



NEPC, LLC

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FELRA and UFCW Pension Fund **Asset Allocation Discussion**

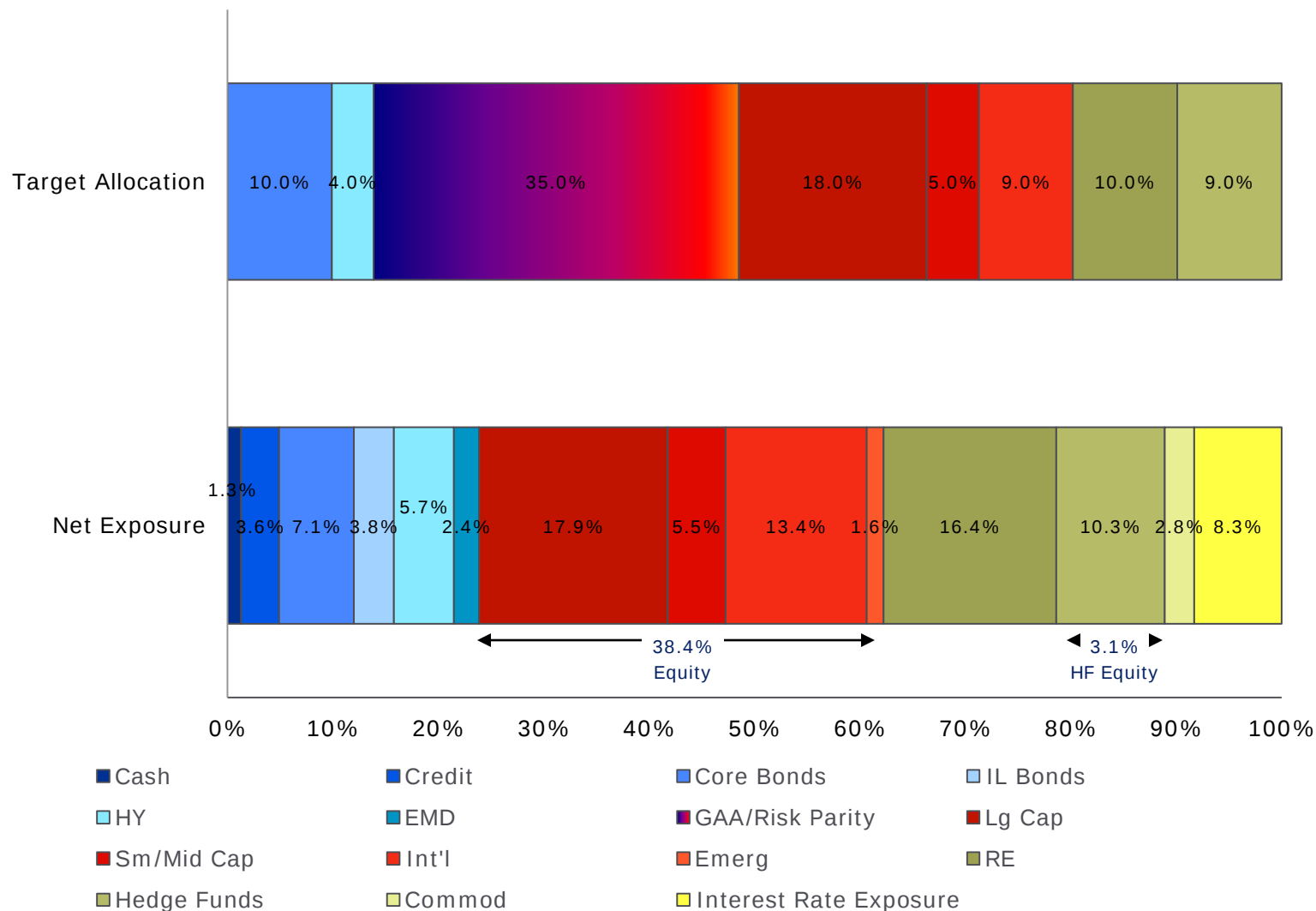
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Asset Allocation: Target vs. Actual (Net) Exposure



1. Net exposure scaled to 100 % for Risk Parity Managers, gross exposure shown on next page
2. Hedge Fund portfolio of 10.3 % comprised of approximately 3.1 % equity exposure
3. 41.5 % is approximate total net equity exposure when considering Direct, GAA, Risk Parity, and Hedge Funds

