





























RISK POOL INVESTMENT SEMINAR MARCH 29, 2023



Looking Back



- 100% US Stocks
- 100% US Fixed Income
- **•**50% / 50%
- 100% HY Fixed Income

Return / Volatility

- **+7.91%** / 15.66%
- **+4.62%** / 3.45%
- **+6.73%** / 7.57%
- +6.40% / 7.89%



Returns – Time Horizon



<u> 2022</u>

- 100% US Stocks
- 100% US Fixed Income
- **•** 50% / 50%
- 100% HY Fixed Income
- 100% Commodities
- 100% Cash

Return

- -19.60%
- -13.25%
- -16.43%
- -9.06%
- +24.08%
- +1.82%



2021-2023

- 100% US Stocks
- 100% US Fixed Income
- **•**50% / 50%
- 100% HY Fixed Income

Return / Volatility

- **+2.45%** / 18.59%
- **-6.88%** / 6.75%
 - **-1.94%** / 11.74%
- **-1.92%** / 8.77%



Fixed Income Yields – 12/31/2021 versus 3/17/2023

<u>Index</u>	YTW @ 12/31/2021	YTW @	Chg In YTW		Addition Annual Income per \$10M		YTW Multiple relative to
		3/17/2023		cing iii i ii		10,000,000	12/31/2021
Aggregate	1.75%	4.36%	1	2.61%	\$	261,000	2.49
Intermediate Aggregate	1.55%	4.31%	1	2.76%	\$	276,000	2.78
U.S. Treasury	1.23%	3.74 %	1	2.51%	\$	251,000	3.04
U.S. 3-Month Treasury	0.05%	4.41%	1	4.36%	\$	436,000	88.20
U.S. 2-Yr Treasury	0.73%	3.88%	1	3.15 %	\$	315,000	5.32
U.S. 5-Yr Treasury	1.26%	3.51 %	1	2.25%	\$	225,000	2.79
U.S. 10-Yr Treasury	1.50%	3.43%	1	1.93%	\$	193,000	2.29
U.S. 30-Yr Treasury	1.89%	3.63%	1	1.74%	\$	174,000	1.92
U.S. Agency MBS	1.98%	4.41%	1	2.43%	\$	243,000	2.23
ABS	1.13%	4.64%	1	3.51 %	\$	351,000	4.11
CMBS	1.88%	5.0 1%	1	3.13 %	\$	313,000	2.66
U.S. Credit	2.25%	5.18 %	1	2.93%	\$	293,000	2.30
A-Rated Corporates	2.11%	5.11 %	1	3.00%	\$	300,000	2.42
BBB-Rated Corporates	2.55%	5.59%	1	3.04 %	\$	304,000	2.19
Municipal Bond	1.11%	3-35%	1	2.24%	\$	224,000	3.02
Taxable Municipal Bond	2.33%	4.74%	1	2.41%	\$	241,000	2.03
U.S. High Yield	4.21%	8.98%	1	4.77%	\$	477,000	2.13
Global Agg. (USD)	1.31%	3.48 %	1	2.17%	\$	217,000	2.66

Risk Pool Peer Group Summary

As of 12/31/2022

SAA Risk Pool Peer Group Overview – As of 12/31/2022



TOTAL

- 23 Clients
- 51 Portfolios
 - > \$5.58B In Assets
 - > \$4.7B Core Fixed Income (84.22%)
 - > \$0.88B Risk Assets (15.78%)

MULTI-LINE P&C

- 18 Clients
- 31 Portfolios
 - > \$4.29B In Assets
 - > \$3.63B Core Fixed Income (84.62%)
 - > \$0.66B Risk Assets (15.38%)

HEALTH

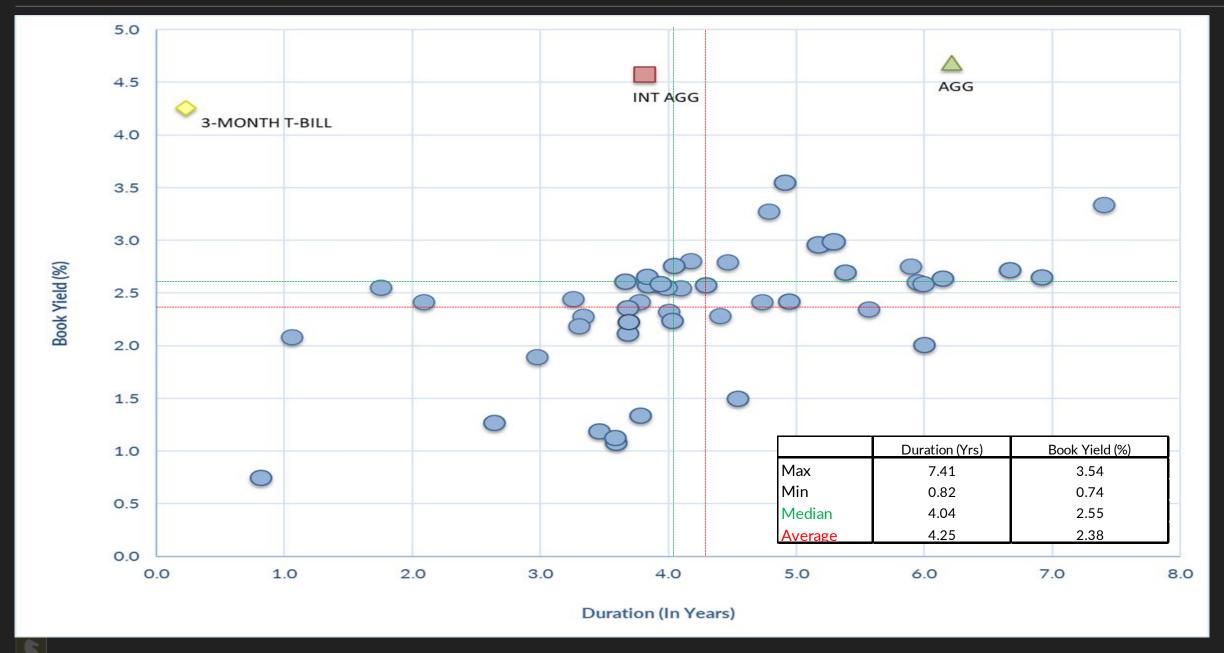
- 9 Client Portfolios
 - > \$333M In Assets
 - \$288M Core Fixed Income (86.49%)
 - > \$45.2M Risk Assets (13.51%)

