GLOBAL ASSET MANAGEMENT INDUSTRY

MALDIVES FINANCE FORUM

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THE WORLD BANK
Treasury

Sudhir Rajkumar
Head of Pension Advisory
Financial Advisory and Banking

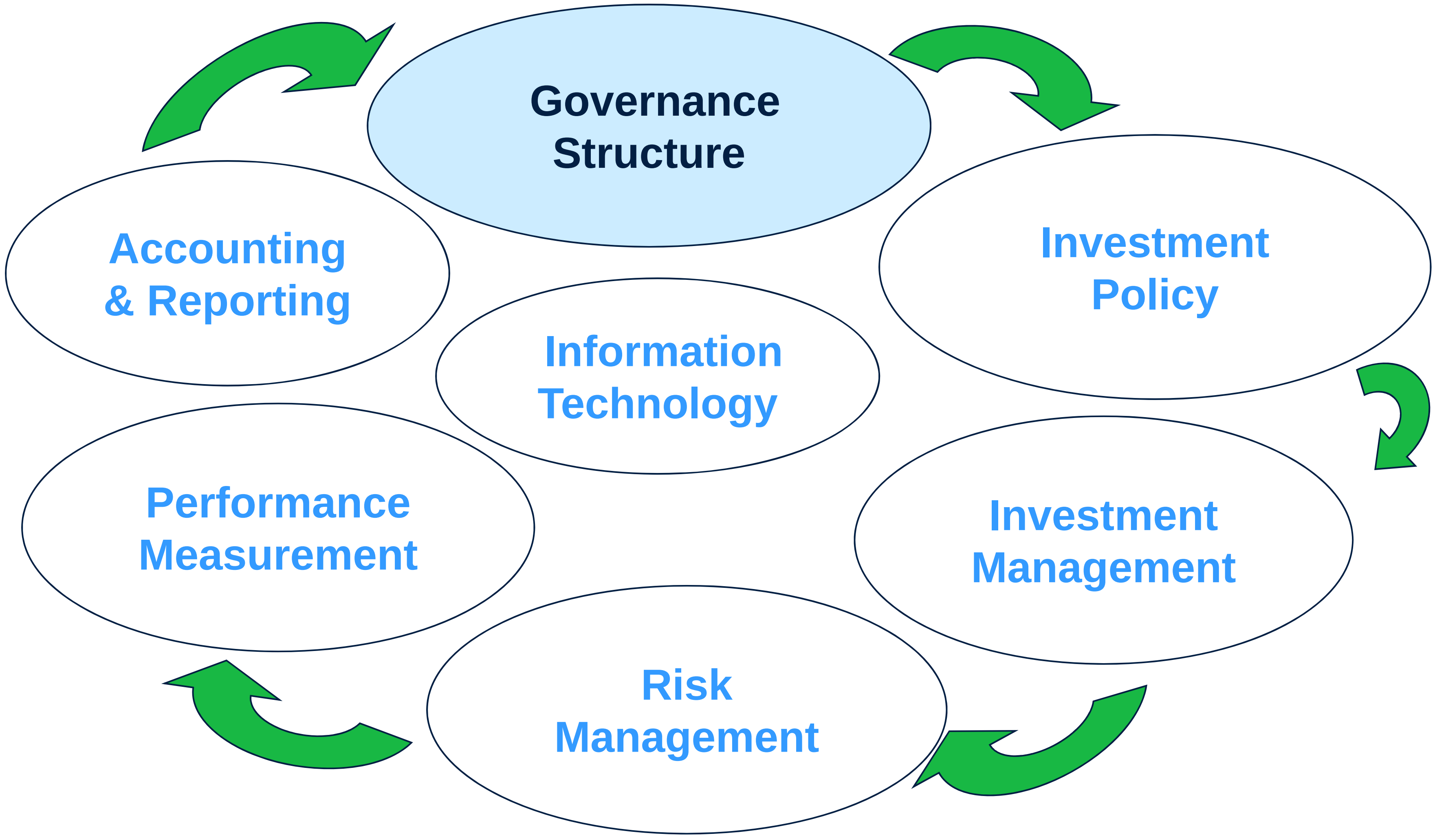
ROAD MAP

- **Background on World Bank Treasury**
- **Key Elements of a Robust Investment Organization**
- **Global Asset Management Industry**
  - **Global Invested Capital by Asset and Investor Class**
  - **Market Sectors and Credit Ratings**
  - **Investment Management Styles**
  - **Alternative Assets**
  - **Types of Investors and Products**
  - **Industry Structure and Prerequisites**
  - **Regulatory Environment**
  - **Largest Global Money Managers**