- The following represents actual exposure as of 3/31/13 for the risk parity managers

<u>Asset Class</u>	<u>AQR</u>	<u>Putnam</u>	<u>Wellington</u>	<u>Windhaven</u>
Cash	0%	0%	4%	10%
Global Interest Rates	97%	41%	10%	12%
Global Inflation Linked Bonds	54%	15%	5%	1%
Investment Grade Credit	41%	6%	12%	8%
High Yield	21%	30%	0%	5%
Emerging Market Debt	25%	5%	6%	6%
Developed Market Equity	23%	35%	46%	46%
Emerging Market Equity	5%	5%	6%	13%
Commodities	30%	15%	10%	1%
Alternatives	0%	0%	0%	0%
Total	296%	152%	100%	100%

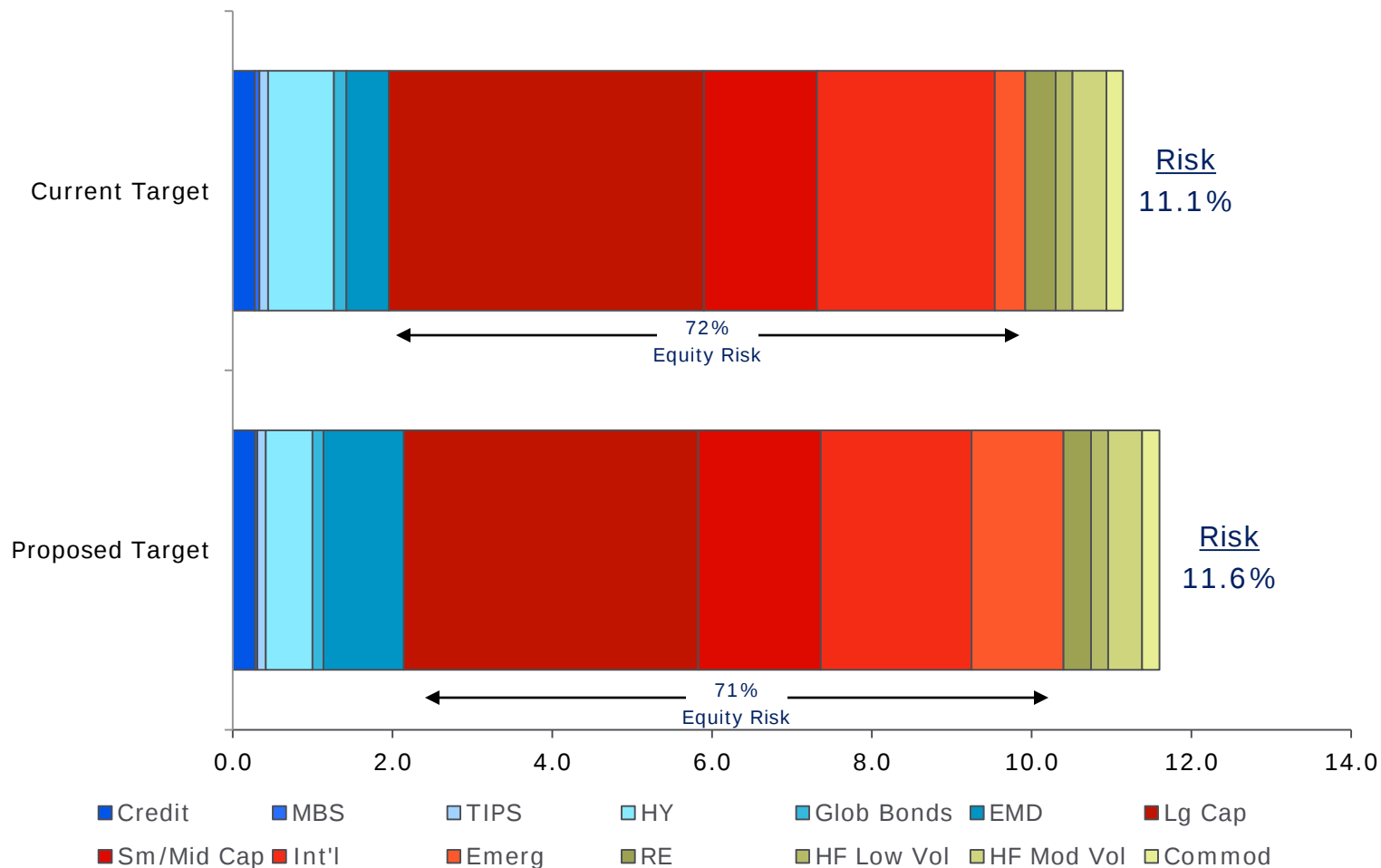
* Windhaven weights as of 12/31/12, due to timing of reporting

• Why change now?