REINSURERS

- 9 Client Portfolios
 - > \$961M In Assets
 - > \$776M Core Fixed Income (80.75%)
 - > \$185M Risk Assets (19.25%)

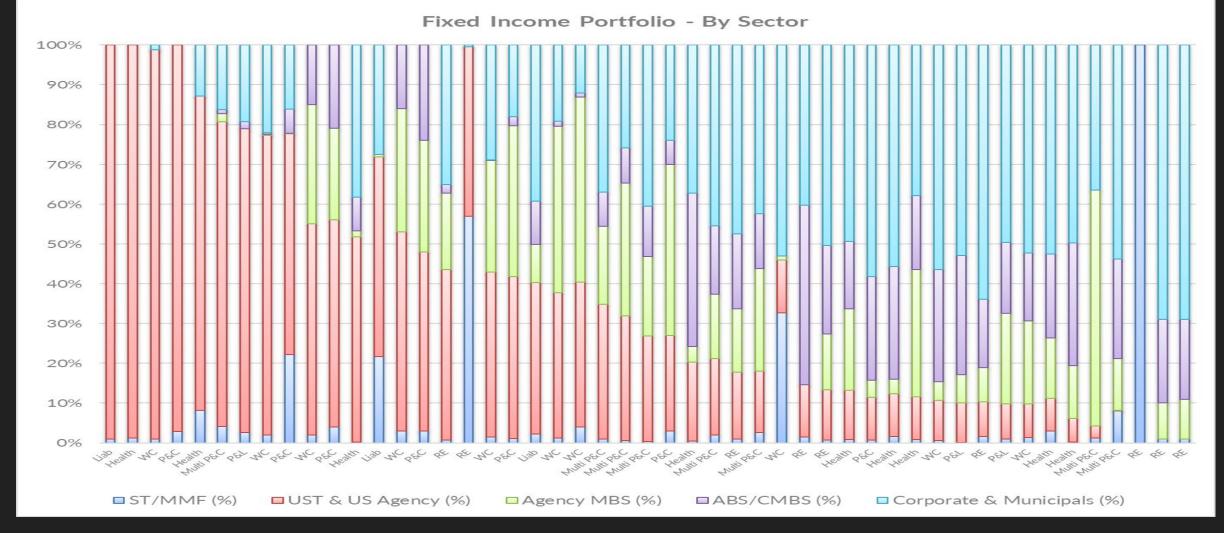
Fixed Income: Book Yield & Duration





Fixed Income Allocation By Sector

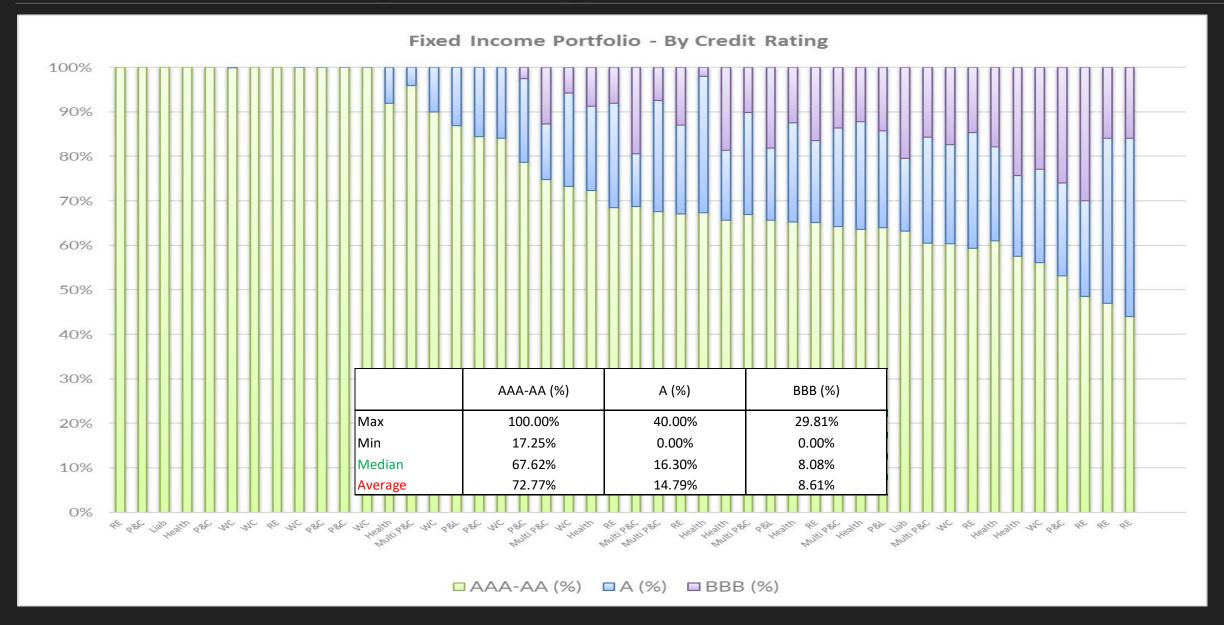




	ST/MMF (%)	UST & US Agency (%)	Agency MBS (%)	ABS/CMBS (%)	Corporate & Taxable Muni (%)	Credit (%) Corp/Structured
Max	100.00%	99.10%	59.20%	45.00%	100.00%	100.00%
Min	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%
Median	1.40%	26.50%	13.10%	12.64%	37.15%	46.17%
Average	6.42%	34.06%	15.02%	12.66%	33.13%	45.54%