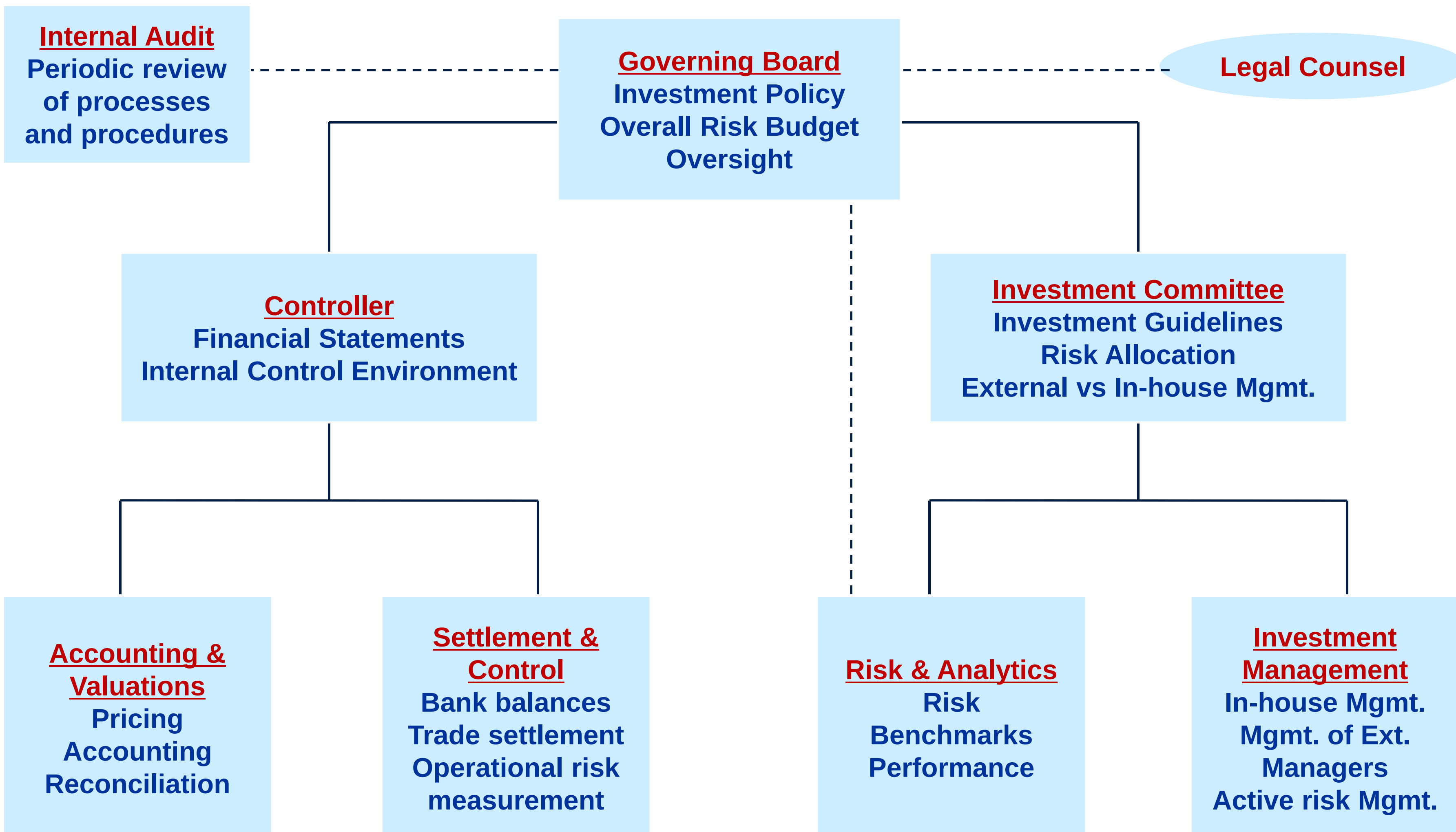
WORLD BANK TREASURY ACTIVITIES

- US$176 billion of investment management
  - 85% managed internally
  - 15% managed externally
  - Full spectrum of assets, from fixed income (bonds) to private equity
  - Includes US$23 billion of Pension Plan Assets
- US$30-50 billion borrowings per year
  - Frequent international issuer with hundreds of transactions per year
  - Wide variety of products with different maturities, currencies, and structures
- US$35-50 billion derivative operations per year
  - Variety of derivative products for risk management

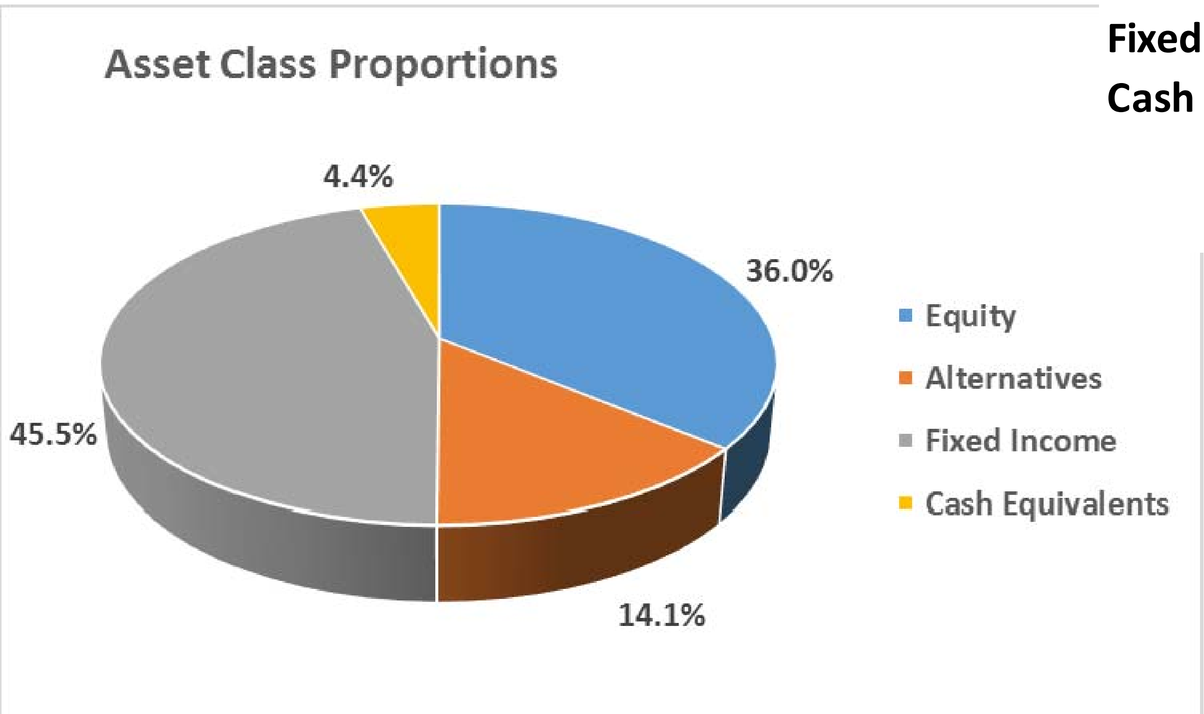
KEY ELEMENTS OF AN INVESTMENT ORGANIZATION



TYPICAL ORGANIZATIONAL STRUCTURE



GLOBAL INVESTED CAPITAL BY ASSET CLASS
(AS OF JUNE 2013, $ TRILLIONS)



Asset Class	Market Size
Equities	$ 36.2
Alternatives	14.4
Fixed Income	46.0
Cash Equivalents	4.5
	$ 101.1

Source: Hewitt EnnisKnupp.

