

Asset Class Return Quilts

Q4, 2022

Asset Class Return Quilt

Calendar Year and Trailing Total Returns

Q4, 2022

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years
Ex-US REITs	US Small Cap	US REITs	US REITs	US Small Cap	EM Stocks	Cash	US Large Cap	Gold	US REITs	Midstrm Energy	US Large Cap
40.9%	38.8%	30.4%	2.5%	21.3%	37.3%	1.8%	31.4%	24.2%	43.1%	30.9%	12.4%
EM Stocks	US Large Cap	US Large Cap	Muni Bonds	Midstrm Energy	Ex-US REITs	Muni Bonds	US REITs	US Large Cap	Midstrm Energy	Commodities 16.1%	US Small Cap
18.2%	33.1%	13.2%	2.4%	18.3%	26.6%	1.6%	25.8%	21.0%	40.2%		9.0%
US REITs	Midstrm Energy	EM Bonds	EM Bonds	US High Yield	Intl Dev Stcks	Taxble Bonds	US Small Cap	US Small Cap	Commodities 27.1%	Cash	US REITs
17.8%	27.6%	7.4%	1.2%	17.1%	25.0%	0.0%	25.5%	20.0%		1.5%	6.5%
EM Bonds	Intl Dev Stcks	Taxble Bonds	US Large Cap	US Large Cap	US Large Cap	Gold	Intl Dev Stcks	EM Stocks	US Large Cap	Gold	Global 60/40
17.4%	22.8%	6.0%	0.9%	12.1%	21.7%	-1.1%	22.0%	18.3%	26.5%	-0.4%	5.1%
Intl Dev Stcks	Global 60/40	US Small Cap	Taxble Bonds	Commodities 11.8%	Global 60/40	US High Yield	Ex-US REITs	Global 60/40	US Small Cap	Muni Bonds	Intl Dev Stcks
17.3%	12.2%	4.9%	0.5%		17.4%	-2.1%	21.9%	13.6%	14.8%	-4.8%	4.7%
US Large Cap	US High Yield	Midstrm Energy	Cash	EM Stocks	US Small Cap	Intl Dev Bnds	Global 60/40	Intl Dev Bnds	Intl Dev Stcks	US High Yield	US High Yield
16.4%	7.4%	4.8%	0.0%	11.2%	14.6%	-2.3%	19.2%	11.2%	11.3%	-11.2%	4.0%
US Small Cap	Ex-US REITs	Muni Bonds	Intl Dev Stcks	EM Bonds	Gold	EM Bonds	Gold	Intl Dev Stcks	Global 60/40	Taxble Bonds	Midstrm Energy
16.3%	4.4%	4.7%	-0.8%	10.2%	11.9%	-4.3%	18.8%	7.8%	9.9%	-13.0%	2.0%
US High Yield	US REITs	Ex-US REITs	Ex-US REITs	Gold	Intl Dev Bnds	US REITs	EM Stocks	Taxble Bonds	Ex-US REITs	Intl Dev Stcks	Muni Bonds
15.8%	2.5%	3.4%	-1.8%	9.1%	11.3%	-4.6%	18.4%	7.5%	5.7%	-14.5%	1.7%
Global 60/40	Cash	Global 60/40	Global 60/40	US REITs	EM Bonds	US Large Cap	EM Bonds	US High Yield	US High Yield	Global 60/40	EM Bonds
11.4%	0.0%	3.0%	-2.5%	8.6%	10.3%	-4.8%	15.0%	7.1%	5.3%	-16.0%	1.6%
Intl Dev Bnds	Muni Bonds	US High Yield	US Small Cap	Global 60/40	US High Yield	Global 60/40	US High Yield	EM Bonds	Muni Bonds	EM Bonds	Ex-US REITs
8.0%	-0.3%	2.5%	-4.4%	5.9%	7.5%	-5.7%	14.3%	5.3%	0.5%	-17.8%	1.5%
Gold	Intl Dev Bnds	Cash	US High Yield	Taxble Bonds	US REITs	Ex-US REITs	Taxble Bonds	Muni Bonds	Cash	US Large Cap	EM Stocks
5.7%	-1.3%	0.0%	-4.5%	2.6%	5.1%	-9.4%	8.7%	4.2%	0.0%	-19.1%	1.4%
Midstrm Energy	Taxble Bonds	Gold	Intl Dev Bnds	Ex-US REITs	Taxble Bonds	US Small Cap	Commodities 7.7%	Cash	Taxble Bonds	EM Stocks	Taxble Bonds
4.8%	-2.0%	-0.2%	-6.6%	2.0%	3.5%	-11.0%		0.5%	-1.5%	-20.1%	1.1%
Taxble Bonds 4.2%	EM Stocks -2.6%	Intl Dev Bnds -2.1%	Gold -11.4%	Intl Dev Bnds 1.6%	Muni Bonds 3.5%	Commodities -11.2%	Midstrm Energy 6.6%	Commodities -3.1%	EM Bonds -1.8%	US Small Cap -20.4%	Gold 0.9%
Muni Bonds	EM Bonds	EM Stocks	EM Stocks	Intl Dev Stcks	Commodities 1.7%	Midstrm Energy	Muni Bonds	Ex-US REITs	EM Stocks	Intl Dev Bnds	Cash
3.6%	-5.3%	-2.2%	-14.9%	1.0%		-12.4%	5.6%	-6.8%	-2.5%	-21.8%	0.7%
Cash 0.1%	Commodities -9.5%	Intl Dev Stcks -4.9%	Commodities -24.7%	Cash 0.3%	Cash 0.8%	Intl Dev Stcks -13.8%	Intl Dev Bnds 4.6%	US REITs -7.6%	Gold -3.8%	Ex-US REITs -22.2%	Commodities -1.3%
Commodities -1.1%	Gold -27.8%	Commodities -17.0%	Midstrm Energy -32.6%	Muni Bonds -0.1%	Midstrm Energy -6.5%	EM Stocks -14.6%	Cash 2.2%	Midstrm Energy -28.7%	Intl Dev Bnds -9.5%	US REITs -24.5%	Intl Dev Bnds -1.9%