Fixed Income Portfolio – By Credit Rating







Fixed Income: One-Year Performance

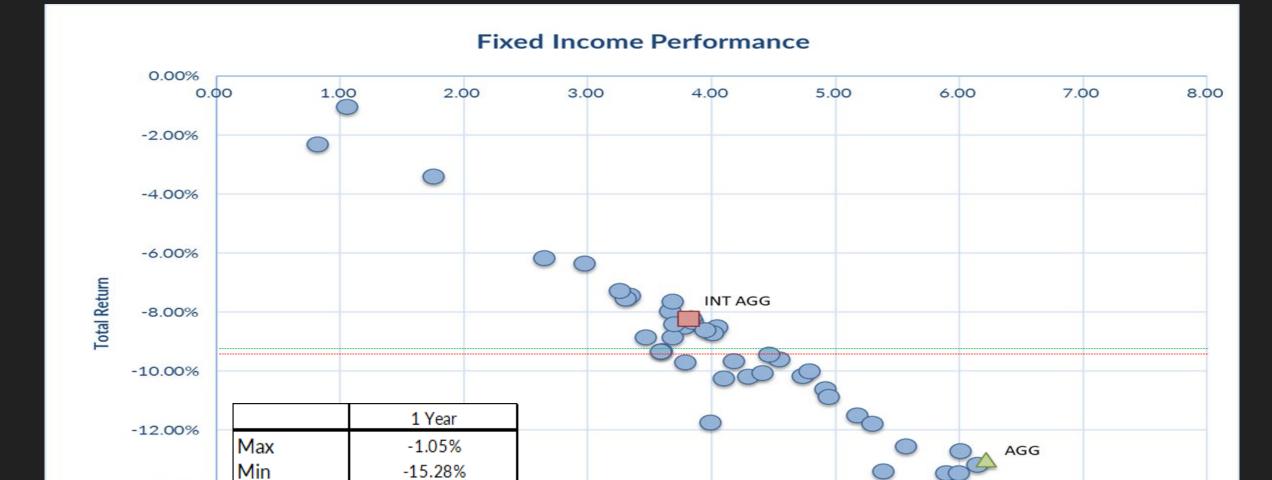
-14.00%

-16.00%

Median

Average





Duration

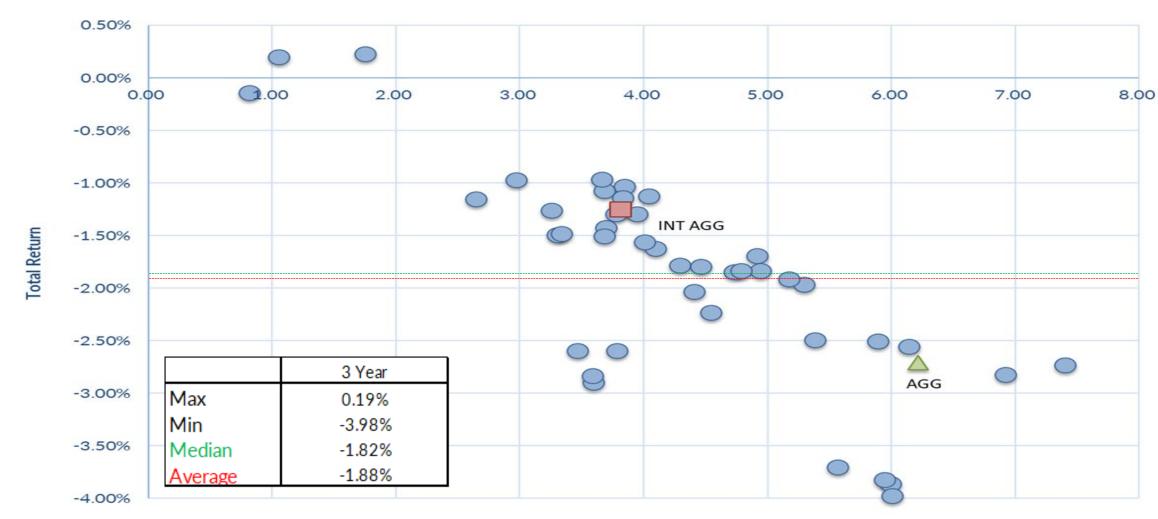
-9.46%

-9.38%

Fixed Income: Three-Year Performance (Annualized)





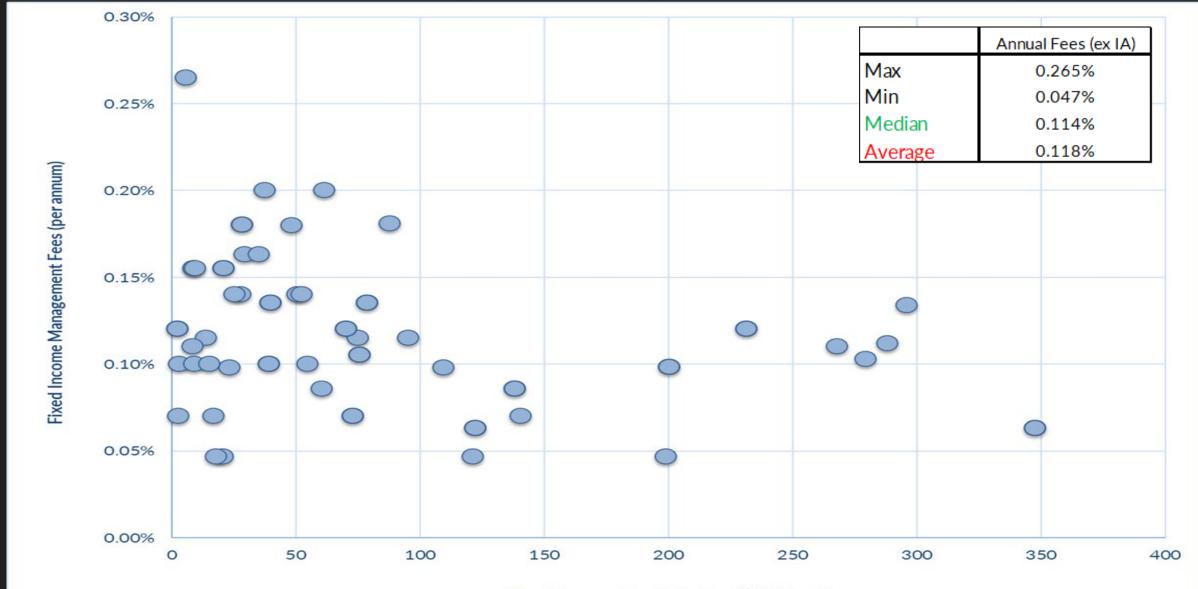


Duration



Fixed Income Investment Management Fees (ex Investment Accounting)