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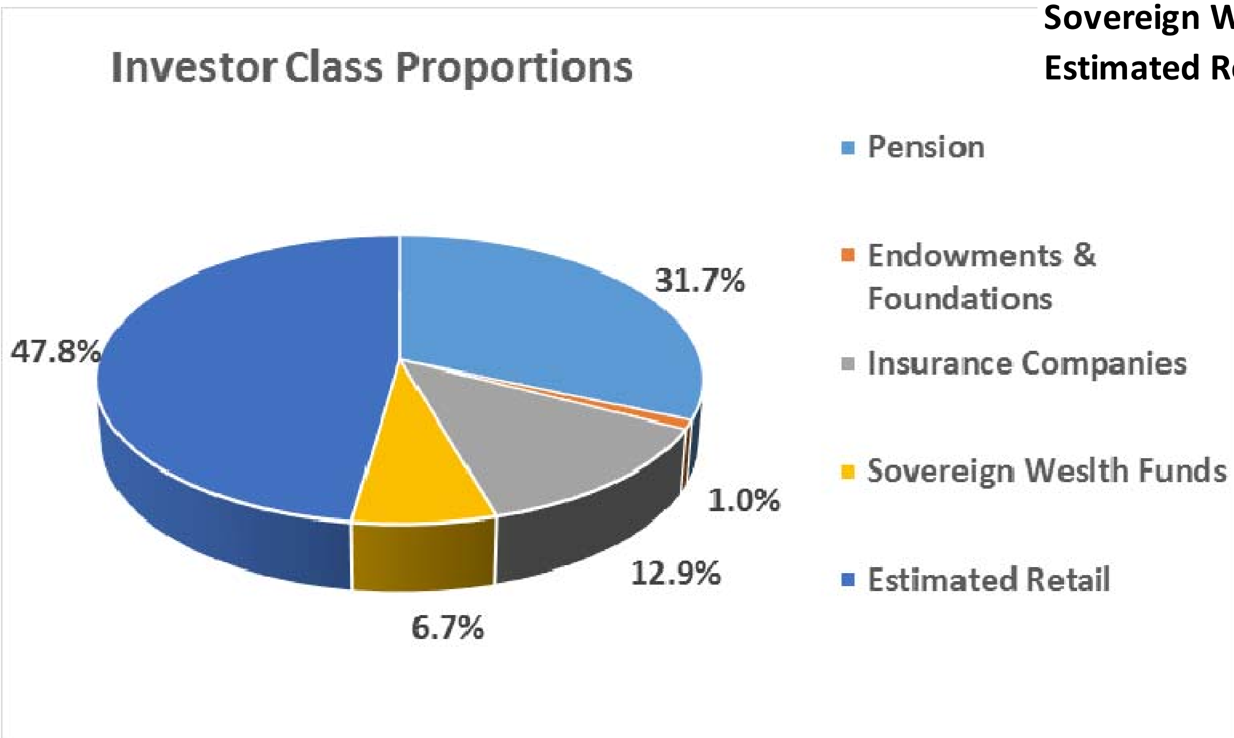
GLOBAL INVESTED CAPITAL BY INVESTOR CLASS
(AS OF JUNE 2013, $ TRILLIONS)

Investor Class		Market Size
Pension	$	32.0
Endowments & Foundations		1.0
Insurance Companies		13.0
Sovereign Weslth Funds		6.8
Estimated Retail		48.3
	$	101.1



Source: Hewitt EnnisKnupp, CFA Institute.

SECTOR AND INDUSTRY CLASSIFICATION

Sector	Industry Group
Energy	Energy
Materials	Materials
Industrials	Capital Goods
	Commercial & Professional Services
	Transportation
Consumer Discretionary	Automobiles & Components
	Consumer Durables & Apparel
	Consumer Services
	Media
	Retailing
Consumer Staples	Food & Staples Retailing
	Food, Beverage & Tobacco
	Household & Personal Products