Asset Class Return Quilt

Calendar Year and Trailing Total Returns

Q4, 2022

	55.8%	39.9%		45.6%			78.5%	35.9%									31.4%				9.9%
	47.3%	31.5%	34.0%	35.9%			76.4%	28.5%		40.9%				21.3%	37.3%		25.8%				9.4%
	45.8%	25.6%	21.4%	32.1%	39.4%		58.2%	27.7%		18.2%				18.3%	26.6%		25.5%				9.0%
	44.5%	20.2%	17.4%	26.3%	31.6%		47.5%	26.9%		17.8%				17.1%	25.0%		22.0%				9.0%
	38.6%	18.3%	17.1%	26.1%	16.2%		31.8%	18.9%		17.4%				12.1%	21.7%		21.9%	24.2%			8.9%
	36.7%	16.7%	13.5%	23.9%	12.7%		29.8%	17.2%		17.3%		30.4%		11.8%	17.4%		19.2%	21.0%	43.1%		8.7%
	29.9%	13.3%	12.1%	18.4%	12.1%		28.6%	16.8%		16.4%		13.2%		11.2%	14.6%		18.8%	20.0%	40.2%		7.3%
25.9%	29.0%	13.2%	10.2%	15.5%	11.2%		28.4%	16.1%	13.9%	16.3%	38.8%	7.4%		10.2%	11.9%		18.4%	18.3%	27.1%		7.1%
24.1%	25.8%	11.6%	6.3%	15.5%	11.2%		27.6%	15.1%	11.6%	15.8%	33.1%	6.0%		9.1%	11.3%		15.0%	13.6%	26.5%		6.5%
24.0%	23.9%	11.4%	6.3%	11.8%	7.0%		27.2%	12.2%	8.7%	11.4%	27.6%	4.9%		8.6%	10.3%		14.3%	11.2%	14.8%		6.4%
13.7%	22.2%	11.1%	4.9%	9.9%	6.2%		23.8%	10.0%	7.8%	8.0%	22.8%	4.8%	2.5%	5.9%	7.5%		8.7%	7.8%	11.3%		6.2%
10.3%	21.7%	9.1%	4.6%	8.1%	5.8%	7.5%	18.9%	7.8%	7.6%	5.7%	12.2%	4.7%	2.4%	2.6%	5.1%		7.7%	7.5%	9.9%		3.3%
8.7%	20.7%	5.0%	3.0%	4.8%	4.8%	5.2%	7.2%	6.5%	7.3%	4.8%	7.4%	3.4%	1.2%	2.0%	3.5%		6.6%	7.1%	5.7%		3.1%
3.6%	4.4%	4.3%	2.7%	4.3%	4.8%	4.2%	6.4%	3.1%	5.0%	4.2%	4.4%	3.0%	0.9%	1.6%	3.5%	1.8%	5.6%	5.3%	5.3%	30.9%	3.0%
1.7%	4.1%	2.9%	2.4%	3.7%	1.9%	3.4%	5.9%	1.9%	1.5%	3.6%	2.5%	2.5%	0.5%	1.0%	1.7%	1.6%	4.6%	4.2%	0.5%	16.1%	1.4%
1.3%	1.0%	1.2%	1.7%	2.1%	1.9%	1.8%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%	0.8%	0.0%	2.2%	0.5%	0.0%	1.5%	1.2%
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	20 Yrs
	_000																				
-1.4%	2000		-8.5%		-1.6%	-12.0%			-0.1%	-1.1%	-0.3%	-0.2%	-0.8%	-0.1%	-6.5%	-1.1%		-3.1%	-1.5%	-0.4%	
-3.4%	2000				-1.6% -16.8%	-12.0% -25.2%			-0.1% -1.9%		-0.3% -1.3%	-0.2% -2.1%	-0.8% -1.8%			-1.1% -2.1%		-3.1% -6.8%	-1.5% -1.8%	-4.8%	
-3.4% -5.3%	2000					-12.0% -25.2% -26.2%			-0.1% -1.9% -4.2%		-0.3% -1.3% -2.0%	-0.2% -2.1% -2.2%	-0.8% -1.8% -2.5%			-1.1% -2.1% -2.3%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5%	-4.8% -11.2%	
-3.4% -5.3% -6.2%	2000					-12.0% -25.2% -26.2% -33.8%			-0.1% -1.9% -4.2% -12.1%		-0.3% -1.3% -2.0% -2.6%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4%			-1.1% -2.1% -2.3% -4.3%		-3.1% -6.8%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0%	
-3.4% -5.3% -6.2% -15.9%	2000					-12.0% -25.2% -26.2% -33.8% -35.6%			-0.1% -1.9% -4.2% -12.1% -13.3%		-0.3% -1.3% -2.0% -2.6% -5.3%	-0.2% -2.1% -2.2%	-0.8% -1.8% -2.5% -4.4% -4.5%			-1.1% -2.1% -2.3% -4.3% -4.6%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5%	-4.8% -11.2% -13.0% -14.5%	
-3.4% -5.3% -6.2% -15.9% -20.5%	2000					-12.0% -25.2% -26.2% -33.8% -35.6% -36.9%			-0.1% -1.9% -4.2% -12.1% -13.3% -16.0%		-0.3% -1.3% -2.0% -2.6% -5.3% -9.5%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4% -4.5% -6.6%			-1.1% -2.1% -2.3% -4.3% -4.6% -4.8%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0% -14.5% -16.0%	
