IQIC - Quantitative Tools

#7: Benchmarking Performance

Comparing Apples to Apples

Defining a benchmark

- **Benchmark:** A standard or reference point used to evaluate performance.
- **Why investors use them:** To judge whether a strategy did well or just followed the market.
- **Example:** If the S&P 500 returned 10% and your portfolio returned 8%, you underperformed.
- **Key idea:** A return number alone means nothing without context.

	Return
Your portfolio	8%
S&P 500 (benchmark)	10%
Difference	-2% (underperformed)

Two Ways to Measure Success

Absolute and relative performance

- **Absolute performance:** The raw return of your portfolio. Example: +8%.
- **Relative performance:** Your return compared to a benchmark. Example: +8% vs +10% benchmark = -2%.
- **Why both matter:** Absolute tells you if you made money. Relative tells you if you beat the market.
- **Key takeaway:** A positive absolute return can still be relative underperformance.

	Portfolio	Benchmark	Relative
Scenario A	+8%	+10%	-2% (underperform)
Scenario B	-5%	-10%	+5% (outperform)
Scenario C	+15%	+12%	+3% (outperform)

Picking Your Comparison

How to choose an appropriate benchmark

- **Match the benchmark to your strategy:** If you invest in US large companies, use the S&P 500.
- **Match the asset class:** If you invest in bonds, use a bond index.
- **Match the region:** If you invest in emerging markets, use an emerging markets index.
- **Why it matters:** The wrong benchmark makes performance look better or worse than it really i

Strategy	Appropriate Benchmark	Strategy
US large company stocks	S&P 500	US large company stocks
US small company stocks	Russell 2000	US small company stocks
Global stocks	MSCI World	Global stocks
US bonds	Bloomberg US Aggregate Bond Index	US bonds

The Complete Picture

Return, risk, drawdown, Sharpe, and benchmark

- **Return:** How much did you make?
- **Volatility:** How bumpy was the ride?
- **Drawdown:** What was the worst decline?
- **Sharpe ratio:** Return per unit of risk.
- **Benchmark:** Did you beat the market?
- **Key takeaway:** No single metric tells the whole story. Use them together.

Additional Resources

Where to go next

- **"Benchmarking" - Investopedia**
  Simple explanation of benchmarks and why they matter.
- **"Absolute vs Relative Return" - Investopedia**
  Short article on the difference between absolute and relative performance.
- **"How to Choose a Benchmark" - Morningstar**
  Guide to selecting the right benchmark for your strategy.