- Increase equity diversification
 - Add emerging and global equity
- Add tactical fixed income exposure
 - Consider impact of rising rates on fixed income portfolio

	Current Target	Proposed Target
Large Cap Equities	18.0%	15.0%
Small/Mid Cap Equities	5.0%	5.0%
Int'l Equities (Unhedged)	9.0%	5.0%
Emerging Int'l Equities	0.0%	3.0%
Global Equity	0.0%	5.0%
Total Equity	32.0 %	33.0 %
Core Bonds	10.0%	4.0%
High-Yield Bonds	4.0%	0.0%
EMD (Local Currency)	0.0%	3.0%
Diversified Fixed Income	0.0%	6.0%
Total Fixed Income	14.0 %	13.0 %
Real Estate (Core)	10.0%	10.0%
Hedge Funds Low Vol	4.5%	4.5%
Hedge Funds Mod Vol	4.5%	4.5%
Total Alternatives	19.0 %	19.0 %
Global Asset Allocation	17.5%	17.5%
Risk Parity	17.5%	17.5%
Total Other	35.0 %	35.0 %
<i>Expected Return (5-7 Years Geometric)</i>	6.3 %	6.5 %
<i>Expected Return (30 Years Arithmetic)</i>	7.8 %	8.0 %
<i>Standard Dev of Asset Return</i>	11.1 %	11.6 %
<i>Sharpe Ratio</i>	0.50	0.50

- Overall risk increases modestly, but equity risk is slightly reduced



- **Diversified Fixed Income**
 - PIMCO
 - GLADI
 - Unconstrained Bond Fund
 - Loomis Sayles
 - Consider high yield positioning as part of this process
- **Emerging Equity**
 - Review best ideas
- **Emerging Debt**
 - Review best ideas
- **Global Equity**
 - Review best ideas
- **Hedge Funds**
 - Consider adding dedicated global macro position to complement existing strategies

2013 5-to-7 Year Return Forecasts

Geometric Expected Return			
Asset Class	2012	2013	2013-2012
Cash	1.25%	0.75%	-0.50%
Treasuries	1.50%	1.00%	-0.50%
IG Corp Credit	4.50%	3.00%	-1.50%
MBS	3.25%	2.50%	-0.75%
<i>Core Bonds *</i>	<i>2.88%</i>	<i>2.04%</i>	<i>-0.84%</i>
TIPS	1.75%	1.50%	-0.25%
High-Yield Bonds	7.00%	5.00%	-2.00%
Bank Loans	5.00%	5.00%	
Global Bonds (Unhedged)	1.25%	0.75%	-0.50%
Global Bonds (Hedged)	1.49%	0.93%	-0.56%
EMD External	5.75%	4.00%	-1.75%
EMD Local Currency	6.75%	5.00%	-1.75%
Large Cap Equities	7.25%	6.75%	-0.50%
Small/Mid Cap Equities	7.50%	7.00%	-0.50%
Int'l Equities (Unhedged)	7.75%	7.75%	
Int'l Equities (Hedged)	8.00%	8.00%	
Emerging Int'l Equities	9.75%	9.75%	
Private Equity	9.75%	9.00%	-0.75%
Private Debt	9.50%	8.50%	-1.00%
Private Real Assets	N/A	8.00%	
Real Estate	6.00%	6.00%	
Commodities	4.75%	5.00%	0.25%
Hedge Funds Low Vol	5.50%	4.75%	-0.75%
Hedge Funds Mod Vol	7.25%	6.50%	-0.75%

* Core Bonds assumption based on market weighted blend of components of Aggregate Index (Treasuries, IG Corp Credit, and MBS).