-3.4% -5.3% -6.2% -15.9%	2000					-12.0% -25.2% -26.2% -33.8% -35.6% -36.9% -37.6%			-0.1% -1.9% -4.2% -12.1% -13.3%		-0.3% -1.3% -2.0% -2.6% -5.3%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4% -4.5% -6.6% -11.4%			-1.1% -2.1% -2.3% -4.3% -4.6% -4.8% -5.7%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0% -14.5% -16.0% -17.8%	
-3.4% -5.3% -6.2% -15.9% -20.5% -21.7%	ıl 60/40		-8.5%	ev Bonds	-16.8%	-12.0% -25.2% -26.2% -33.8% -35.6% -36.9% -37.6% -38.0%			-0.1% -1.9% -4.2% -12.1% -13.3% -16.0%		-0.3% -1.3% -2.0% -2.6% -5.3% -9.5%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4% -4.5% -6.6% -11.4%			-1.1% -2.1% -2.3% -4.3% -4.6% -4.8% -5.7% -9.4%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0% -14.5% -16.0% -17.8% -19.1%	
-3.4% -5.3% -6.2% -15.9% -20.5% -21.7% • Globa • U.S. I			-8.5%	jing Bonds	-16.8%	-12.0% -25.2% -26.2% -33.8% -35.6% -36.9% -37.6% -38.0% -43.4%			-0.1% -1.9% -4.2% -12.1% -13.3% -16.0%		-0.3% -1.3% -2.0% -2.6% -5.3% -9.5%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4% -4.5% -6.6% -11.4% -14.9% -24.7%			-1.1% -2.1% -2.3% -4.3% -4.6% -4.8% -5.7% -9.4% -11.0%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0% -14.5% -16.0% -17.8% -19.1% -20.1%	
-3.4% -5.3% -6.2% -15.9% -20.5% -21.7% Globa U.S. 1 U.S. 3	ıl 60/40 Large Cap Small Cap ev Stocks		-8.5% Intl De Emerg U.S. F Ex-U.:	jing Bonds REITs S. Real Est	-16.8%	-12.0% -25.2% -26.2% -33.8% -35.6% -36.9% -37.6% -38.0% -43.4% -53.0%			-0.1% -1.9% -4.2% -12.1% -13.3% -16.0%		-0.3% -1.3% -2.0% -2.6% -5.3% -9.5%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4% -4.5% -6.6% -11.4%			-1.1% -2.1% -2.3% -4.3% -4.6% -4.8% -5.7% -9.4% -11.0%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0% -14.5% -16.0% -17.8% -19.1% -20.1% -20.4%	
-3.4% -5.3% -6.2% -15.9% -20.5% -21.7% Globa U.S. I	ıl 60/40 Large Cap Small Cap ev Stocks ging Stocks		-8.5% Intl De Emerg U.S. F Ex-U.: Comn	jing Bonds REITs	-16.8%	-12.0% -25.2% -26.2% -33.8% -35.6% -36.9% -37.6% -38.0% -43.4%			-0.1% -1.9% -4.2% -12.1% -13.3% -16.0%		-0.3% -1.3% -2.0% -2.6% -5.3% -9.5%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4% -4.5% -6.6% -11.4% -14.9% -24.7%			-1.1% -2.1% -2.3% -4.3% -4.6% -4.8% -5.7% -9.4% -11.0% -11.2% -12.4%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0% -14.5% -16.0% -17.8% -19.1% -20.1% -20.4% -21.8%	
-3.4% -5.3% -6.2% -15.9% -20.5% -21.7% Globa U.S. I U.S. I Emer. Muni U.S In	ıl 60/40 Large Cap Small Cap ev Stocks	s Inds	-8.5% Intl De Emerg U.S. F Ex-U.: Comn Gold	jing Bonds REITs S. Real Est	-16.8%	-12.0% -25.2% -26.2% -33.8% -35.6% -36.9% -37.6% -38.0% -43.4% -53.0%			-0.1% -1.9% -4.2% -12.1% -13.3% -16.0%		-0.3% -1.3% -2.0% -2.6% -5.3% -9.5%	-0.2% -2.1% -2.2% -4.9%	-0.8% -1.8% -2.5% -4.4% -4.5% -6.6% -11.4% -14.9% -24.7%			-1.1% -2.1% -2.3% -4.3% -4.6% -4.8% -5.7% -9.4% -11.0%		-3.1% -6.8% -7.6%	-1.5% -1.8% -2.5% -3.8%	-4.8% -11.2% -13.0% -14.5% -16.0% -17.8% -19.1% -20.1% -20.4%	



