interest payments are passed-through to the bond holders. There are many more complex securities which are derived from pass-throughs, including CMOs, REMICs, IOs, POs and so on. These securities introduce an additional element of risk, and must be carefully modeled and monitored.

Mutual Fund: An open-end investment company. Its portfolio is managed; that is, it buys or sells Securities according to changing conditions. It sells new shares on a continuous basis and buys back (redeems) outstanding shares. Buy and sell prices are equal to the fund's Net Asset Value (plus sales and redemption charges, if any). Contrasts with Closed-End Investment Company.

NASDAQ: The Computerized National Association of Securities Dealers Automated Quotation System that provides price quotations of securities traded over the counter.

National Public Fund Median Index: An index representing the median or average returns for the average public pension's total fund. Included are municipalities, counties, and states.

Par: The price the bondholder will receive for his bonds at maturity. In almost all cases, par is equal to a price of 100.

Peer Group: A very specific subset of the data base with important similarities allowing meaningful comparisons of investment results for the total fund or portion of the fund. Examples include public pension funds, balanced, equity or bond funds, funds with similar asset mix, and funds with similar risk levels.

Performance: See rate of return.

Policy: Guidelines prescribed to obtain investment objectives, including specifications of acceptable risk and diversification levels consistent with those objectives (e.g. limits on commitments to stock, bonds, cash or other investment vehicles) Policy is generally independent of a time horizon and is based on a neutral market outlook.

Political Risk: The risk that a security's price will decline as a result of a country's uncertain political future.

Power of Attorney: A legal document authorizing an individual to conduct the financial affairs of the maker of the Power of Attorney.

Premium: A price greater than par.

Prepayment: The rate at which a mortgage backed security is prepaying its principal. The prepayment rate is determined by the rate at which homeowners pay off their mortgages—either by refinancing, moving, or other form of accelerated payments. Since refinancing is such a big part of the prepayment equation, prepayments tend to accelerate when rates drop (homeowners pay off older, high interest loans) and slow down when rates rise. Prepayments act as a partial “call” on the bonds outstanding, reducing the bond holder's principal little by little. “PSA” and “CPR” are two common measures of prepayment speed.

Prime Rate: The loan rate banks advertise as their best rate; that is, available to their best customers.

Probate: The process of proving the validity of the will in court and executing the provisions of it under the guidance of the court.

Property: Includes cash, securities, real estate, and any other possessions.

Proxy/Proxy Voting: A proxy is a document empowering a person to act for another. Specifically, with regard to common stock owned by Pension Fund, a proxy empowers a person to vote in the Pension Funds' stead at stockholders meeting using the voting power held by the total number of shares of stock owned.

Quality Ratings: Several independent research companies provide ratings on stocks and bonds. In the case of both stocks and bonds, these ratings are intended to give an indication of the Issuers' financial soundness. Bond ratings assess a company's ability to pay bondholders interest and to repay principal in a timely manner. Stock ratings assess a company's balance sheet, relative industry position, dividend payment records and other features to fundamentally judge the stock's strength. These ratings provide an independent opinion about the quality of diverse and sometimes complex securities.

Rankings/ Percent Rank/ Percentile: During a given measurement period, a ranking between the 1st and 99th percentiles in a universe is given, representing the relative position of that fund or fund segment in the universe. For example, ranking of 5th means that the fund performed in the top 5% of all funds and that 95% of the funds performed below this return. When reviewing or comparing rankings, we must always be careful to understand what universe we are inspecting, what value we are reviewing and over what time period we are making observations. (See data base/universe, relative return, and median)

Rate of Return: A mathematical measure of the rate of change in the market value of a fund's assets. Rates of return reflect both realized and unrealized capital gains and losses, as well as total earnings from interest and dividends. Contributions of distributions that increase or decrease the total value of the fund have no effect on investment performance, often referred to as Performance or Total Return. (See absolute return, annualized return, and relative return)

Realization Gains/ Losses: Gains and losses that result from the actual sale of securities.