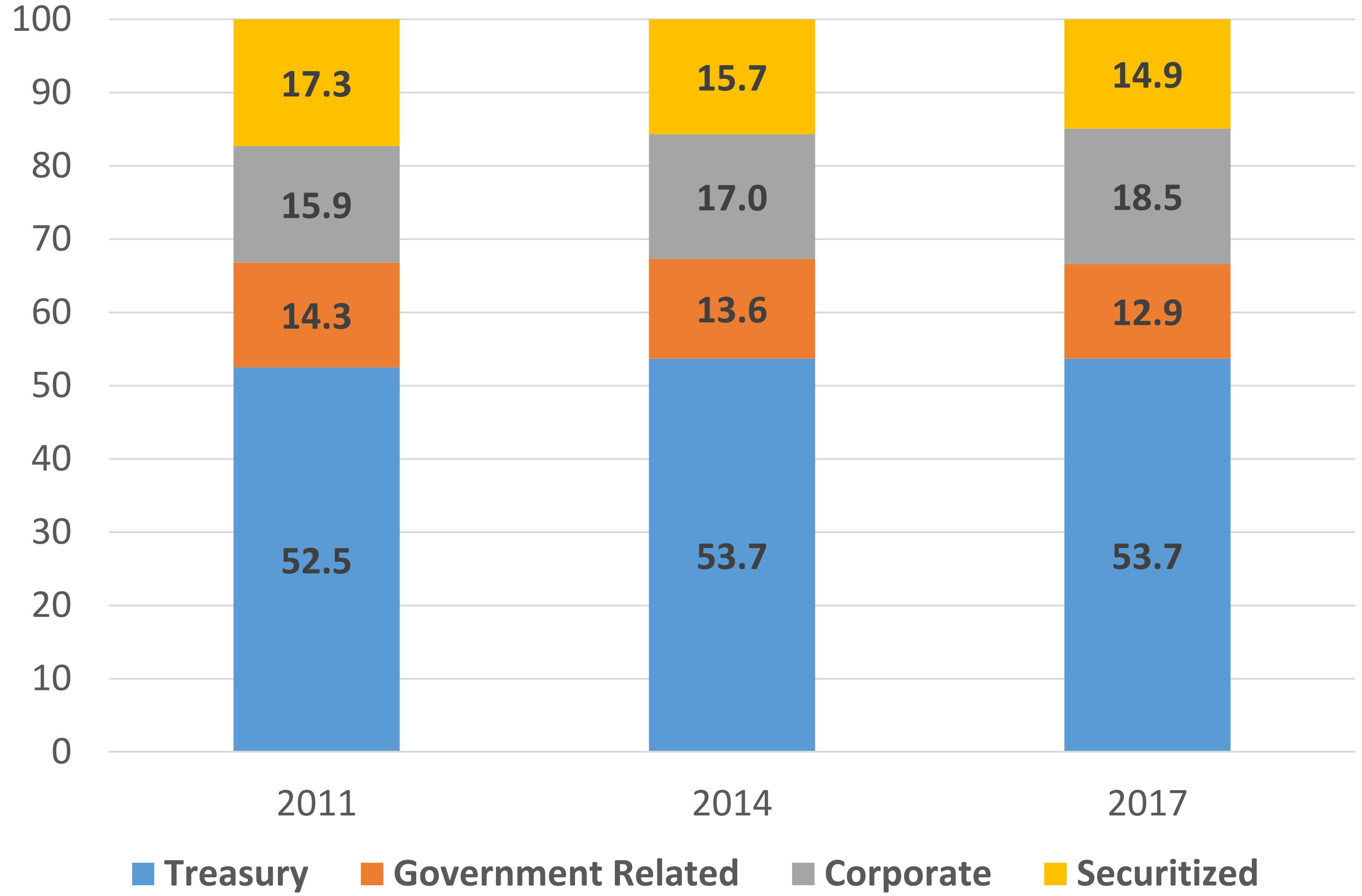
Source: Standard & Poors, MSCI

SECTOR AND INDUSTRY CLASSIFICATION (CONT.)

Sector	**Industry Group**
Health Care	Health Care Equipment & Services Pharmaceuticals, Biotech & Life Sciences
Financials	Banks Diversified Financials Insurance
Information Technology	Software & Services Technology Hardware & Equipment Semiconductors & Equipment
Telecommunication Services	Telecommunication Services
Utilities	Utilities
Real Estate	Real Estate