U.S. Equity Sector Return Quilt Calendar Year and Trailing Total Returns

Q4, 2022

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years
Financials	Cons Disc	Real Estate	Cons Disc	Energy	Technology	Health Care 6.5%	Technology	Technology	Energy	Energy	Technology
28.8%	43.1%	30.2%	10.1%	27.4%	38.8%		50.3%	43.9%	54.6%	65.7%	18.3%
Cons Disc	Health Care	Utilities	Health Care 6.9%	CommServ	Materials	Utilities	CommServ	Cons Disc	Real Estate	Utilities	Health Care
23.9%	41.5%	29.0%		23.5%	23.8%	4.1%	32.7%	33.3%	46.2%	1.6%	15.0%
Real Estate	Industrials	Health Care	ConsStaples	Financials	Cons Disc	Cons Disc	Financials	CommServ	Financials	ConsStaples	S&P 500
19.7%	40.7%	25.3%	6.6%	22.8%	23.0%	0.8%	32.1%	23.6%	35.0%	-0.6%	12.6%
CommServ	Financials	Technology	Technology	Industrials	Financials	Technology	S&P 500	Materials	Technology	Health Care -2.0%	Financials
18.3%	35.6%	20.1%	5.9%	18.9%	22.2%	-0.3%	31.5%	20.7%	34.5%		12.2%
Health Care	S&P 500	ConsStaples	Real Estate	Materials	Health Care 22.1%	Real Estate	Industrials	S&P 500	S&P 500	Industrials	Industrials
17.9%	32.4%	16.0%	4.7%	16.7%		-2.2%	29.4%	18.4%	28.7%	-5.5%	11.9%
S&P 500	Technology	Financials	CommServ	Utilities	S&P 500	S&P 500	Real Estate	Health Care	Materials	Financials	Cons Disc
16.0%	28.4%	15.2%	3.4%	16.3%	21.8%	-4.4%	29.0%	13.4%	27.3%	-10.5%	11.7%
Industrials	ConsStaples	S&P 500	S&P 500	Technology	Industrials	ConsStaples	Cons Disc	Industrials	Health Care 26.1%	Materials	Utilities
15.3%	26.1%	13.7%	1.4%	13.8%	21.0%	-8.4%	27.9%	11.1%		-12.3%	11.1%
Materials	Materials	Industrials	Financials	S&P 500	ConsStaples	CommServ	ConsStaples	ConsStaples	Cons Disc	S&P 500	ConsStaples
15.0%	25.6%	9.8%	-1.5%	12.0%	13.5%	-12.5%	27.6%	10.7%	24.4%	-18.1%	11.0%
Technology	Energy	Cons Disc	Industrials	Cons Disc	Utilities	Financials	Utilities	Utilities	CommServ	Real Estate	Materials
14.8%	25.1%	9.7%	-2.5%	6.0%	12.1%	-13.0%	26.3%	0.5%	21.6%	-26.1%	9.8%
ConsStaples	Utilities	Materials	Utilities	ConsStaples	Real Estate	Industrials	Materials	Financials	Industrials 21.1%	Technology	Real Estate
10.8%	13.2%	6.9%	-4.8%	5.4%	10.8%	-13.3%	24.6%	-1.7%		-28.2%	7.8%
Energy	CommServ	CommServ	Materials	Real Estate	Energy	Materials	Health Care 20.8%	Real Estate	ConsStaples	Cons Disc	Energy
4.6%	11.5%	3.0%	-8.4%	3.4%	-1.0%	-14.7%		-2.2%	18.6%	-37.0%	6.0%
Utilities	Real Estate	Energy	Energy	Health Care	CommServ	Energy	Energy	Energy	Utilities	CommServ	CommServ
1.3%	1.6%	-7.8%	-21.1%	-2.7%	-1.3%	-18.1%	11.8%	-33.7%	17.7%	-39.9%	4.3%



U.S. Equity Factor Return Quilt Calendar Year and Trailing Total Returns

Q4, 2022

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years
Cyclicals	Small Cap	Defensives	Momentum	Small Cap	Momentum	Min Vol	High Quality	Momentum	Defensives	Defensives	Momentum
20.1%	38.8%	20.4%	9.3%	21.3%	37.8%	1.5%	39.1%	29.6%	30.3%	14.2%	14.1%
Small Cap	Cyclicals	Min Vol	High Quality	Value	Cyclicals	Momentum	Cyclicals	Cyclicals	Large Cap	High Dividnd -3.8%	High Quality
16.3%	35.0%	16.5%	7.0%	16.9%	27.3%	-1.6%	36.3%	27.8%	28.7%		13.6%
Large Cap	Momentum	High Dividnd	Min Vol	High Dividnd	High Quality	High Dividnd -2.3%	Large Cap	High Quality	Cyclicals	Value	Cyclicals
16.0%	34.8%	14.9%	5.6%	16.3%	26.0%		31.5%	22.9%	27.6%	-6.2%	13.3%
Momentum	High Quality	Momentum	Cyclicals	Cyclicals	Large Cap	High Quality	Momentum	Small Cap	High Quality	Min Vol	Large Cap
15.1%	33.5%	14.7%	2.6%	14.0%	21.8%	-2.6%	28.1%	20.0%	27.6%	-9.2%	12.6%
Value	Large Cap	Large Cap	Large Cap	Defensives	High Dividnd	Defensives	Min Vol	Large Cap	Value	Momentum	Defensives
15.0%	32.4%	13.7%	1.4%	14.0%	19.5%	-4.3%	28.0%	18.4%	27.2%	-17.4%	12.2%
High Quality 14.0%	Value 32.3%	Cyclicals 13.6%	High Dividnd 0.7%	Large Cap 12.0%	Min Vol 19.2%	Large Cap -4.4%	Value 25.7%	Min Vol 5.8%	High Dividnd 21.9%	Large Cap -18.1%	Min Vol 11.9%
Min Vol	High Dividnd 28.9%	Value	Value	Min Vol	Value	Cyclicals	Small Cap	High Dividnd	Min Vol	Small Cap	High Dividnd
11.2%		12.3%	-1.9%	10.7%	15.4%	-5.3%	25.5%	1.7%	21.0%	-20.4%	11.5%
Defensives	Defensives	High Quality	Defensives	High Quality	Small Cap	Value	High Dividnd	Value	Small Cap	High Quality	Value
10.7%	28.9%	11.8%	-2.6%	8.0%	14.6%	-7.2%	22.5%	0.9%	14.8%	-22.7%	10.7%
High Dividnd	Min Vol	Small Cap	Small Cap	Momentum	Defensives	Small Cap	Defensives	Defensives	Momentum	Cyclicals	Small Cap
10.6%	25.3%	4.9%	-4.4%	5.1%	9.1%	-11.0%	21.8%	-2.9%	12.9%	-27.2%	9.0%



