

Suppose you are advising a client whose risk aversion coefficient is 4. What allocation would you suggest to her?

Answer.

As explained in the “Optimal Risky Portfolio Choice” Lesson, we need to proceed as follows:

- Find the portfolio that maximizes the Sharpe Ratio, which is the MVE portfolio. The MVE in the case is the following:

	RETURN	DEVIATION
MVE	0.0776	0.0819

- Mix the MVE with the Risk Free asset according to the Risk Aversion levels.

	RETURN	DEVIATION
MVE	0.0776	0.0819
Risk-Free	0.03	

A	w_MVE	w_RF	E[r]	STD
1	7.096	-6.096	37%	58%
2	3.548	-2.548	20%	29%
3	2.365	-1.365	14%	19%
4	1.774	-0.774	11%	15%
5	1.419	-0.419	10%	12%
6	1.183	-0.183	9%	10%
7	1.014	-0.014	8%	8%
8	0.887	0.113	7%	7%
9	0.788	0.212	7%	6%
10	0.710	0.290	6%	6%

For Risk Aversion = 4, the allocation is highlighted in red.