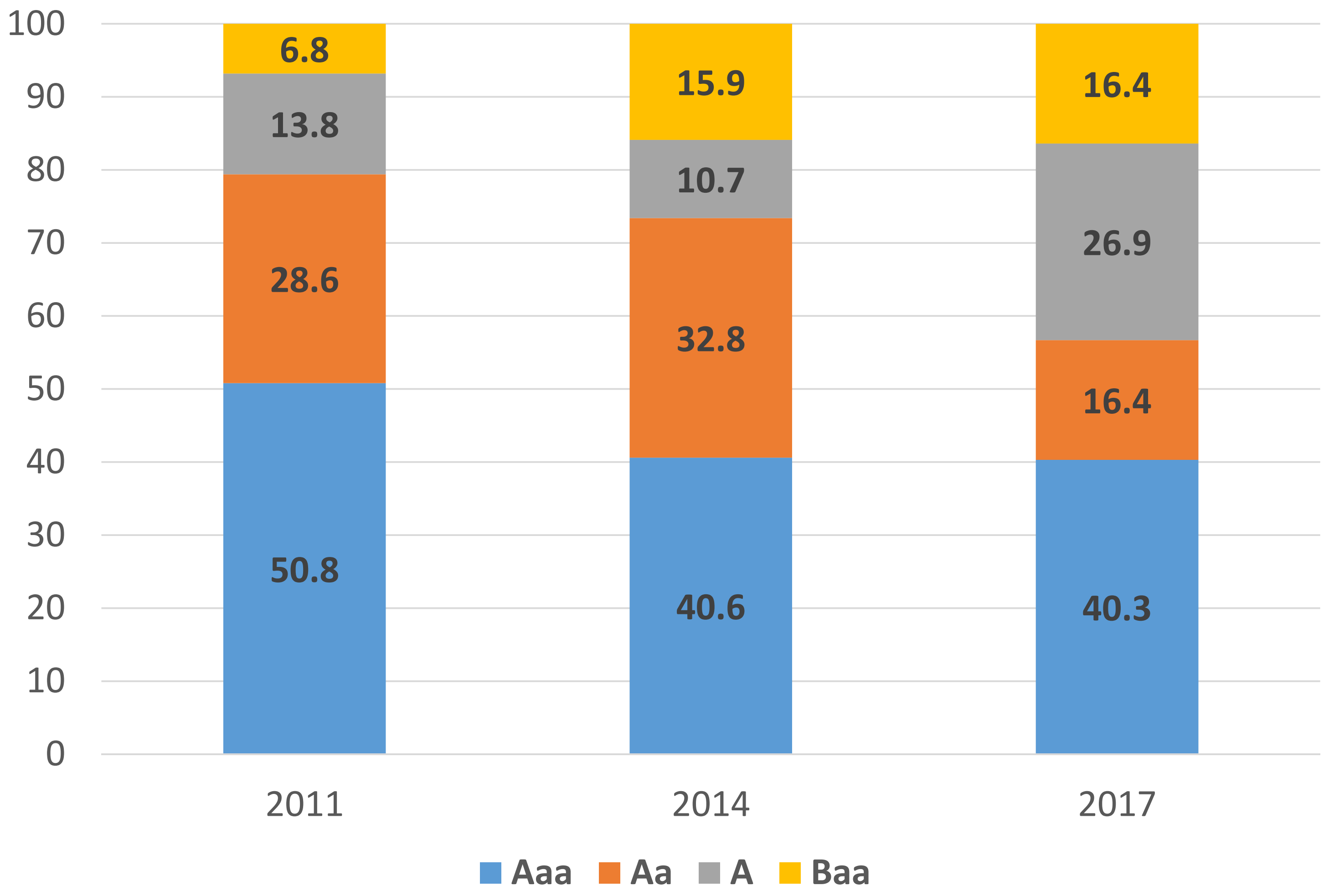
Source: Standard & Poors, MSCI

BARCLAYS GLOBAL AGGREGATE INDEX SECTOR COMPOSITION



Source: State Street Global Advisors, Barclays

BARCLAYS GLOBAL AGGREGATE INDEX QUALITY COMPOSITION



Source: State Street Global Advisors, Barclays

CREDIT RATINGS SUMMARY BY RATINGS AGENCY

Moody's	S&P	Fitch	Rating description
Aaa	AAA	AAA	Prime
Aa1	AA+	AA+	High grade
Aa2	AA	AA	
Aa3	AA–	AA–	
A1	A+	A+	Upper medium grade
A2	A	A	
A3	A–	A–	
Baa1	BBB+	BBB+	Lower medium grade
Baa2	BBB	BBB	
Baa3	BBB–	BBB–	
Ba1	BB+	BB+	Non-investment grade speculative
Ba2	BB	BB	
Ba3	BB–	BB–	
B1	B+	B+	Highly speculative
B2	B	B	
B3	B–	B–	
Caa1	CCC+	CCC+	Substantial risks
Caa2	CCC	CCC	
Caa3	CCC–	CCC–	
	CC	CC	Extremely speculative
Ca			
	C	C	Default imminent
C	RD	DDD	In default
/	SD	DD	
/	D	D	

Source: Moody's, S&P, Fitch

INVESTMENT MANAGEMENT STYLES: KEY ELEMENTS

	Passive Management	Enhanced Indexing	Active Management
Investment Style	Benchmark Replication	Arbitrage based	Taking Market Views
Excess Returns	Low	Moderate	Volatile
Risks	Low	Moderate	High
Risk Management	Compliance	Basic	Complex
Staffing Implications	No Investment Manager Discretion	Investment Managers engaged in market	Investment Managers 100% market focused

FIXED INCOME

Managers Add Value by:

- *Duration Management* – Increasing or decreasing a portfolio's duration.

- *Yield Curve Structure Management* – Taking advantage of shifts in the yield curve.

- *Sector Exposure* – Shifting sector weights relative to benchmark.

- *Credit Spreads* – Underweighting or overweighting lower-credit, or riskier, bonds.

Source: CFA Institute

PUBLIC EQUITIES

Managers Add Value by investing in stocks based on:

- *Fundamentals* – Bottom-up investing focused on identifying attractive companies with attractive fundamental characteristics.
- *Market Capitalization* – Favoring small-cap versus mid-cap versus large-cap stocks in benchmark depending on economic factors at a given time.
- *Value versus Growth Characteristics* – Favoring stocks which are attractively priced relative to their intrinsic value or stocks which exhibit high growth momentum.
- *Sector/Geographic Exposure* – Shifting sector or geographic weights relative to benchmark based on macroeconomic trends.

Source: CFA Institute

TRADITIONAL VERSUS ALTERNATIVE ASSET MANAGERS

	Traditional Managers	Alternative Managers
Asset Classes	Long-Only Equity Fixed Income Multi-Asset Strategies	Hedge Funds Private Equity
Revenue	Asset-Based Fees	Management Fees Performance Fees or Carried Interest

Increasingly, the line between Traditional and Alternative is blurring.

- Traditional managers seek to deliver higher-margin alternative products to retail segments.

- Alternative managers seek to reduce the revenue volatility of performance fees by offering retail versions of their alternative products – with less leverage and no performance fees.

Source: CFA Institute

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HEDGE FUNDS

Hedge Funds represent a broad set of ***investment styles*** with distinguishing characteristics:

- ***Short Selling*** – Selling short to profit from a stock's decline.
- ***Absolute Return*** – Instead of trying to outperform a long-only benchmark, seek to achieve positive returns in all market environments.
- ***Leverage*** – Through bank borrowing or use of derivatives, magnify the impact of relatively small profit-making opportunities.
- ***Low Correlation*** – Historically have not been correlated with traditional asset classes adding diversity to client portfolios.
- ***Fee Structures*** – Charge traditional asset-based fee, and a performance fee, calculated as realized capital gains. Normally charge 2% of assets and performance fees of up to 20%.

Hedge Funds assets totaled $3.07 trillion in the first quarter of 2017.

Source: CFA Institute, ValueWalk

HEDGE FUNDS (CONT.)

The major hedge fund ***strategies*** include:

- ***Global Macro*** – Implement bets based on macroeconomic factors such as interest rates or currencies.
- ***Equity Long-Short*** – Profit from long (undervalued) and short (overvalued positions in equities.
- ***Distressed*** – Involves purchase of securities of companies in or approaching bankruptcy.
- ***Event Driven*** – Designed to profit from corporate events, including mergers and acquisitions, bankruptcies, and spinoffs.
- ***Managed Futures*** – Rely on use of futures contracts to take long and short positions across commodity, interest rate and other financial futures markets.
- ***Multistrategy*** – A single fund or fund-of-funds designed to combine multiple hedge fund investment strategies in a single fund.