Fixed Income & Credit Return Quilt

Calendar Year and Trailing Total Returns

Q4, 2022

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years
Emerging	HY Corp	IG Corp	Municipal	HY Corp	Ex-US Dev	ABS	Emerging	Ex-US Dev	Bank Loan	Bank Loan	HY Corp
17.4%	7.4%	7.5%	2.4%	17.1%	11.3%	1.8%	15.0%	11.2%	5.4%	-1.1%	4.0%
HY Corp	Bank Loan	Emerging	MBS	Emerging	Emerging	Municipal	IG Corp	IG Corp	HY Corp	ABS	Bank Loan
15.8%	6.2%	7.4%	1.5%	10.2%	10.3%	1.6%	14.5%	9.9%	5.3%	-4.3%	3.8%
IG Corp	ABS	MBS	ABS	Bank Loan	HY Corp	Bank Loan	HY Corp	Govt	Municipal	Municipal	IG Corp
9.8%	-0.3%	6.1%	1.2%	9.9%	7.5%	1.1%	14.3%	7.9%	0.5%	-4.8%	2.0%
Bank Loan	Municipal	US Agg	Emerging	IG Corp	IG Corp	MBS	US Agg	US Agg	ABS	HY Corp	Municipal
9.4%	-0.3%	6.0%	1.2%	6.1%	6.4%	1.0%	8.7%	7.5%	-0.3%	-11.2%	1.7%
Ex-US Dev	Ex-US Dev	Govt	Govt	US Agg	Bank Loan	Govt	Bank Loan	HY Corp	IG Corp	MBS	Emerging
8.0%	-1.3%	4.9%	0.9%	2.6%	4.2%	0.9%	8.2%	7.1%	-1.0%	-11.8%	1.6%
US Agg	MBS	Municipal	US Agg	ABS	US Agg	US Agg	Govt	Emerging	MBS	Govt	ABS
4.2%	-1.4%	4.7%	0.5%	2.0%	3.5%	0.0%	6.8%	5.3%	-1.0%	-12.3%	1.2%
ABS	IG Corp	HY Corp	Bank Loan	MBS	Municipal	HY Corp	MBS	ABS	US Agg	US Agg	US Agg
3.7%	-1.5%	2.5%	-0.4%	1.7%	3.5%	-2.1%	6.4%	4.5%	-1.5%	-13.0%	1.1%
Municipal 3.6%	US Agg	Bank Loan	IG Corp	Ex-US Dev	MBS	Ex-US Dev	Municipal	Municipal	Emerging	IG Corp	MBS
	-2.0%	2.1%	-0.7%	1.6%	2.5%	-2.3%	5.6%	4.2%	-1.8%	-15.8%	0.7%
MBS	Govt	ABS	HY Corp	Govt	Govt	IG Corp	Ex-US Dev	MBS	Govt	Emerging	Govt
2.6%	-2.6%	1.9%	-4.5%	1.0%	2.3%	-2.5%	4.6%	3.9%	-2.3%	-17.8%	0.6%
Govt	Emerging	Ex-US Dev	Ex-US Dev	Municipal	ABS	Emerging	ABS	Bank Loan	Ex-US Dev	Ex-US Dev	Ex-US Dev
2.0%	-5.3%	-2.1%	-6.6%	-0.1%	1.6%	-4.3%	4.5%	2.8%	-9.5%	-21.8%	-1.9%