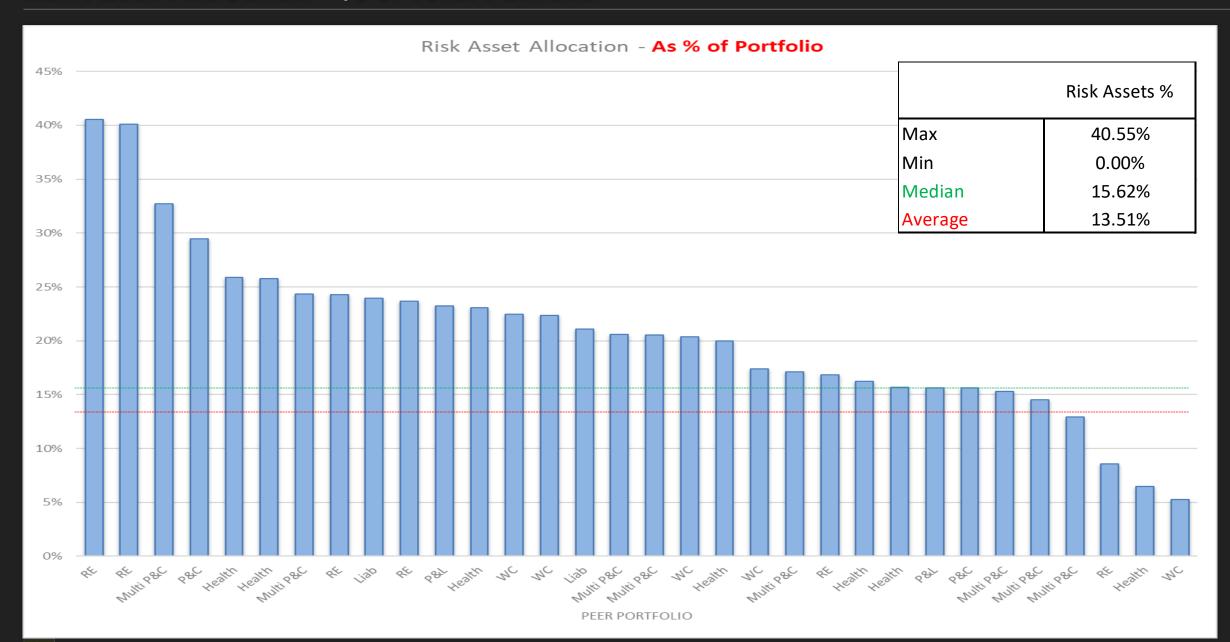






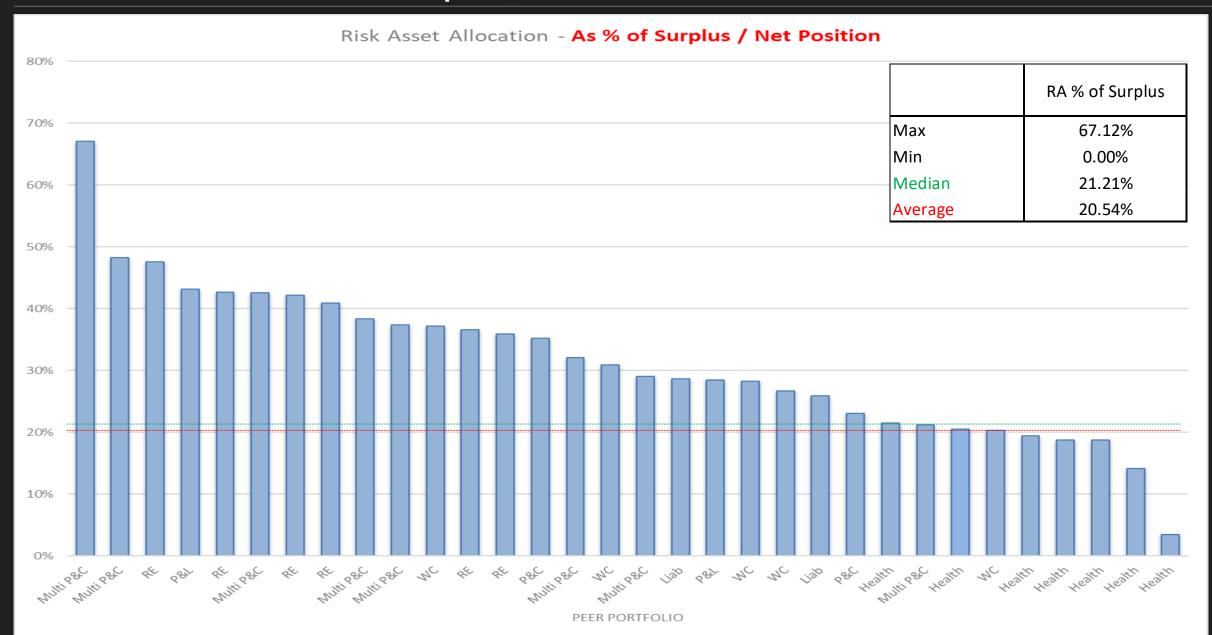
Risk Asset Allocation - % of Total Portfolio





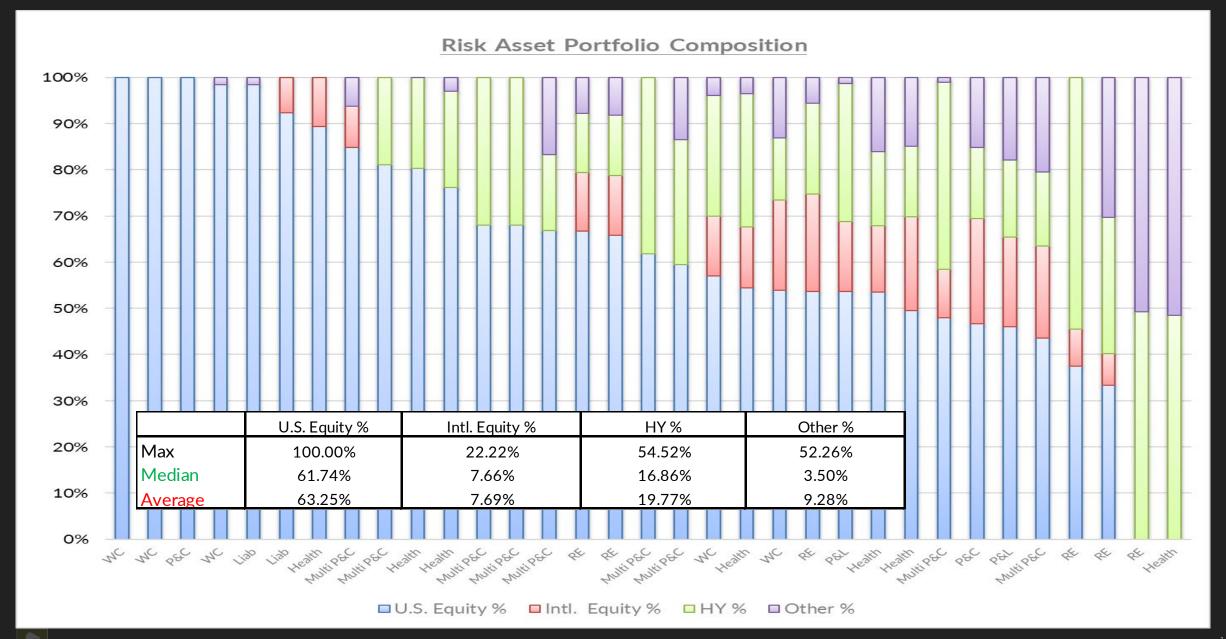
Risk Asset Allocation - % of Surplus / Net Position