Source: CFA Institute

PRIVATE EQUITY

Private Equity Funds have the following ***characteristics***:

- Raise capital from investors to buy, optimize and ultimately sell portfolio companies to generate profit.
- Investors, known as limited partners or LPs, provide a majority of fund's capital. Managers, know as general partners or GPs, will commit 1% to 5% of align interest with LPs.
- Most PE funds have a lifespan of 7 to 10 years. First few years are spent acquiring companies, normally about 10 or more. Later years are spent "harvesting" or "exiting" phase, as fund divest portfolio companies.
- Added value comes from taking hands-on approach to portfolio companies, through a combination of financial engineering, installation of new board and executives, and developing the firm's business strategy.

Private Equity Funds assets under management were $2.5 trillion at end-2016

Source: Investopedia

PRIVATE EQUITY (CONT.)

Major ***Types*** of Private Equity Funds:

- ***Buyout*** – Companies are acquired with the use of financial leverage. The companies involved in these transactions are typically mature and generate operating cash flows.

- ***Growth Capital*** - Equity investments, most often minority investments, in relatively mature companies that are looking for capital to expand or restructure operations, enter new markets or finance a major acquisition without a change of control of the business.

- ***Mezzanine Capital*** – Investments in subordinated debt or preferred equity securities that often represent the most junior portion of a company's capital structure.

- ***Venture Capital*** - Equity investments made, typically in less mature companies, for the launch of a seed or start-up company, early stage development, or expansion of a business.

Source: Investopedia

TYPES OF INVESTORS - RETAIL

In selling to the individual, or retail, investor, asset managers package investment strategies in Collective Investment Vehicles (CIV) such as:

- ✓ ***Mutual Funds***
- ✓ ***Undertakings for the Collective Investment of Transferable Securities (UCITS)***
- ✓ ***Exchange-Traded Funds (ETF)***
- ✓ ***Closed-End Funds (CEF)***

Retail investors are categorized into *four* segments:

Investor Segment	Financial Assets	Investment Products
Ultra-High Net Worth	> $30,000,000	Separate Accounts, Hedge Funds, Private Equity, Mutual Funds, UCITS, CEFs, ETFs
High Net Worth	>$1,000,000	Separate Accounts, Hedge Funds, Private Equity, Mutual Funds, UCITS, CEFs, ETFs
Mass Affluent	>$100,000	Mutual Funds, UCITS, CEFs, ETFs
Mass Retail	<$100,000	ETFs

Source: CFA Institute

TYPES OF INVESTORS – INSTITUTIONAL

The major types of Institutional Investors include:

- ***Pension Funds*** are corporates, government or other organizations which maintain funds for their employee's retirement needs. Pension funds can further be divided into: Defined Benefit, where each employee's pension is determined by salary and years of service; Defined Contribution, where the return is dependent on the employee's contributions and choice of investment.
  - Defined Benefit, which places the liability on the employer, are gradually being replaced by Defined Contribution plans which are dependent on the employee's savings and decisions.
- ***Endowments*** are funds established by universities, hospitals and other organizations to fund specific needs. Foundations are similar funds established by nonprofit organizations for charitable purposes.
  - Endowments and Foundations typically have long time horizons which allow them to hold higher allocations to alternative asset classes.
- ***Sovereign Wealth Funds*** are state-owned investment funds commonly funded by revenues from commodity exports of foreign exchange reserves.
  - Unlike pension defined benefit plans, Sovereign Wealth Funds do not manage specific liabilities and possess long-term horizons which allows higher allocations to alternative asset classes .

Source: CFA Institute

TYPES OF INVESTMENT PRODUCTS

The major types of Investment Products include:

- ***Separately Managed Accounts*** – Individual securities are purchased and held in the client's custodial account. Are managed by guidelines set in a customized investment management agreement.
- ***Mutual Funds*** – is an investment vehicle made up of a pool of funds collected from many investors for the purpose of investing in securities. Offer individuals such advantages as low investment minimums, daily or intraday liquidity, and standardized performance and tax reporting.
- ***Exchange-Traded Funds*** - is a marketable security that tracks an index, a commodity, bonds, or a basket of assets like an index fund. Unlike mutual funds, an ETF trades like a common stock on a stock exchange. ETFs experience price changes throughout the day as they are bought and sold.

Source: CFA Institute

ASSET MANAGEMENT INDUSTRY STRUCTURE

Investors - Legal Asset Owners

Institutions | **Individuals**

Direct Investors

Intermediaries – Asset Allocation, Financial Planning, Asset Management

Consultants | **Financial Advisors**

Asset Managers – Investment Management, Asset Management Solutions

Traditional | **Alternative**

Investment Products – Separate Accounts, Mutual Funds, ETFs, LPs, etc.

Capital Markets – Debt, Equity, Securitizations, Derivatives, etc.