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2013 5-to-7 Year Volatility Forecasts

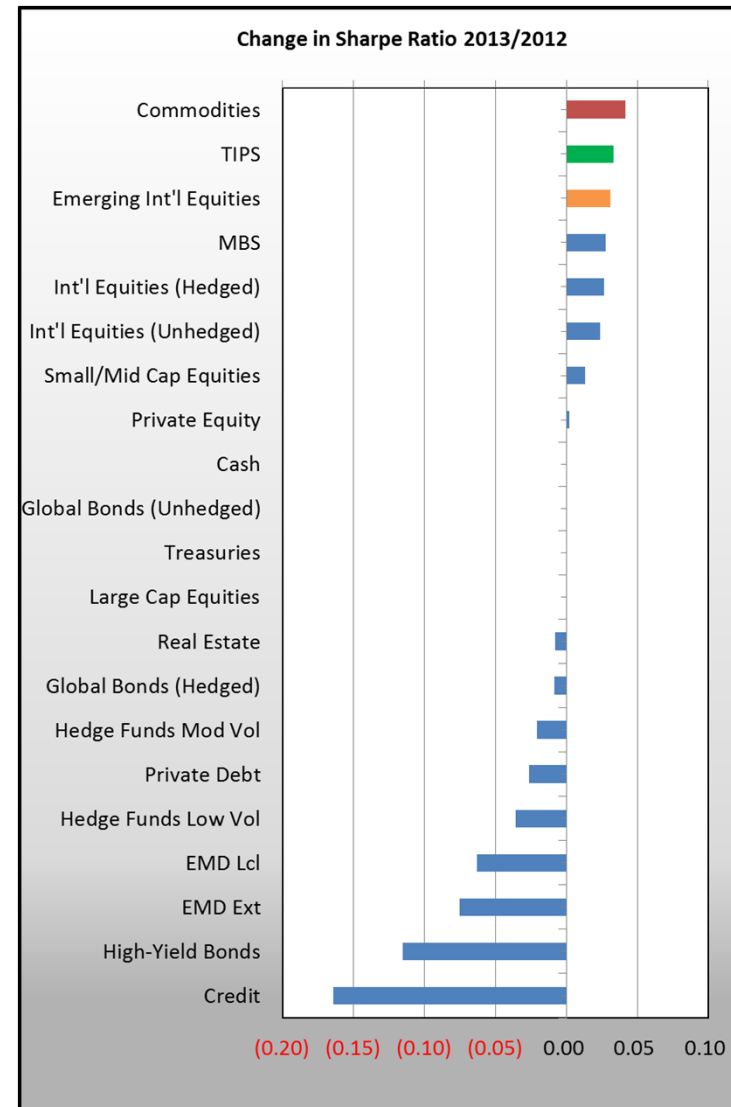
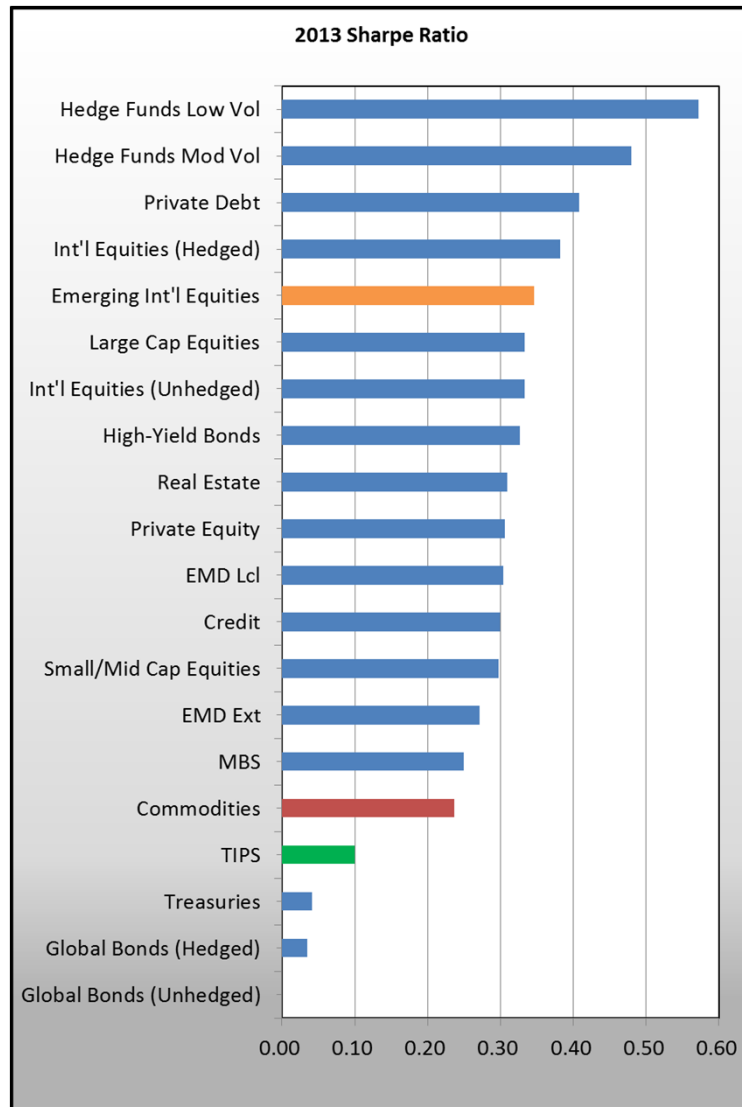
Volatility			
Asset Class	2012	2013	2013-2012
Cash	1.50%	1.00%	-0.50%
Treasuries	6.00%	6.00%	
IG Corp Credit	7.00%	7.50%	0.50%
MBS	9.00%	7.00%	-2.00%
Core Bonds*	7.00%	6.31%	-0.69%
TIPS	7.50%	7.50%	
High-Yield Bonds	13.00%	13.00%	
Bank Loans	6.50%	6.50%	
Global Bonds (Unhedged)	10.00%	9.00%	-1.00%
Global Bonds (Hedged)	5.50%	5.00%	-0.50%
EMD External	13.00%	12.00%	-1.00%
EMD Local Currency	15.00%	14.00%	-1.00%
Large Cap Equities	18.00%	18.00%	
Small/Mid Cap Equities	22.00%	21.00%	-1.00%
Int'l Equities (Unhedged)	21.00%	21.00%	
Int'l Equities (Hedged)	19.00%	19.00%	
Emerging Int'l Equities	27.00%	26.00%	-1.00%
Private Equity	28.00%	27.00%	-1.00%
Private Debt	19.00%	19.00%	
Private Real Assets	N/A	24.00%	
Real Estate	15.00%	17.00%	2.00%
Commodities	18.00%	18.00%	
Hedge Funds Low Vol	7.00%	7.00%	
Hedge Funds Mod Vol	12.00%	12.00%	

