

Question 1 of 9

When choosing an appropriate benchmark for alternative investments, which attribute is *least likely* to be a key consideration?

- A. Ambiguity
- B. Accountability
- C. Appropriateness

QUESTION 2 - 5

Julie Chevalier, an analyst with Vertex Capital Advisors, is mentoring a new junior analyst, Max Dussault. Chevalier asks Dussault to explain the roles of the Sharpe and Sortino ratios in performance measurement. In his remarks, Dussault states:

- Statement 1:** The Sortino ratio formula can be considered a type of risk premium.
- Statement 2:** The Sharpe ratio is just as effective as the Sortino ratio for appraising negatively skewed strategies
- Statement 3:** Investors focused on capital preservation should use the Sortino ratio to judge an investment strategy.

Later, Chevalier asks Dussault to determine and evaluate the upside capture and downside capture ratios of Vertex's strategy. Using the last eight years of the Vertex Global Equity portfolio's annual returns against its benchmark, the MSCI ACWI, she provides him the data shown in Exhibit 1.

Exhibit 1 Vertex Capital Advisors Global Equity

Period (t)	$R_{(P)}$ (%)	$R_{(B)}$ (%)
1	-2.35	-1.24
2	4.62	4.28
3	6.01	6.95
4	-7.04	-8.15
5	10.95	12.34
6	-2.03	-1.02
7	-5.75	-7.02
8	18.52	15.23

$R_{(P)}$ (%): Annual return of Vertex Global Equity portfolio

$R_{(B)}$ (%): Annual return of MSCI ACWI benchmark

After Dussault presents his results, Chevalier comments about the capture ratio (CR):

- Comment 1:** The CR measures the asymmetry of returns and, as such, it is similar to bond convexity or option gamma.
- Comment 2:** A value of CR less than 1 indicates a convex return profile.
- Comment 3:** An asymmetrical return profile, particularly during periods when the market is not trending strongly upward, results in lower risk-adjusted returns.

Chevalier then asks Dussault to evaluate the Vertex Global Equity portfolio's results compared to two competitors over a five-year period, the Bluex Global Equity and the Rougex Global Equity, as well as the benchmark MSCI ACWI. Results are shown in Exhibit 2.

Exhibit 2 Vertex vs Competitors

Appraisal measure	Vertex	Bluex	Rougex	MSCI ACWI
Annualized return	0.0254	0.0268	0.0271	0.0236
Annualized volatility*	0.0827	0.0831	0.0991	0.0801
Beta	1.00	1.50	0.50	--
Sharpe ratio	0.1862	0.2022	0.1726	--
Treynor ratio	0.0154	0.0112	0.0342	--
Information ratio	0.1182	0.1146	0.1134	--

*Volatility = standard deviation

Question 2 of 9

Which of Dussault's statements is correct?

- A. Statement 1
- B. Statement 2
- C. Statement 3

Question 3 of 9

Based on Exhibit 1, the downside capture ratio for the Vertex portfolio is *closest* to:

- A. 97.97%
- B. 98.51%
- C. 104.94%

Question 4 of 9

Which of Dussault's comments is correct?

- A. Comment 1
- B. Comment 2
- C. Comment 3

Question 5 of 9

Based on Exhibit 2, which fund has produced the *greatest* risk-adjusted return relative to the benchmark?

- A. Bluex
- B. Vertex
- C. Rougex

QUESTION 6 - 9

Joshua Reems is a new junior performance analyst on the investment staff that manages the VenturePath US large-cap growth mutual fund. Under the supervision of portfolio manager Mika Lefèvre, Reems is still learning how VenturePath uses performance evaluation in examining its large-cap fund. Lefèvre states:

- Statement 1:** Performance attribution often includes the use of risk-adjusted measures like the Sharpe ratio or the information ratio.
- Statement 2:** Performance appraisal usually includes looking at the alignment of performance with the fund's stated objectives.
- Statement 3:** Performance measurement typically includes measuring the impact of asset allocation and security selection decisions on overall performance.

Lefèvre asks Reems to review a competitor's fund, the Ascend Capital Growth Fund. Reems uses the fund's performance report for the last quarter, found on Ascend's public website. Ascend's performance attribution approach is based on the Brinson-Hood-Beebower (BHB) methodology. Selected data from the report are shown in Exhibit 1:

Exhibit 1 Ascend Capital Growth Fund – Data for the Quarter Ending Mar 31, 20XX

Sector	Portfolio Weight	Benchmark Weight	Portfolio Return	Benchmark Return
Energy	15%	10%	9%	11%
Information technology	25%	30%	20%	14%
Consumer discretionary	30%	25%	5%	4%
Health care	20%	20%	7%	8%
Financials	10%	15%	3%	7%
Total	100%	100%	9.55%	8.95%

Question 6 of 9

Which of Lefèvre's statements is *correct*?

- A. Statement 1
- B. Statement 2
- C. Statement 3

Question 7 of 9

Based on Exhibit 1, the sector with the *greatest negative* contribution to the allocation effect for the Ascend Capital Growth Fund's performance for the quarter was:

- A. energy.
- B. financials.
- C. information technology.

Question 8 of 9

Based on Exhibit 1, the sector with the *greatest negative* contribution to the security selection effect for the Ascend Capital Growth Fund's performance for the quarter was:

- A. energy.
- B. financials.
- C. health care.

Question 9 of 9

Based on Exhibit 1, the sector with the *greatest positive* contribution to the interaction effect for the Ascend Capital Growth Fund's performance for the quarter was:

- A. energy.
- B. financials.
- C. consumer discretionary.