Relationship Of Volatility & Market Returns
(S&P 500 Index: 1962–Dec 31, 2024)

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%	2.8%	-1.5%	1.9%
2nd	0.9% - 1.3%	63%	37%	3.1%	-2.3%	1.1%
3rd	1.3% - 1.7%	54%	46%	3.3%	-3.2%	0.4%
4th	1.7% - 6.6%	44%	56%	4.8%	-5.0%	-0.6%

ANNUAL DATA (1962–2024): 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%	94%	6%	16.2%	-1.5%	15.0%
2nd	1.0% - 1.4%	80%	20%	17.2%	-4.5%	12.8%
3rd	1.4% - 1.7%	81%	19%	17.4%	-7.8%	12.7%
4th	1.7% - 2.7%	38%	63%	15.1%	-18.6%	-5.9%

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

1962 - Dec 31, 2024