* Core Bonds assumption based on market weighted blend of components of Aggregate Index (Treasuries, IG Corp Credit, and MBS).

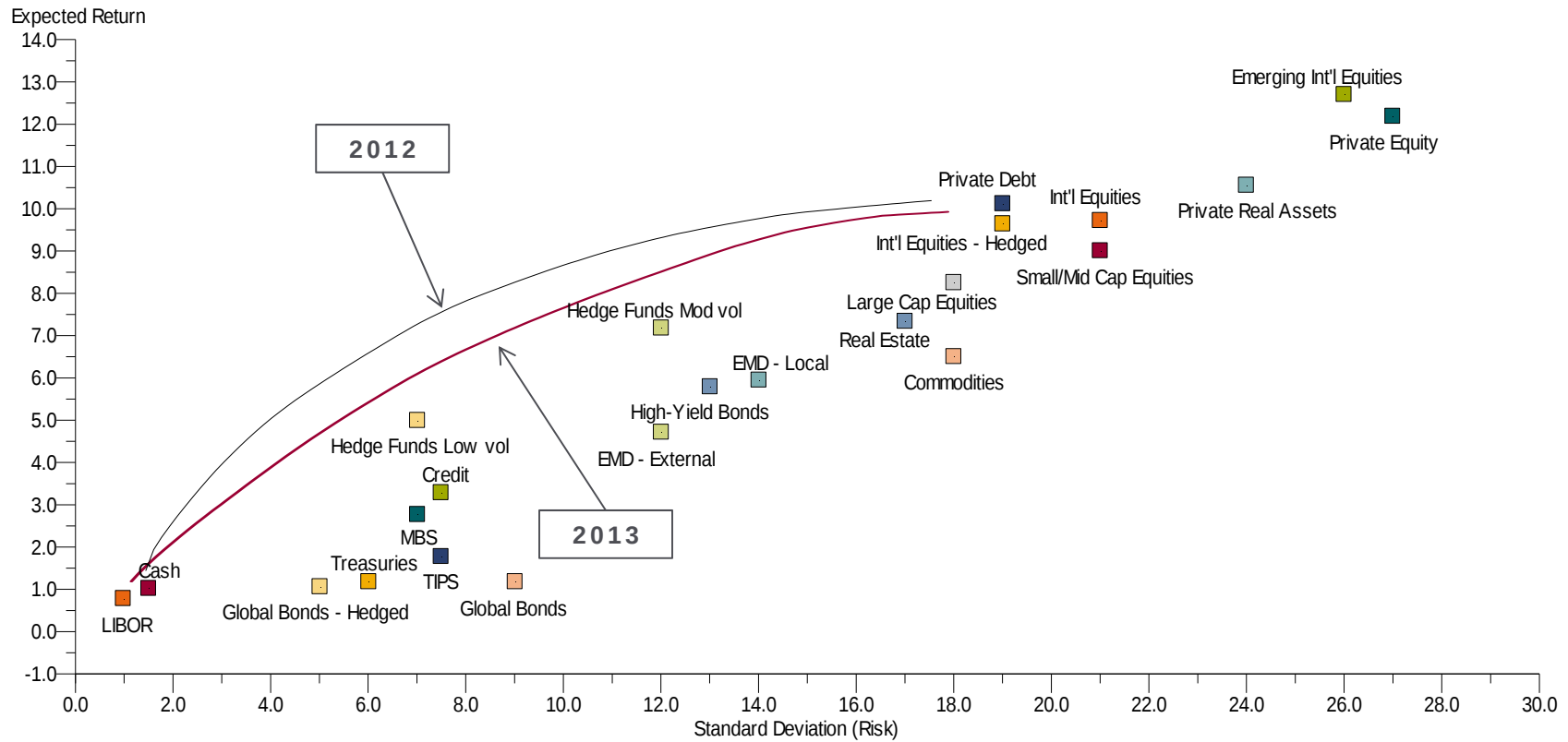


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Relative Asset Class Attractiveness



Efficient Frontier Comparison



2013 5-7 Year Correlations

Asset Class	Cash	Treas	Credit	MBS	TIPS	HY	Glob (U)	Glob (H)	EMD (Ext)	EMD (Loc)	Lg Cap	Smid Cap	Int'l Eq (U)	Int'l Eq (H)	Emerg Eq	Priv Eq	Priv Debt	Pr RI Assets	Real Estate	Comm	HF Low Vol	HF Mod Vol
Cash	1.00																					
Treas	0.20	1.00																				
IG Credit	0.10	0.75	1.00																			
MBS	0.25	0.90	0.80	1.00																		
TIPS	0.00	0.75	0.60	0.70	1.00																	
High-Yield	-0.05	0.15	0.60	0.30	0.20	1.00																
Glob Bonds (U)	0.10	0.55	0.50	0.45	0.40	0.10	1.00															
Glob Bonds (H)	0.10	0.90	0.65	0.70	0.65	0.10	0.60	1.00														
EMD (Ext)	0.05	0.15	0.65	0.25	0.30	0.65	0.15	0.10	1.00													
EMD (Loc)	0.05	0.15	0.65	0.25	0.25	0.70	0.25	0.05	0.80	1.00												
Lg Cap Eq	0.05	0.05	0.55	0.15	0.10	0.70	0.10	0.05	0.60	0.65	1.00											