Commodity Futures Return Quilt Calendar Year and Trailing Total Returns

Q4, 2022

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years
Unleaded Gas	Soybeans	Coffee	Sugar	Zinc	Aluminum	Wheat	Unleaded Gas	Silver	Unleaded Gas	Unleaded Gas	Nickel
25.7%	10.5%	37.8%	-4.7%	57.5%	31.2%	3.5%	44.5%	42.5%	69.6%	48.7%	5.1%
Soybeans	WTI Crude	Live Cattle	Gold	Sugar	Zinc	Live Cattle 2.6%	WTI Crude	Soybeans	Coffee	Nickel	Soybeans
24.0%	6.8%	22.1%	-11.4%	22.8%	29.7%		34.4%	32.2%	63.7%	46.7%	4.3%
Corn	Natural Gas	Nickel	Unleaded Gas	Copper	Copper	Natural Gas	Nickel	Gold	WTI Crude	Soybeans	Zinc
19.0%	5.0%	7.3%	-12.6%	15.7%	29.2%	-0.1%	32.6%	24.2%	61.6%	28.9%	4.1%
Wheat	Unleaded Gas	Zinc	Silver	Soybeans	Nickel	Gold	Gold	Copper	Aluminum	WTI Crude	Gold
9.8%	1.9%	3.5%	-12.7%	14.8%	25.6%	-1.1%	18.8%	23.3%	39.0%	24.9%	0.9%
Zinc	Live Cattle	Gold	Live Cattle	Silver	Gold	Corn	Silver	Zinc	Corn	Corn	Unleaded Gas
9.0%	-5.0%	-0.2%	-14.3%	14.0%	11.9%	-4.6%	13.9%	18.6%	34.4%	23.0%	-0.1%
Silver	Zinc	Aluminum	Soybeans	Nickel	Live Cattle	Silver	Coffee	Nickel	Natural Gas	Natural Gas	Copper
7.1%	-7.0%	-3.1%	-14.6%	11.8%	9.1%	-10.2%	12.2%	16.6%	28.0%	19.4%	-0.3%
Gold 5.7%	Copper -8.8%	Soybeans -5.5%	Corn -19.2%	Commodities 11.8%	Silver 5.8%	Commodities -11.2%	Wheat 9.4%	Corn 12.9%	Zinc 28.0%	Commodities 16.1%	Live Cattle -1.1%
Copper 5.0%	Commodities -9.5%	Wheat -9.4%	Wheat -22.2%	Natural Gas 10.3%	WTI Crude 5.1%	Soybeans -11.7%	Commodities 7.7%	Sugar 10.6%	Commodities 27.1%	Sugar 12.2%	Commodities -1.3%
Commodities -1.1%	Sugar	Corn	Aluminum	Aluminum	Unleaded Gas	Nickel	Copper	Wheat	Copper	Live Cattle	Aluminum
	-20.0%	-13.3%	-22.9%	9.7%	2.8%	-16.4%	7.3%	10.3%	27.0%	4.7%	-1.8%
Live Cattle -3.9%	Nickel -20.1%	Copper -16.6%	Commodities -24.7%	Gold 9.1%	Commodities 1.7%	Aluminum -16.9%	Sugar 1.9%	Aluminum 3.9%	Nickel 25.1%	Silver 2.6%	Silver -3.6%
Aluminum -4.0%	Aluminum -20.7%	Commodities -17.0%	Copper -25.1%	WTI Crude 7.1%	Soybeans -8.1%	WTI Crude -20.5%	Live Cattle 1.2%	Commodities -3.1%	Sugar 22.7%	Gold -0.4%	Corn -4.2%
Nickel -10.2%	Wheat -27.2%	Silver -20.4%	Zinc -28.0%	Unleaded Gas 6.4%	Corn -12.1%	Copper -21.2%	Soybeans -0.6%	Coffee -9.5%	Wheat 14.1%	Wheat -2.7%	Sugar -5.7%
WTI Crude	Gold	Natural Gas -30.7%	Coffee	Coffee	Wheat	Zinc	Zinc	Live Cattle	Soybeans	Zinc	Coffee
-11.8%	-27.8%		-31.5%	-1.3%	-12.5%	-21.4%	-1.2%	-17.9%	8.3%	-10.5%	-6.4%
Sugar	Corn	Sugar	Natural Gas	Live Cattle	Coffee	Sugar	Aluminum	Unleaded Gas	Live Cattle	Copper -13.5%	Wheat
-13.0%	-30.3%	-30.9%	-39.9%	-7.4%	-16.0%	-26.1%	-3.8%	-30.9%	-0.1%		-7.2%
Natural Gas	Coffee	WTI Crude	Nickel	Corn	Sugar	Coffee	Corn	Natural Gas	Gold	Aluminum	WTI Crude
-30.6%	-30.5%	-41.7%	-42.6%	-9.8%	-25.4%	-26.5%	-5.2%	-41.9%	-3.8%	-15.1%	-8.4%
Coffee	Silver	Unleaded Gas	WTI Crude	Wheat	Natural Gas	Unleaded Gas	Natural Gas	WTI Crude	Silver	Coffee	Natural Gas
-41.6%	-36.6%	-43.8%	-44.3%	-24.1%	-36.4%	-28.3%	-37.2%	-50.7%	-12.3%	-21.9%	-16.2%