Risk Asset Allocation





Risk Assets: One-Year Performance



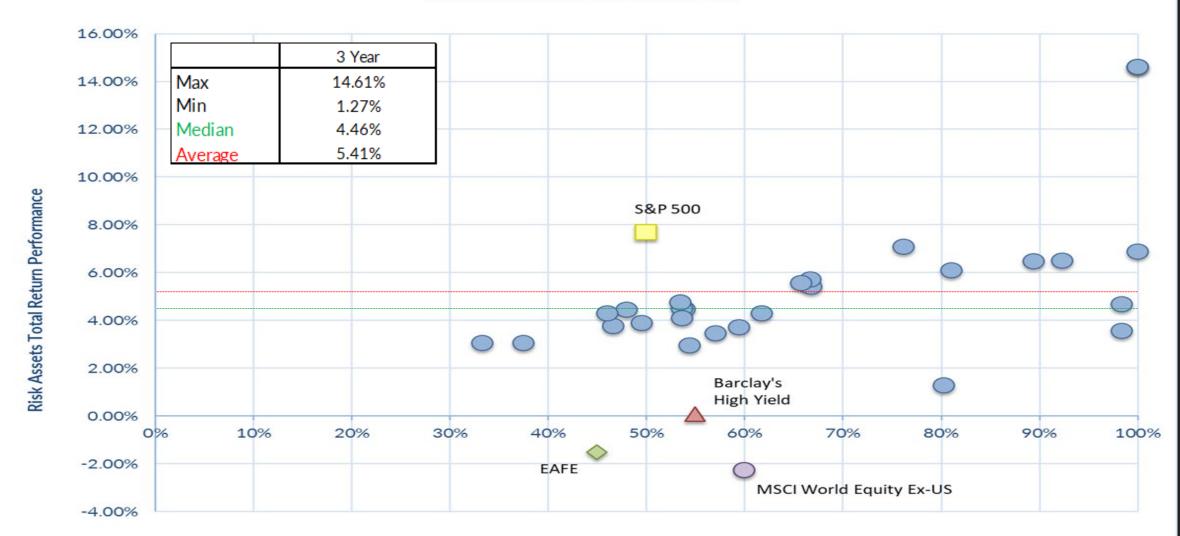


% of Risk Assets Allocation to U.S. Equity

Risk Assets: Three-Year Performance (Annualized)