Sm/Mid Cap Eq	-0.05	-0.05	0.35	0.05	0.05	0.70	0.00	-0.05	0.55	0.60	0.90	1.00										
Int'l Eq (U)	-0.10	0.00	0.30	0.05	0.05	0.50	0.40	0.25	0.60	0.65	0.75	0.65	1.00									
Int'l Eq (H)	-0.10	0.00	0.30	0.05	0.05	0.50	0.30	0.40	0.60	0.65	0.75	0.65	0.90	1.00								
Emerg Eq	-0.10	-0.10	0.25	-0.10	0.05	0.55	0.05	0.05	0.75	0.80	0.65	0.70	0.70	0.70	1.00							
Private Eq	-0.10	-0.05	0.25	0.05	0.00	0.60	-0.10	-0.10	0.35	0.40	0.75	0.80	0.60	0.60	0.40	1.00						
Private Debt	0.00	-0.35	0.15	-0.10	0.05	0.65	-0.10	-0.10	0.55	0.60	0.55	0.65	0.55	0.55	0.60	0.50	1.00					
Private Real Assets	0.15	-0.20	0.05	-0.10	0.20	0.40	-0.05	-0.05	0.40	0.40	0.50	0.55	0.50	0.50	0.50	0.65	0.55	1.00				
Real Estate	0.40	-0.05	-0.05	-0.05	0.00	-0.10	-0.05	-0.05	-0.10	-0.10	0.15	0.05	0.10	0.10	-0.05	0.15	0.00	0.35	1.00			
Commodities	0.10	-0.10	0.00	-0.10	0.30	0.10	0.10	0.10	0.25	0.35	0.20	0.20	0.25	0.25	0.30	0.15	0.20	0.35	0.10	1.00		
Hedge Funds Low Vol	0.35	-0.05	0.25	0.00	0.35	0.60	0.00	-0.10	0.50	0.50	0.55	0.55	0.60	0.60	0.60	0.40	0.50	0.45	0.10	0.30	1.00	
Hedge Funds Mod Vol	0.05	0.00	0.35	0.10	0.20	0.65	0.00	-0.10	0.50	0.50	0.70	0.75	0.65	0.65	0.65	0.50	0.70	0.50	0.05	0.35	0.90	1.00