Registered Investment Advisor (RIA): By law, an individual or business that receives compensation of any form for advice or services related to money, securities, or any financial product must register with the SEC. The SEC does not approve or disapprove of the 'Registered Investment Advisor's' professional knowledge or practice. This designation simply means that the person or business entity has complied with the law and registered with the SEC.

Relative Return: Compares absolute returns against investment results of similar portfolios. A ranking is provided to determine if a manager performs better than, equal to, or worse than a peer group. For example, a 12% absolute return with a ranking of 45th means that the return ranked in the top 45% of the data base: 45% of the funds did better, 55% did worse. First percentile is best, 99th percentile is worst. Median is average or 50th percentile. (See median, rankings)

Risk: The uncertainty associated with the possibility that actual investment results may not coincide with the expected rate of return associated with a given level of assumptions about asset mix, quality of investments and other factors. There are many measure of risk such as beta, duration, standard deviation and other abstract statistics. High risk typically provides high returns couples with the chance of equally high losses. Low risk usually provides low returns with the chance of equally high losses. Low risk usually provides low returns with the chance of similar low losses. (See beta, duration, diversification, volatility)

S&P 500: Standard and Poor's benchmark indicator of 500 stocks, which tracks 400 industrial stocks, 20 transportation stocks, 40 financial stocks, and 40 public utilities. It is a market capitalization weighted index often used as an index against which money managers measure their performance.

Sectors: The major groupings of the bond market. In the U.S. markets, the three main sectors are Government Bonds, Corporate Bonds, and Mortgage Bonds. Each of these can be broken into sub- sectors (e.g., Corporate consist of finance, industrial, utility and yankee bonds).

Securities and Exchange Commission (SEC): A government agency responsible for the supervision and regulation of the securities industry.

Security: A generic term referring to stocks, bonds, and other investments.

Sharpe Ratio: Another measure of volatility combining two important risk elements: 1) portfolio return premiums earned over the "risk free" Treasury Bill rate, and 2) the fund's standard deviation of returns. The Sharpe Ratio assesses the volatility of a portfolio by analyzing how returns vary per unit of risk. The calculation is fairly simple. Take the return of the portfolio and subtract the "risk free" rate of Treasury Bill, then divide this return by the standard deviation of the portfolio's returns over the period.

Stock Market: An organized marketplace where securities are bought and sold on behalf of investors.

Total Return: Comprised of both the income and change in market value of a portfolio over some time period. Returns over multiple time periods are linked geometrically. Returns covering periods longer than on year are generally annualized a five year cumulative return of 50.0% would be expressed as a 8.5% annual return.

Trustee: Person or organization entrusted to manage, administer, and distribute the trust for the benefit of the trust beneficiaries, in strict compliance with the terms of the document. Trustees are held to a high fiduciary duty of loyalty to the beneficiaries, as well as to reasonableness in investing, and making distributions to trust beneficiaries.

Umbrella Insurance: Personal liability insurance protection that provides insurance beyond the underlying coverage of an individual's auto and homeowners insurance policies.

Universe: See data base.

Volatility: The degree to which a fund's rates of return have fluctuated over a time period. High volatility tends to be associated with investment policies and management strategies of an aggressive nature; low volatility tends to be associated with conservative policies and strategies. A fund's volatility is often assessed by using the statistical computations of standard deviation. (See beta, risk)

Yield: The return on an investment, either dividend or interest, expressed as an annual percentage of either the current market value or the cost of investment. The yield is the return divided by the current market value or cost. The most accurate measure of a bond yield, is yield to maturity (or alternative, Yield to worst) which allows comparisons between different types of bonds, and considers the present value of all future payments.

Yield Curve: The relationship between the maturities of bonds and their corresponding yields. Generally, bonds with longer maturities will have higher yields, forming a "normal" or "positively sloped" yield curve. These relationships change with economic activity, supply/demand, etc., leading to continuous shifts in the yield curve.

Yield Spread: The incremental yield advantage that a bond offers compared to a like-maturity U.S. Treasury. For instance, a 10 year maturity corporate bond yielding 7% would offer a yield spread of 75 basis points (.75%) over a 10 year Treasury yielding 6.25%.

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