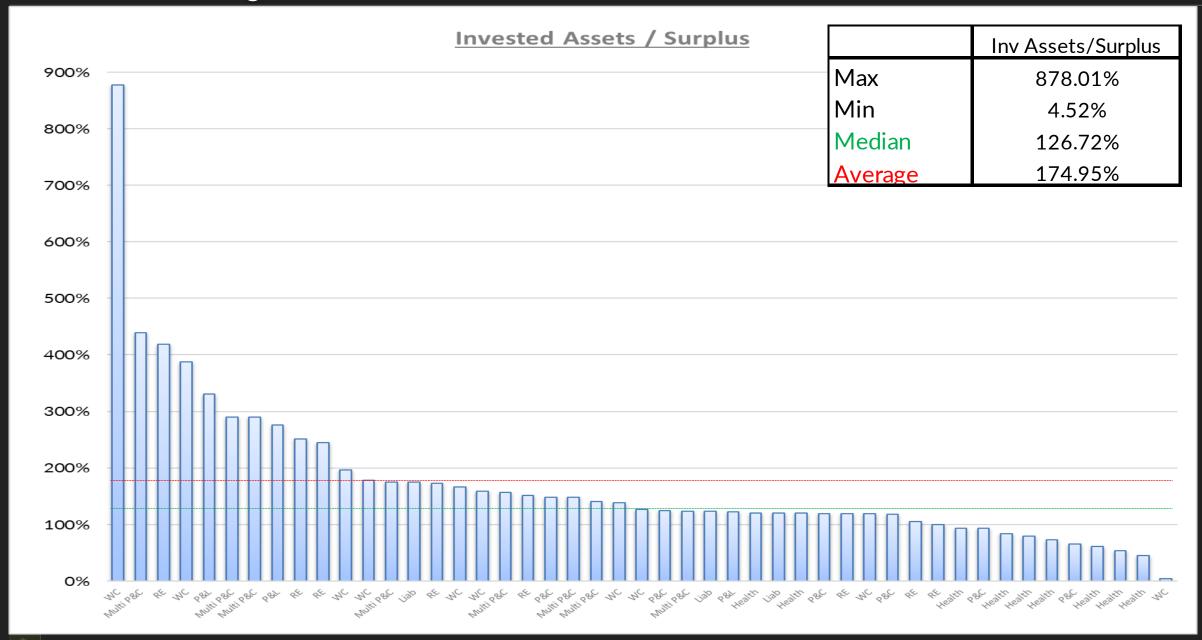


% of Risk Assets Allocation to U.S. Equity



Investment Leverage





Total Performance: One-Year Performance

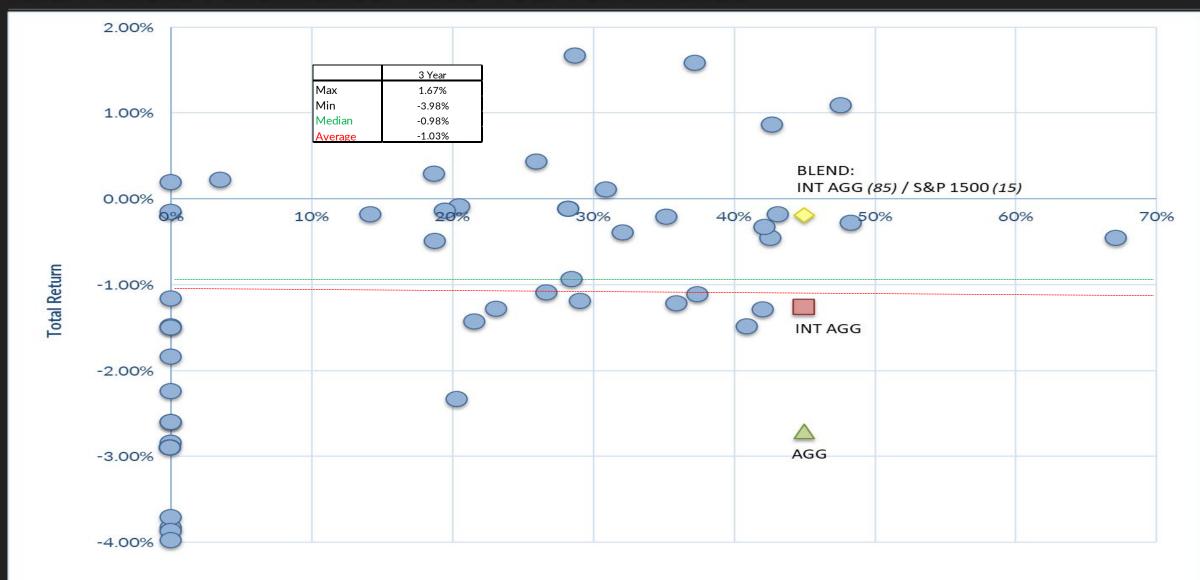




Risk Asset Allocation As % of Surplus

Total Portfolio Performance: Three-Year Performance





Risk Asset Allocation As % of Surplus

Here & Now

2

- Cybersecurity
- ClimateChange
- RegulatoryChange

- AgingInfrastructure
- EvolvingLiabilities
- Inflation



•

- Member ValueProposition
- TechnologicalChange
- Talent & WorkforceManagement

- Reinsurance
- CapitalEfficiency



Group Question #1 (30 min)



- Discuss at your table. Determine the top 3 KEY RISK
 POOL ISSUE and decide on the most important one.
- Be prepared to discuss the reasons for your selections.

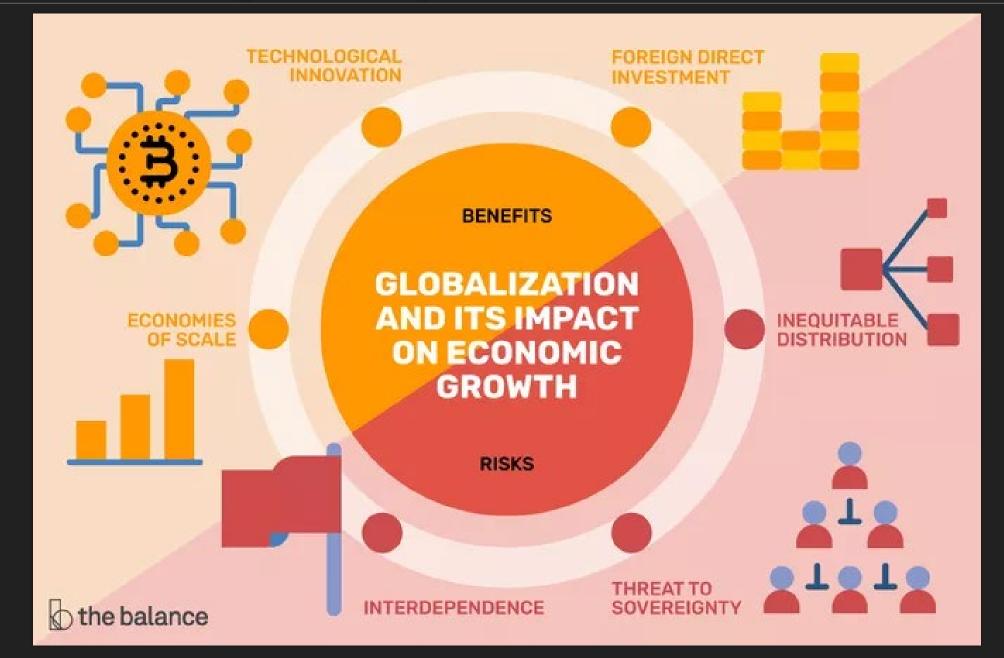




Looking Ahead

Globalization – Evolving But Still Very Much Present



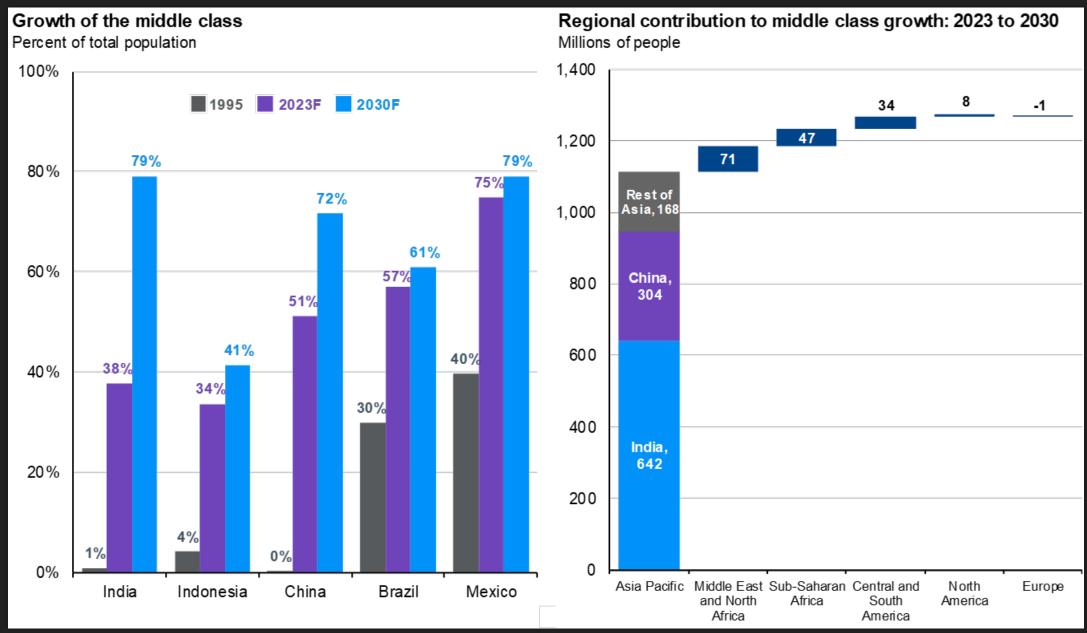


Share of domestic consumption met by inflows, 2019, %

No global region is self-sufficient nor ever will be, but the global connections are reconfiguring...