Liquid Alternatives Return Quilt Calendar Year and Trailing Total Returns

Q4, 2022

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years
US 60/40 11.4%	Convertibles 21.7%	US 60/40 10.6%	Mkt Neutral 1.8%	US 60/40 8.2%	World Alloc 14.8%	Mkt Neutral -0.3%	US 60/40 22.1%	Convertibles 39.9%	LS Equity 18.0%	Mngd Futures 16.9%	Convertibles 8.4%
Convertibles 10.9%	US 60/40 17.7%	Mngd Futures 9.1%	US 60/40 1.2%	Convertibles 7.7%	US 60/40 14.3%	Alternty Bond -1.2%	Convertibles 21.5%	US 60/40 15.4%	US 60/40 16.0%	Mkt Neutral 5.9%	US 60/40 8.1%
World Alloc 10.7%	LS Equity 14.6%	Convertibles 6.4%	Mngd Futures -0.9%	World Alloc 6.0%	Tactical Alloc 12.6%	Convertibles -2.1%	World Alloc 16.1%	Tactical Alloc 9.8%	Tactical Alloc 13.4%	Multi Strat -2.1%	Tactical Alloc 4.4%
Tactical Alloc 9.4%	World Alloc 10.1%	Multi Strat 3.4%	Alternty Bond -1.4%	Tactical Alloc 6.0%	Convertibles 12.2%	US 60/40 -2.3%	Tactical Alloc 14.6%	LS Equity 7.9%	World Alloc 11.3%	Alternty Bond -6.3%	LS Equity 4.4%
Alternty Bond 7.5%	Option Writing 8.9%	LS Equity 2.9%	Multi Strat -1.7%	Alternty Bond 5.3%	LS Equity 11.2%	Option Writing -3.5%	LS Equity 11.9%	Option Writing 7.2%	Option Writing 10.7%	LS Equity -7.6%	Mngd Futures 4.2%
LS Equity 5.1%	Tactical Alloc 8.6%	Mkt Neutral 2.7%	Option Writing -1.8%	Option Writing 3.3%	Option Writing 6.0%	Multi Strat -4.3%	Option Writing 11.3%	World Alloc 6.2%	Mkt Neutral 6.9%	Option Writing -9.4%	World Alloc 4.1%
Option Writing 5.1%	Multi Strat 7.0%	Option Writing 2.6%	LS Equity -2.0%	Multi Strat 2.5%	Multi Strat 5.6%	Mngd Futures -5.8%	Multi Strat 7.8%	Alternty Bond 3.4%	Multi Strat 6.9%	World Alloc -12.5%	Option Writing 3.5%
Multi Strat 4.9%	Mkt Neutral 3.7%	Tactical Alloc 2.4%	Convertibles -3.7%	LS Equity 2.3%	Alternty Bond 4.1%	LS Equity -6.3%	Alternty Bond 6.7%	Mngd Futures 2.8%	Mngd Futures 5.0%	Tactical Alloc -15.5%	Multi Strat 2.3%
Mkt Neutral 3.3%	Alternty Bond 0.3%	World Alloc 1.5%	World Alloc -4.1%	Mkt Neutral 0.9%	Mkt Neutral 3.4%	Tactical Alloc -7.7%	Mngd Futures 4.7%	Multi Strat 1.6%	Convertibles 4.4%	US 60/40 -15.9%	Mkt Neutral 1.7%
Mngd Futures -7.4%	Mngd Futures -0.9%	Alternty Bond 1.2%	Tactical Alloc -5.9%	Mngd Futures -2.8%	Mngd Futures 3.0%	World Alloc -8.3%	Mkt Neutral 0.1%	Mkt Neutral -5.3%	Alternty Bond 1.8%	Convertibles -17.5%	Alternty Bond 1.6%



The Most Loved & Hated Return Quilt

Calendar Year and Trailing Total Returns

Q4, 2022

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	10 Years
Bitcoin	Bitcoin	Tesla	Amazon	Bitcoin	Bitcoin	Amazon	Bitcoin	Tesla	Short Vol	Midstrm Energy	Bitcoin
158.8%	5866.3%	47.9%	117.8%	124.1%	1622.9%	28.4%	86.4%	743.4%	72.2%	30.9%	107.2%
Short Vol	Tesla	Short Vol	Short Vol	Short Vol	Short Vol	Tesla	Short Vol	Bitcoin	Bitcoin	Short Vol	Tesla
77.9%	344.1%	25.5%	36.0%	67.8%	72.1%	6.9%	67.8%	293.4%	67.2%	23.1%	49.2%
Amazon	Short Vol	Momentum	Bitcoin	Microcap Stcks	Amazon	Cash	Momentum	Amazon	Tesla	Commodities 16.1%	Short Vol
44.9%	65.7%	14.7%	35.1%	20.4%	56.0%	1.8%	28.1%	76.3%	49.8%		46.5%
Microcap Stcks	Amazon	Value	Momentum	Midstrm Energy	Tesla	Muni Bonds	Value	Momentum	Midstrm Energy	Cash	Amazon
19.7%	59.0%	12.3%	9.3%	18.3%	45.7%	1.6%	25.7%	29.6%	40.2%	1.5%	20.9%
Tesla	Microcap Stcks	Midstrm Energy	Tesla	Value	Momentum	Gold	Tesla	Gold	Value	Gold	Momentum
18.6%	45.6%	4.8%	7.9%	16.9%	37.8%	-1.1%	25.7%	24.2%	27.2%	-0.4%	14.1%
Momentum 15.1%	Momentum 34.8%	Muni Bonds 4.7%	Muni Bonds 2.4%	Commodities 11.8%	Global 60/40 17.4%	Momentum -1.6%	Amazon 23.0%	Microcap Stcks 21.0%	Commodities 27.1%	Muni Bonds -4.8%	Value 10.7%
Value	Value	Microcap Stcks	Cash	Amazon	Value	Global 60/40	Microcap Stcks	Global 60/40	Microcap Stcks	Value	Microcap Stcks
15.0%	32.3%	3.6%	0.0%	10.9%	15.4%	-5.7%	22.4%	13.6%	19.3%	-6.2%	8.9%
Global 60/40	Midstrm Energy	Global 60/40	Value	Gold	Microcap Stcks	Value	Global 60/40	Muni Bonds	Momentum	Global 60/40	Global 60/40
11.4%	27.6%	3.0%	-1.9%	9.1%	13.2%	-7.2%	19.2%	4.2%	12.9%	-16.0%	5.1%
Gold 5.7%	Global 60/40 12.2%	Cash 0.0%	Global 60/40 -2.5%	Global 60/40 5.9%	Gold 11.9%	Commodities -11.2%	Gold 18.8%	Value 0.9%	Global 60/40 9.9%	Momentum -17.4%	Midstrm Energy 2.0%
Midstrm Energy 4.8%	Cash 0.0%	Gold -0.2%	Microcap Stcks -5.2%	Momentum 5.1%	Muni Bonds 3.5%	Midstrm Energy -12.4%	Commodities 7.7%	Cash 0.5%	Amazon 2.4%	Microcap Stcks -22.0%	Muni Bonds 1.7%
Muni Bonds 3.6%	Muni Bonds -0.3%	Commodities -17.0%	Gold -11.4%	Cash 0.3%	Commodities 1.7%	Microcap Stcks -13.1%	Midstrm Energy 6.6%	Commodities -3.1%	Muni Bonds 0.5%	Amazon -49.6%	Gold 0.9%
Cash 0.1%	Commodities -9.5%	Amazon -22.2%	Commodities -24.7%	Muni Bonds -0.1%	Cash 0.8%	Short Vol -68.1%	Muni Bonds 5.6%	Short Vol -13.2%	Cash 0.0%	Tesla -65.0%	Cash 0.7%
Commodities -1.1%	Gold	Bitcoin	Midstrm Energy	Tesla	Midstrm Energy	Bitcoin	Cash	Midstrm Energy	Gold	Bitcoin	Commodities
	-27.8%	-60.5%	-32.6%	-11.0%	-6.5%	-72.3%	2.2%	-28.7%	-3.8%	-65.0%	-1.3%

