

Cliffwater Q1 2018 Long Term (10 Year) Capital Market Assumptions

(See Cliffwater's 2018 Asset Allocation Report (Jan 2018) for detailed explanation of assumptions)

The following table of Capital Market Assumptions shows forward-looking return and risk expectations as estimated by Cliffwater for asset classes that compose Cliffwater's investment universe. The table also shows estimated forward-looking correlations among the various asset classes. Cliffwater uses these Capital Market Assumptions to inform its process for determining asset allocation recommendations.

	Fixed Income										Alternatives										Sub-strategies									
	Stocks										Stocks										Stocks									
	Annual Risk (%)										Annual Risk (%)										Annual Risk (%)									
	Average Return (%)										Average Return (%)										Average Return (%)									
Compound Return (%)										Compound Return (%)										Compound Return (%)										
U.S. Stocks										U.S. Stocks										U.S. Stocks										
Non-US Developed										Non-US Developed										Non-US Developed										
Emerging Markets										Emerging Markets										Emerging Markets										
Global Equity										Global Equity										Global Equity										
Core U.S. Bonds										Core U.S. Bonds										Core U.S. Bonds										
IG Corporate										IG Corporate										IG Corporate										
10-yr Treasury										10-yr Treasury										10-yr Treasury										
3M LIBOR (Cash)										3M LIBOR (Cash)										3M LIBOR (Cash)										
10-yr TIPS										10-yr TIPS										10-yr TIPS										
High Yield Bonds										High Yield Bonds										High Yield Bonds										
Bank Loans										Bank Loans										Bank Loans										
Emerging Market Debt										Emerging Market Debt										Emerging Market Debt										
Private Real Estate (UL)										Private Real Estate (UL)										Private Real Estate (UL)										
Public REITs										Public REITs										Public REITs										
Private RE Partnerships										Private RE Partnerships										Private RE Partnerships										
Diversified Private Equity										Diversified Private Equity										Diversified Private Equity										
Diversified Hedge Funds										Diversified Hedge Funds										Diversified Hedge Funds										
Energy Funds										Energy Funds										Energy Funds										
Farmland										Farmland										Farmland										
Commodity Futures										Commodity Futures										Commodity Futures										
Infrastructure										Infrastructure										Infrastructure										
MLPs										MLPs										MLPs										
Private Debt (UL)										Private Debt (UL)										Private Debt (UL)										
Private Debt (L.0.85)										Private Debt (L.0.85)										Private Debt (L.0.85)										
Public BDCs										Public BDCs										Public BDCs										
Buyouts										Buyouts										Buyouts										
Venture Capital										Venture Capital										Venture Capital										
Directional HF's										Directional HF's										Directional HF's										
Absolute Return HF's										Absolute Return HF's										Absolute Return HF's										
Market Neutral HF's										Market Neutral HF's										Market Neutral HF's										
Credit/ Distressed HF's										Credit/ Distressed HF's										Credit/ Distressed HF's										
Event Driven HF's										Event Driven HF's										Event Driven HF's										
Equity L/S HF's										Equity L/S HF's										Equity L/S HF's										
Macro (Discretionary) HF's										Macro (Discretionary) HF's										Macro (Discretionary) HF's										
Macro (Trend) HF's										Macro (Trend) HF's										Macro (Trend) HF's										
Multi Strategy HF's										Multi Strategy HF's										Multi Strategy HF's										
CPI										CPI										CPI										

Notes: Compound Return refers to the long term (10 year) expected geometric average return. Average Return refers the long term (10 year) expected arithmetic average return.

Disclosures

The views expressed herein are the views of Cliffwater LLC ("Cliffwater") only through the date indicated and are subject to change based on market or other conditions. All information has been obtained from sources believed to be reliable but its accuracy is not guaranteed. Cliffwater has not conducted an independent verification of the information. The information herein may include inaccuracies or typographical errors. Due to various factors, including the inherent possibility of human or mechanical error, the accuracy, completeness, timeliness and correct sequencing of such information and the results obtained from its use are not guaranteed by Cliffwater. No representation, warranty, or undertaking, express or implied, is given as to the accuracy or completeness of the information or opinions contained in this report. This report is not an advertisement, is being distributed for informational and discussion purposes only, should not be considered investment advice, and should not be construed as an offer or solicitation of an offer for the purchase or sale of any security. The information herein does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. Cliffwater shall not be responsible for investment decisions, damages, or other losses resulting from the use of the information.



Disclosures (continued)

The information in this report is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. Statements that are nonfactual in nature, including opinions, projections and estimates, assume certain economic conditions and industry developments. Further, all information, including opinions and facts, expressed herein is current as of the date indicated and is subject to change without notice.

There can be no assurance that any expected rates of return or risk or expected correlations will be achieved. Expected rates of return and risk and expected correlations are subjective determinations by Cliffwater based on a variety of factors, including, among other things, investment strategy, prior performance of similar strategies, and market conditions. Expected rates of return and risk and expected correlations may be based upon assumptions regarding future events and conditions that prove to be inaccurate. Expected rates of return and risk and expected correlations should not be relied upon as an indication of future performance and should not form the primary basis for an investment decision. No representation or assurance is made that the expected rates of return or risk or expected correlations will be achieved.

Cliffwater is a service mark of Cliffwater LLC.

© 2018 Cliffwater LLC. All rights reserved.