The emergence of the EM middle class

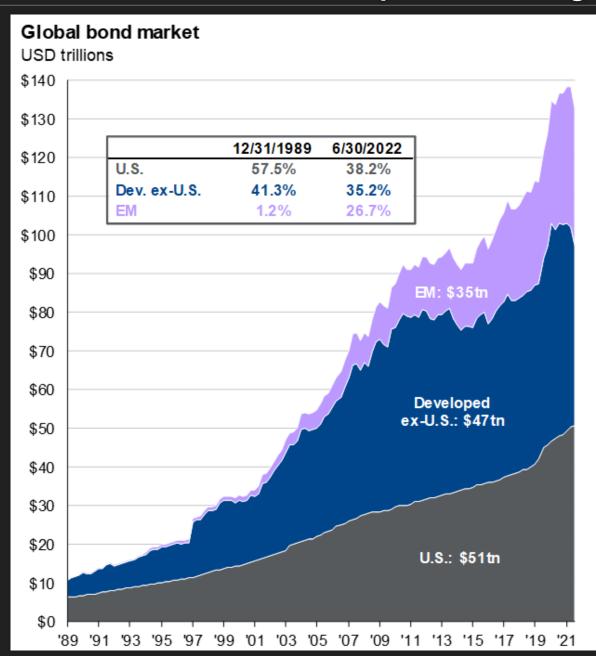






Global bond market – The Capital Financing Era?





- \$140 Trillion
- \$106 Trillion est. Global GDP
- ○132% Debt to GDP Ratio



Sustainable Investing: What that means for pools?

FIFTY YEARS OF DIGITAL ASSIMILATION

2000 THE TIPPING POINT (OF NO RETURN) Web 1.0 - Connected Organizations - Dial In Websites & Search • Digital Marketing • eCommerce **VIRUSES** 2010 Web 2.0 - Connected People - 3G **Social Technologies • Media • Networking Communication SOCIAL ENGINEERING** 2020 Web 3.0 - Connected Things - 5G **Smart Devices • IoT & M2M • Ambient Computing Mesh** DIGITAL RISK GROWS **DEVICE TAKEOVER** MANY REMARKS AND THE STATE OF T 2028 Web 4.0 - Virtual Intelligence - 8G? AI, ML, DL Ecosystem • Ambient Intelligence Mesh MI EXTORTION/CORRUPTION 2045 Web 5.0 - Augmented Capabilities - 10G? Wearables/Implantables • Transhumanism AUGMENTATION EXTORTION/CONTROL

Source: AGRIP Spring 2022, Scott Klososky Keynote, March 8, 2022

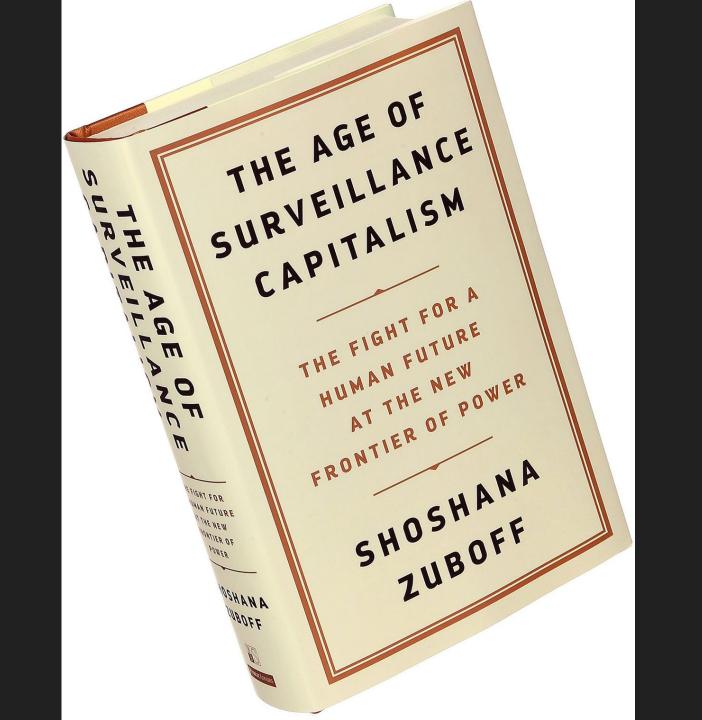


POLICY FORUM

The growing influence of industry in AI research

Industry is gaining control over the technology's future

NUR AHMED, MUNTASIR WAHED, AND NEIL C. THOMPSON Authors Info & Affiliations





Things to Consider

Olnvestment income:

- Is a cornerstone to the risk transfer business model, and...
- maximizing risk-adjusted investment income can mean the difference between remaining competitive or losing members to aggressive pricing.

- O How much can you expect to earn?
- O How much risk are you willing to prudently take?
- What liabilities are you funding by design or presumption?
- "NEW" How much reinsurance is available and at what cost?

Investment Performance Objectives

Where do you fall on this objective continuum and why?

Book yield 'or' Income Only

Constrained total return

Total return

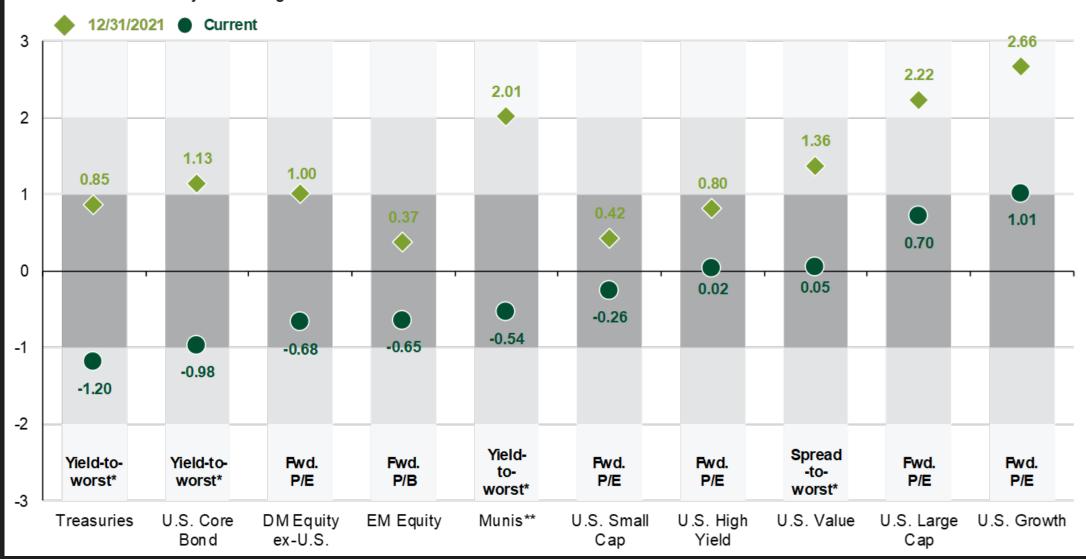
Most Risk Pools & Insurers

Valuations Monitor (Latest 20 Years)



