

An AI-augmented survey of asset classes

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Abstract

In this paper, I describe an AI-augmented survey of asset classes.
The paper ends with "The End"

Introduction

In previous papers, I've described many concepts and results of asset pricing.
In this paper, I describe an AI-augmented survey of asset classes.

Asset pricing metrics of asset classes from Claude.ai

Using Claude.ai, I obtained the following table of asset pricing metrics on various asset classes:

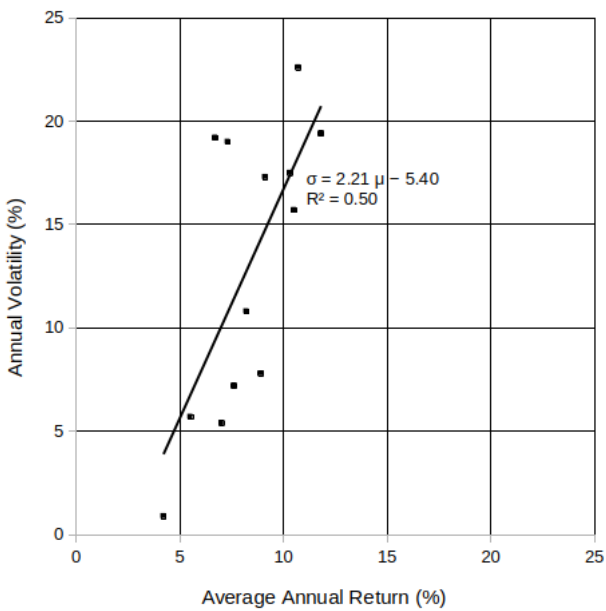
Asset Class	Average Annual Return (μ) (%)	Annual Volatility (σ) (%)	Maximum Draw-down (δ) (%)	Sharpe Ratio
U.S. Large Cap Stocks	10.5	15.7	-50.9	0.42
U.S. Small Cap Stocks	11.8	19.4	-58	0.39
International Developed Stocks	9.1	17.3	-56.7	0.32
Emerging Market Stocks	10.7	22.6	-61.4	0.31
U.S. Treasury Bonds	7.0	5.4	-15.8	0.56
U.S. Corporate Bonds	7.6	7.2	-19.7	0.51
High-Yield Bonds	8.2	10.8	-33.3	0.40
Treasury Inflation-Protected Securities (TIPS)	5.5	5.7	-12.7	0.35
Real Estate Investment Trusts (REITs)	10.3	17.5	-67.9	0.38
Commodities	6.7	19.2	-67.6	0.13
Gold	7.3	19.0	-61.8	0.16
Hedge Funds	8.9	7.8	-21.4	0.62
Cash/Money Market	4.2	0.9	0	-

Derived metrics of asset classes

The following derived metrics of asset classes were obtained from the data above:

Asset Class	$\frac{\mu - \mu_{min}}{\sigma - \sigma_{min}}$	$\frac{\delta - \delta_{min}}{\sigma - \sigma_{min}}$	$\frac{\delta - \delta_{min}}{\mu - \mu_{min}}$
U.S. Large Cap Stocks	0.43	1.15	2.70
U.S. Small Cap Stocks	0.41	0.54	1.30
International Developed Stocks	0.30	0.68	2.29
Emerging Market Stocks	0.30	0.30	1.00
U.S. Treasury Bonds	0.62	11.58	18.61
U.S. Corporate Bonds	0.54	7.65	14.18
High-Yield Bonds	0.40	3.49	8.65
Treasury Inflation-Protected Securities (TIPS)	0.27	11.50	42.46
Real Estate Investment Trusts (REITs)	0.37	0.00	0.00
Commodities	0.14	0.02	0.12
Gold	0.17	0.34	1.97
Hedge Funds	0.68	6.74	9.89

Regression Plot



Synopsis

Investments in cash and the money market are now more attractive than investments in other asset classes. However, this doesn't mean that strategic asset allocation into other asset classes should be ignored because the nature of investments in cash and the money market are usually short-term and at most medium-term. Long-term wealth creation and preservation still requires taking on risk for reward.

The End