Source: CFA Institute

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ASSET MANAGEMENT INDUSTRY PREREQUISITES

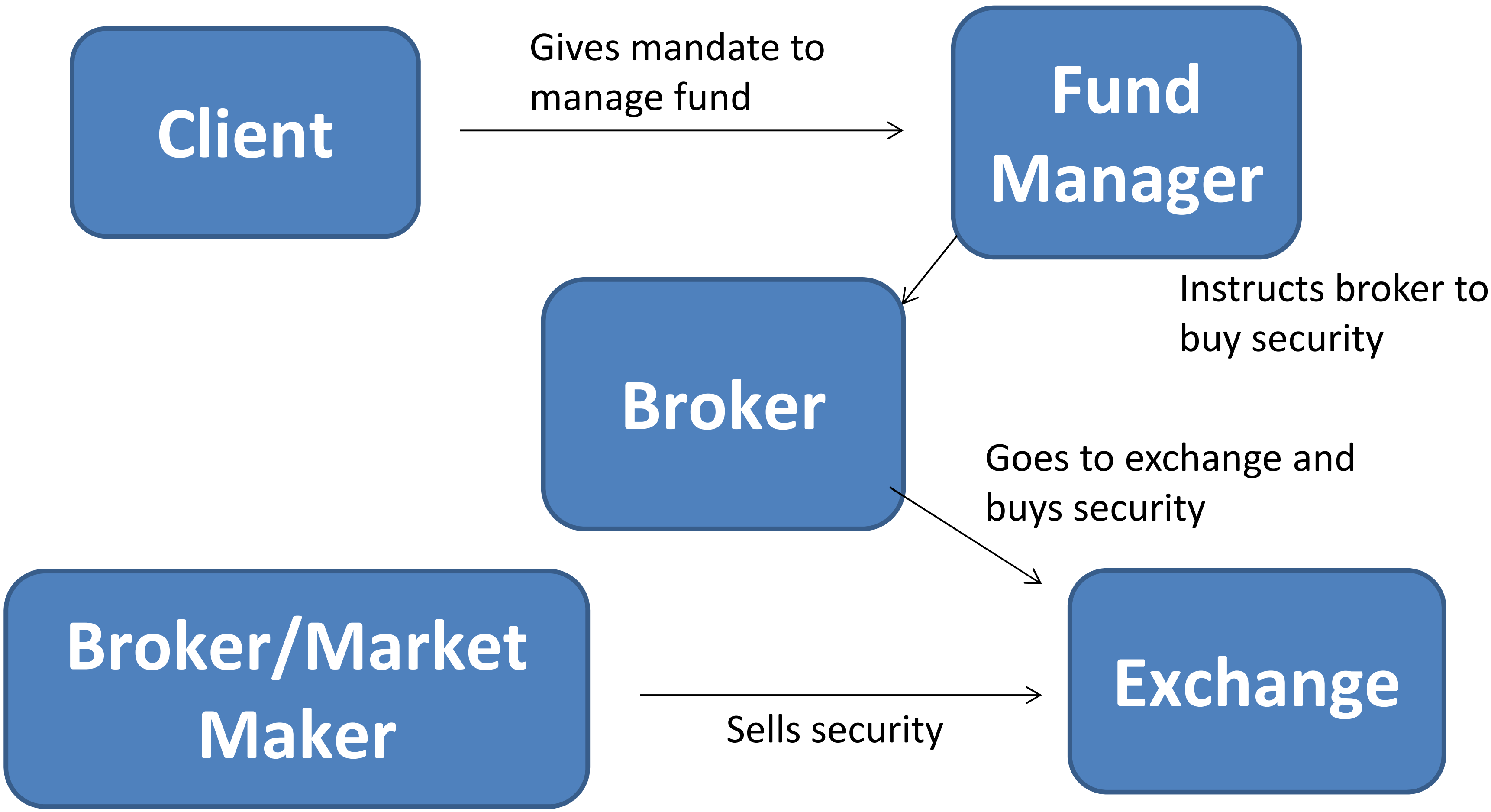
The key players and their roles in the asset management industry are:

- ***Client or Plan Sponsor*** – Owner of the assets.
- ***Client's Custodian*** – Holds the clients assets, including cash and securities. Also responsible for portfolio servicing, i.e. dividends, voting, etc.
- ***Fund or Asset Manager*** – Used or hired by client to create and manage portfolios.
- ***Brokers*** – Used by fund managers to buy and sell securities, act as agents, meaning do not own securities at any point.
- ***Exchanges*** – Central marketplaces where brokers go to transact trades. Trades not executed on exchanges are considered over-the-counter (OTC).

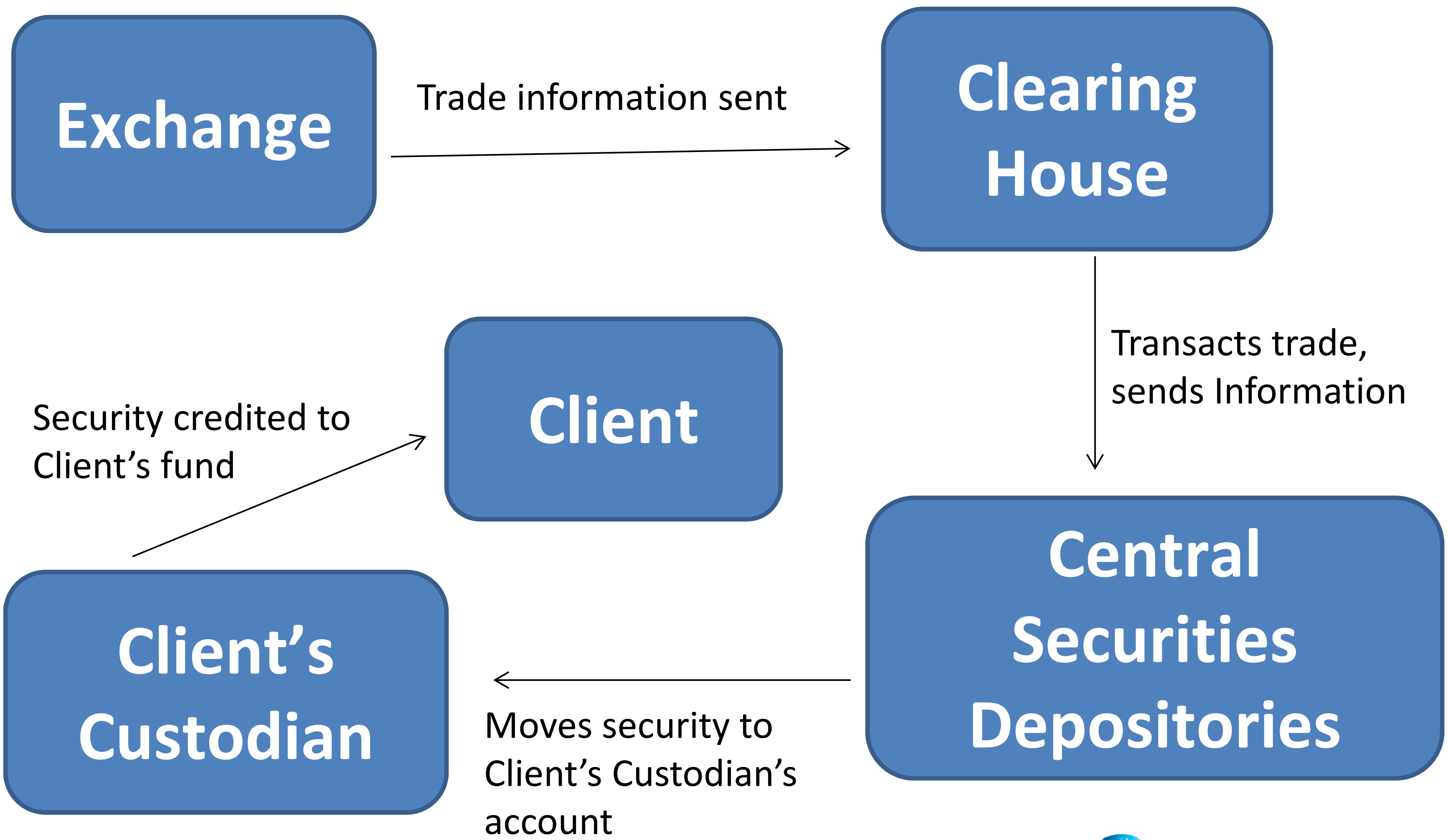
ASSET MANAGEMENT INDUSTRY PREREQUISITES (CONT.)