Asset class valuations

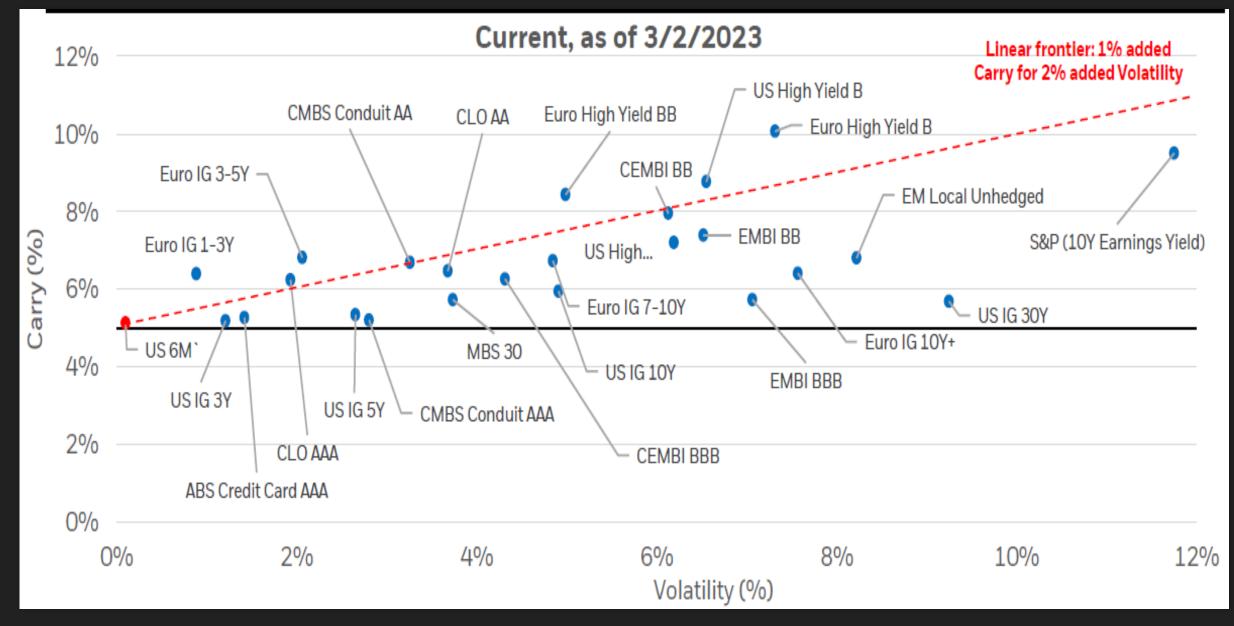
Z-scores based on 20-year average valuation measures





Tactical - Cash, Carry and Volatility Today



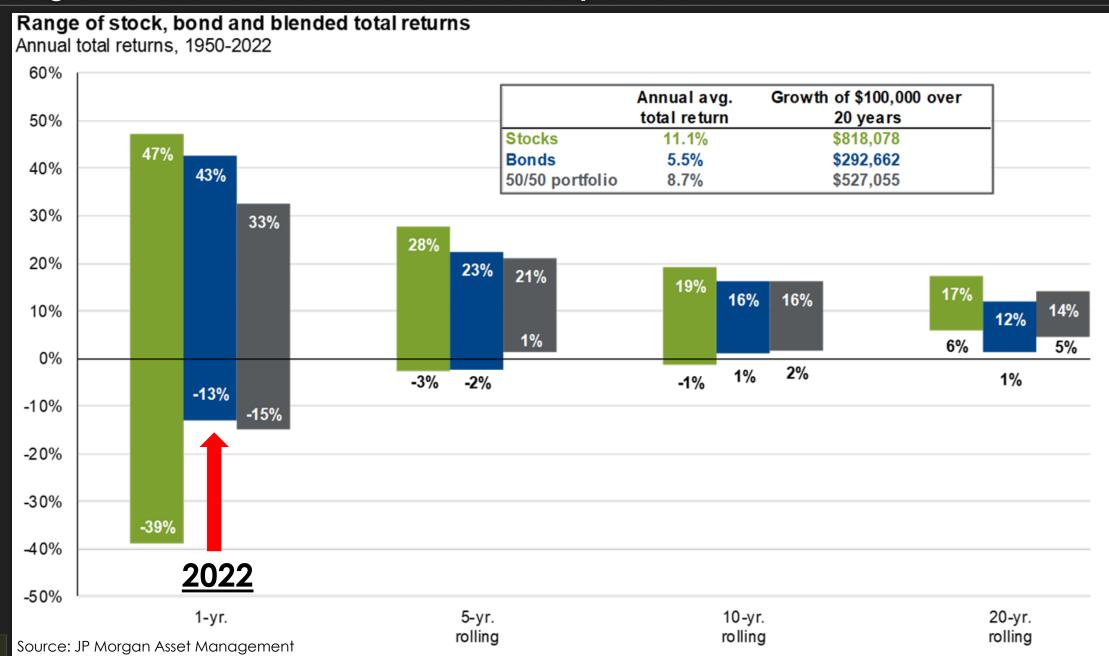




Source: BlackRock

Strategic - Time, Diversification and the Volatility of Returns





Considerations – Investment Process

- OHow is your investment process addressing these trends?
 - OAsset allocation (Yield vs. Growth)
 - OEnterprise risk management modeling vs. culture
 - OBoard/staff education
 - (data vs. information vs. knowledge)
 - Olnvestment policy flexibility
 - Captive formation

Considerations – Investment Process cont.

- OHow is your investment process addressing these trends?
 - OInternal Staffing
 - Olnvestment manager(s)
 - OInvestment advisors
 - Olnvestment manager Technology platform & flexibility
 - OInvestment accounting & reporting



