RISK REPORT

Value at Risk (VaR) and Expected Shortfall (CVaR) Analysis

Value at Risk (VaR)

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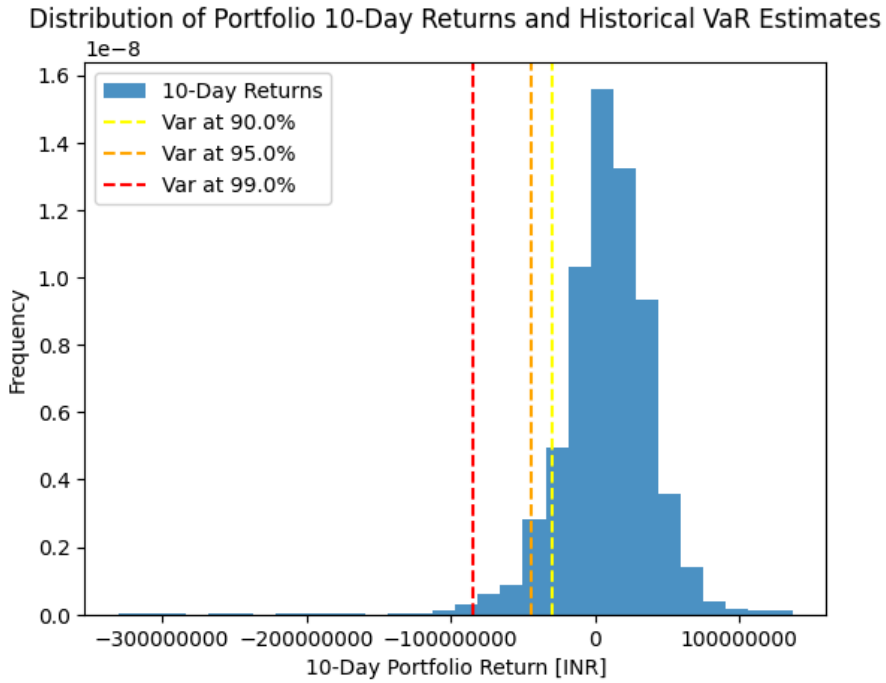
Value at Risk (VaR)
--------------------------------------------------
Confidence Level    VaR(%)        VaR(INR)
--------------------------------------------------
      90.0%         2.94%     29433093.73 INR
      95.0%         4.45%     44471551.74 INR
      99.0%         8.48%      84774636.5 INR
--------------------------------------------------
Portfolio Value: 1000000000 INR
--------------------------------------------------
```



Value at Risk (VaR): The VaR results highlight the potential losses at different confidence levels, providing a measure of risk exposure. The higher the confidence level, the greater the potential loss:

- At a **90%** confidence level, the maximum expected loss over 10 days is **29,433,093 INR**.
- At a **95%** confidence level, this rises to **44,471,551 INR.**
- At a **99%** confidence level, it could be as high as **84,774,636 INR.**

These figures indicate that there is a significant risk of larger losses occurring, particularly at higher confidence levels. This should be factored into the risk management strategies and contingency planning.

Expected Shortfall (CVaR)

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Expected Shortfall (ES/CVaR)
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Confidence Level    CVaR(%)       CVaR(INR)
--------------------------------------------------
      90.0%          5.7%     57342191.89 INR
      95.0%          7.8%     78156932.55 INR
      99.0%         15.5%    155347088.21 INR
--------------------------------------------------
Portfolio Value: 1000000000 INR
```

Expected Shortfall (ES/CVaR): ES provides a measure of the average loss in the worst-case scenarios beyond the VaR threshold, offering insights into tail risk:

- For the **90%** confidence level, the average loss in the worst 10% of cases is **57,342,191 INR.**
- At the **95%** confidence level, the average loss in the worst 5% of cases is **78,156,932 INR.**
- At the **99%** confidence level, this average loss escalates to **155,347,088 INR.**

The higher ES values at elevated confidence levels indicate that, while VaR provides a boundary for potential loss, the ES measure reveals that extreme losses can be significantly larger. This underscores the need for robust risk management practices to address potential severe losses.

Risk Management:

- **Strategic Planning:** The results suggest that the portfolio is subject to notable risk exposure, especially under adverse market conditions. Strategies should be devised to mitigate these risks, including diversification, hedging, or adjusting portfolio allocations.
- **Capital Reserves:** The potential for significant losses, particularly at higher confidence levels, implies that adequate capital reserves or risk buffers should be maintained to absorb potential losses.
- **Stress Testing:** Regular stress testing and scenario analysis should be conducted to assess how the portfolio would perform under extreme conditions and to evaluate the effectiveness of risk management strategies.