Change from Prior Year

Asset Class	Cash	Treas	Credit	MBS	TIPS	HY	Glob (U)	Glob (H)	EMD (Ext)	EMD (Loc)	Lg Cap	Smid Cap	Int'l Eq (U)	Int'l Eq (H)	Emerg Eq	Priv Eq	Priv Debt	Pr RI Assets	Real Estate	Comm	HF Low Vol	HF Mod Vol
Cash	0.00																					
Treas	0.00	0.00																				
IG Credit	-0.05	-0.10	0.00																			
MBS	0.00	0.00	-0.05	0.00																		
TIPS	0.00	0.00	0.00	0.00	0.00																	
High-Yield	0.00	-0.05	0.00	-0.10	0.00	0.00																
Glob Bonds (U)	0.00	0.00	0.00	0.00	0.00	0.00	0.00															
Glob Bonds (H)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00														
EMD (Ext)	-0.05	0.05	0.05	0.05	0.10	0.00	0.15	0.10	0.00													
EMD (Loc)	-0.05	0.00	0.00	0.00	0.00	0.00	0.20	0.00	-0.15	0.00												
Lg Cap Eq	0.00	-0.10	0.00	-0.10	0.00	0.05	0.00	-0.05	0.00	0.05	0.00											
Sm/Mid Cap Eq	0.00	-0.10	0.00	-0.10	0.00	0.05	0.00	-0.05	0.00	0.05	0.00	0.00										
Int'l Eq (U)	0.00	-0.10	0.00	-0.10	0.00	0.05	0.00	-0.15	0.00	0.05	0.05	0.10	0.00									
Int'l Eq (H)	0.00	-0.10	0.00	-0.10	0.00	0.05	-0.10	0.00	0.00	0.05	0.05	0.10	0.00	0.00								
Emerg Eq	0.00	-0.10	0.00	-0.10	0.00	0.05	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.00							
Private Eq	0.00	-0.10	0.00	-0.10	0.00	0.00	-0.10	-0.10	0.10	0.15	0.00	-0.05	0.10	0.10	0.15	0.00						
Private Debt	0.00	-0.10	0.00	-0.10	0.00	0.00	-0.10	-0.10	0.00	0.05	0.15	0.15	0.15	0.15	0.15	0.50	0.00					
Private Real Assets																		0.00				
Real Estate	0.00	0.00	0.00	-0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.15	0.20		0.00			
Commodities	0.00	-0.05	0.00	-0.05	0.00	0.10	0.00	0.00	0.05	0.10	0.10	0.10	0.10	0.10	0.10	0.15	0.10		0.10	0.00		
Hedge Funds Low Vol	-0.05	-0.10	0.00	-0.10	0.00	0.05	0.00	-0.10	0.10	0.10	0.05	0.05	0.10	0.10	0.10	0.20	0.15		0.10	0.10	0.00	
Hedge Funds Mod Vol	-0.05	-0.10	0.00	-0.10	0.00	0.05	0.00	-0.10	0.10	0.10	0.05	0.05	0.10	0.10	0.10	0.15	0.10		0.05	0.10	0.00	0.00