- ***Market Makers*** – Also known as dealers, provide liquidity to the market by buying and selling securities for their own account.
- ***Clearinghouses*** – Perform the actual transaction of exchanging cash and securities.
- ***Central Securities Depositories*** – Serves as custodian to the custodian, holding assets.
- ***Government and Non-government Regulatory Agencies*** – Set standards and laws for the industry. Protect the client from fraud, devise procedures to prevent market turmoil, etc.

STEPS IN EXECUTING A SECURITIES TRADE



STEPS IN SETTLING A SECURITIES TRADE



REGULATORY STRUCTURE – UNITED STATES

The two primary asset management regulatory entities in the United States are:

Securities and Exchange Commission (SEC)

- Independent Government Agency which has regulatory powers relating to the U.S. Securities markets, including the oversight of exchanges and the enforcement of regulations.

Financial Industry Regulatory Authority (FINRA)

- Self-regulating non-government organization. Licenses individuals and admits firms to the industry, writes rules to govern their behavior, examines regulatory compliance. Is sanctioned by SEC to discipline firms that fail to comply.

Other bodies involved in regulating the financial industry include the Federal Reserve, the Treasury Department and the Federal Deposit Insurance Company

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REGULATORY STRUCTURE – EUROPE

Each European country has their respective regulatory institutions. EU-wide regulations are overseen by the ***European Securities and Market Authority (ESMA)***.

ESMA is responsible for securities legislation and regulation of financial markets in Europe, investor protection and co-operation between national authorities. The two key regulatory frameworks under ESMA are:

- *Undertakings for Collective Investments in Transferable Securities (UCITS)* Directive – Sets standards for mutual funds traded throughout the European Union.

- *Alternative Investment Fund Managers Directive (AIFMD)* - Covers hedge funds, private equity funds.

Other EU bodies involved in financial regulation are the European Bank Authority and the European Insurance and Occupational Pensions Authority.

REGULATORY STRUCTURE – ASIA

Key Regulatory Bodies in Asia

Japan – Financial Instrument and Exchange Act is the main statute codifying securities law and regulating securities companies in Japan. The Financial Services Agency oversees investment activity of banks, insurance and securities companies.

China – Securities companies are regulated by the China Securities Regulatory Commission. In addition, two separate commissions oversee asset management activities for banks and insurance companies.

India – Securities and Exchange Board of India (SEBI) regulates securities markets. Other regulators include Reserve Bank of India (RBI) and the Ministry of Finance. Insurance companies and pension funds have their own regulatory bodies (IRAI and PFRDA respectively).

Korea – The Financial Supervisory Service oversees investment activity for banks, securities and insurance companies. To minimize government interference, the organization was created as an independent public entity rather than a government agency.

REGULATORY STRUCTURE – TRENDS

Following the 2008 financial crisis, regulations world-wide have become more stringent. Key areas of increased regulation include:

- Increase in transparency of fund portfolios and investment practices. Using technological advances to improve reporting capabilities to both investors and government agencies.

- Better laws regarding asset managers acting as fiduciaries to their clients; for example moving industry away from expensive transaction-based fees to asset-based fees.

- Better liquidity risk management; being able to assess how many days it will take to sell a client's assets without impacting the security's price.

- Improvement in cybersecurity practices to protect from hackers.

LARGEST GLOBAL MONEY MANAGERS IN 2016

(TOTAL WORLDWIDE ASSETS UNDER MANAGEMENT)

Firm	$ Billions
BlackRock Inc.	$4,398
Vanguard Group	$3,092
State Street Global Advisors	$2,066
BNY Mellon Investment	$1,492
J.P. Morgan Asset Management	$1,361
PIMCO	$1,321
Capital Group	$1,272
Prudential Financial	$1,090

Source: IPE Reference Hub

CONTACT DETAILS

Sudhir Rajkumar
Head of Pension Advisory
Financial Advisory and banking
World Bank Treasury
+1 (202)-473-0799
srajkumar@worldbank.org

treasury.worldbank.org

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