Relationship Of Volatility & Market Returns
(S&P 500 Index: 1962–Dec 31, 2020)

MONTHLY DATA: S&P 500 INDEX AVERAGE DAILY RANGE

Quartile	Volatility Range	% Chance Up Month	% Chance Dn Month	If Up Avg Gain	If Down Avg Loss	Expected Gain/(Loss)
1st	0% - 0.9%	78%	22%	3.2%	-1.5%	2.1%
2nd	0.9% - 1.3%	64%	36%	3.2%	-2.2%	1.3%
3rd	1.3% - 1.7%	56%	44%	3.4%	-3.1%	0.6%
4th	1.7% - 6.6%	44%	56%	5.1%	-4.9%	-0.6%

ANNUAL DATA (1962–2020): S&P 500 INDEX AVERAGE DAILY RANGE

Quartile	Volatility Range	% Chance Up Year	% Chance Dn Year	If Up Avg Gain	If Down Avg Loss	Expected Gain/(Loss)
1st	0% - 1.0%	86%	14%	16.2%	-3.9%	13.4%
2nd	1.0% - 1.4%	79%	21%	13.6%	-6.3%	9.4%
3rd	1.4% - 1.7%	86%	14%	17.5%	-5.9%	14.2%
4th	1.7% - 2.7%	40%	60%	15.1%	-18.5%	-5.0%

Avg Daily Range: S&P 500 Index (3 Mo Moving Average)

1962 - Dec 31, 2020