Source: Bloomberg and Morningstar. Returns are gross of. Short Vol is represented by the inverse of the S&P 500 VIX Short Term Futures Index performance.



ASSET CLASS DEFINITIONS

Asset Class/ Security	Asset Class Benchmark/ Security
Global 60/40	Global 60-40 (60% MSCI ACWI, 40% Bbg Gbl Agg Bond)
US 60/40	U.S. 60-40 (60% S&P 500, 40% Bbg Agg Bond)
ABS	BBgBarc ABS TR Index
Alternty Bond	US Fund Nontraditional Bond
Aluminum	Bloomberg Sub Aluminum TR Index
Amazon	Amazon.com Inc
Bank Loan	Credit Suisse Leveraged Loan Index
Bitcoin	MVIS CryptoCompare Bitcoin PR Index
Cash	BBgBarc US Treasury Bill 1-3 Mon TR Index
Coffee	Bloomberg Sub Coffee TR Index
Commodities	Bloomberg Commodity TR Index
CommServ	S&P 500 Sec/Commun Services TR Index
Cons Disc	S&P 500 Sec/Cons Disc TR Index
ConsStaples	S&P 500 Sec/Cons Staples TR Index
Convertibles	US Fund Convertibles
Copper	Bloomberg Sub Copper TR Index
Corn	Bloomberg Sub Corn TR Index
Cyclicals	MSCI USA Cyclical Sectors GR Index
Defensives	MSCI USA Defensive Sectors Capped GR Index
EM Bonds	JPM EMBI Global Diversified TR Index
EM Stocks	MSCI EM NR Index
Emerging	JPM EMBI Global Diversified TR Index
Energy	S&P 500 Sec/Energy TR Index
Ex-US Dev	S&P International Sov Ex-US Bond TR Index
Ex-US REITs	S&P Global Ex US Property TR Index
Facebook	Facebook Inc A
Financials	S&P 500 Sec/Financials TR Index
Gold	LBMA Gold Price AM Index
Govt	BBgBarc US Government TR Index
Health Care	S&P 500 Sec/Health Care TR Index
High Dividnd	MSCI USA High Dividend Yield GR Index
High Quality	MSCI USA Quality GR Index
HY Corp	BBgBarc High Yield Corporate TR Index
IG Corp	BBgBarc US Corp Bond TR Index
Industrials	S&P 500 Sec/Industrials TR Index
Intl Dev Bnds	S&P International Sov Ex-US Bond TR Index
Intl Dev Stcks	MSCI EAFE NR Index
Large Cap	S&P 500 TR Index
Live Cattle	Bloomberg Sub Live Cattle TR Index

Asset Class/ Security	Asset Class Benchmark/ Security
LS Equity	US Fund Long-Short Equity
Materials	S&P 500 Sec/Materials TR Index
MBS	BBgBarc US MBS TR Index
Microcap Stcks	Russell Micro Cap TR Index
Midstrm Energy	Alerian MLP TR Index
Min Vol	MSCI USA Minimum Volatility (USD) GR Index
Mkt Neutral	US Fund Equity Market Neutral
Mngd Futures	US Fund Managed Futures
Momentum	MSCI USA Momentum GR Index
Multi Strat	US Fund Multistrategy
Muni Bonds	BBgBarc Municipal 1-10Y Blend 1-12Y TR Index
Municipal	BBgBarc Municipal 1-10Y Blend 1-12Y TR Index
Natural Gas	Bloomberg Sub Natural Gas TR Index
Nickel	Bloomberg Sub Nickel TR Index
Option Writing	US Fund Options Trading
Real Estate	S&P 500 Sec/Real Estate TR Index
S&P 500	S&P 500 TR Index
Short Vol	S&P 500 VIX Short Term Futures TR Index
Silver	Bloomberg Sub Silver TR Index
Small Cap	Russell 2000 TR Index
Soybeans	Bloomberg Sub Soybean TR Index
Sugar	Bloomberg Sub Sugar TR Index
Tactical Alloc	US Fund Tactical Allocation
Taxble Bonds	BBgBarc US Agg Bond TR Index
Technology	S&P 500 Sec/Information Technology TR Index
Tesla	Tesla Inc
Unleaded Gas	Bloomberg Sub Unleaded Gas TR Index
US Agg	BBgBarc US Agg Bond TR Index
US All Cap Value	Russell 3000 Value TR Index
US High Yield	BBgBarc High Yield Corporate TR Index
US Large Cap	Russell 1000 TR Index
US REITs	MSCI US REIT GR Index
US Small Cap	Russell 2000 TR Index
Utilities	S&P 500 Sec/Utilities TR Index
Value	MSCI USA Value GR Index
Wheat	Bloomberg Sub Wheat TR Index
World Alloc	US Fund World Allocation
WTI Crude	Bloomberg Sub WTI Crude Oil TR Index
Zinc	Bloomberg Sub Zinc TR Index
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