Question #1 of 9

Question ID: 1256927

When $\xi = 0$, the generalized extreme value distribution (GEV) becomes which of the following distributions?

A) Frechet distribution.

B) Gumbel distribution.

C) Gaussian distribution.

D) Weibull distribution.

Question #2 of 9

Question ID: 1427677

Which of the following is true comparing VaR and extreme value theory (EVT)?

A) Only EVT considers losses beyond a specified threshold.

B) EVT focuses exclusively on the upper half of the return distribution.

C) The generalized Pareto distribution is fully parameterized by the mean and variance.

D) VaR and EVT assume normality of the return distribution.

Question #3 of 9

Question ID: 1256933

Which of the following statements regarding generalized extreme value (GEV) and peaks-over-threshold (POT) is correct?

A) POT approach may introduce additional uncertainty.

B) POT requires the estimation of one more parameter than GEV.

C) Both POT and GEV focus on the distribution of extreme values above a specified threshold.

D) Only one of the approaches has a tail parameter denoted ξ.

Question #4 of 9

Question ID: 1256935

Which of the following most accurately describes the parameters of a generalized Pareto distribution (GPD)?

A) β The scale parameter: 0 > β. The shape (tail) index: ξ, can be any real number.

B) The scale parameter: 0 < β. The shape (tail) index: ξ, can be any real number.

C) The scale parameter: β, which can be any real number. The shape (tail) index: ξ > 0.

D) The scale parameter: β, can be any real number. The shape (tail) index: ξ, can be any real number.

Question #5 of 9

Question ID: 1561418

Extreme value theory (EVT) helps quantify the magnitude of:

A) the level of risk obtained from scenario analysis.

B) market risk and operational risk.

C) an X year return in the loss in excess VaR.

D) market risk and credit risk.

Question #6 of 9

Question ID: 1256929

Which of the following statements about extreme value theory (EVT) is false?

A) EVT can be used to model everyday occurrences.

B) EVT focuses on data that is generally considered outliers.

C) Cluster analysis is appropriate for financial data with time dependency.

D) POT models determine the cut-off between typical and extreme values.

Question #7 of 9

Question ID: 1427674

Extreme value theory (EVT) can assist with value at risk (VaR) calculations by providing better probability estimates of observing extreme losses than that indicated by a standard normal distribution because:

A) extreme losses appear to occur more frequently than indicated by a normal distribution.

B) extreme losses appear to occur less frequently than indicated by a normal distribution.

C) the observed empirical distribution of most asset returns tends to be platykurtic.

D) EVT is the most efficient method for estimating extreme losses.

Question #8 of 9

Question ID: 1427678

Extreme value theory can assist with VaR calculations by providing better probability estimates of extreme losses than those indicated by a standard normal distribution. Using the generalized Pareto distribution (GPD), the parameter that indicates the fatness of tails is the:

A) shape parameter, ξ.

B) slope coefficient, *b*.

C) threshold level, μ.

D) scaling parameter, b.

Question #9 of 9

Question ID: 1824344

The Generalized Extreme Value (GEV) distribution is useful for:

I. Estimating value at risk (VaR).

II. Stress testing.

III. Estimating correlation in extreme market conditions.

IV. Backtesting VaR models.

A) II only.

B) I, II, and III only.

C) I and III only.

D) I only.