RISK MANAGEMENT AT ZEN SECURITIES LTD

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ABSTRACT

This study delves into the analysis of Value at Risk (VaR) for select companies, offering insights into their risk profiles and implications for investors. The findings reveal a diverse spectrum of risk exposures, ranging from moderate to high, across companies such as BATA INDIA, NEULAND LABORATORIES LTD, DR REDDY LABORATORIES, INFOSYS LIMITED, RELIANCE INDUSTRIES LIMITED, and BHARATHI AIRTEL LIMITED.

For BATA INDIA, moderate VaR values suggest relatively stable risk levels, whereas NEULAND LABORATORIES LTD exhibits high VaR values, indicating significant downside risk. DR REDDY LABORATORIES and INFOSYS LIMITED showcase moderate risk profiles, while RELIANCE INDUSTRIES LIMITED presents moderate to high risk.

The study underscores the importance of proactive risk management strategies tailored to each company's risk profile. It recommends measures such as portfolio diversification, hedging strategies, and close monitoring of market conditions to mitigate potential losses.

The dynamic nature of financial markets emphasizes the need for continuous monitoring and adaptation of risk management strategies. Regular reassessment of VaR values, market conditions, and company fundamentals is crucial to align investment decisions with evolving risk profiles.

In conclusion, the study emphasizes the critical role of VaR analysis in informing risk management decisions and optimizing portfolio performance. By integrating VaR insights with proactive risk mitigation measures, investors can navigate market uncertainties effectively and pursue their investment objectives with confidence.

INTRODUCTION

Value at risk (VAR or sometimes VaR) has been called the "new science of risk management", but you do not need to be a scientist to use VAR. Here, in part 1 of this series, we look at the idea behind VAR and the three basic methods of calculating it. In we apply these methods to calculating VAR for a single stock or investment.

The Idea behind VAR

The most popular and traditional measure of risk is volatility. The main problem with volatility, however, is that it does not care about the direction of an investment's movement: a stock can be volatile because it suddenly jumps higher. Of course, investors are not distressed by gains!

For investors, risk is about the odds of losing money, and VAR is based on that common-sense fact. By assuming investors care about the odds of a really big loss, VAR answers the question, "What is my worst-case scenario?" or "How much could I lose in a realbad month?"

Now let's get specific. A VAR statistic has three components: a time period, a confidence level and a loss amount (or loss percentage). Keep these three parts in mind as we give some examples of variations of the question that VAR answers:

- What is the most I can - with a 95% or 99% level of confidence - expect to lose in dollars over the next month?

- What is the maximum percentage I can - with 95% or 99% confidence - expect to lose over the next year?

You can see how the "VAR question" has three elements: a relatively high level of confidence (typically either 95% or 99%), a time period (a day, a month or a year) and an estimate of investment loss (expressed either in dollar or percentage terms).

NEED FOR THE STUDY

- This section provides the rationale behind conducting the study. It may include:
- The importance of risk management in investment decisions.
- The prevalence of Value at Risk (VaR) as a key risk measurement tool.
- The need to understand and mitigate market risks for investors and financial institutions.
- The relevance of studying VaR across different companies to assess their risk profiles and inform investment strategies.

SCOPE OF THE STUDY

- This section outlines the boundaries and focus of the research. It may include:
- The specific companies or industries under investigation.
- The time frame covered by the study.
- The types of risks considered (e.g., market risk).
- The geographical scope or market segments included in the analysis.

OBJECTIVES OF THE STUDY

- To analyze the VaR profiles of selected companies and assess their risk levels.
- To identify factors influencing variations in VaR values across companies.
- To evaluate the effectiveness of VaR as a risk management tool in different market conditions.
- To provide insights and recommendations for investors and financial professionals based on the findings.

RESEARCH METHODOLOGY

Data collection:

In the present project work the data has been collected from readily available sources that is secondary data like websites, newspapers and magazines.

The sample size taken for study five companies.

Data analysis:

The present project work has been analysis using time series analysis with graphical presentations.

Value at Risk

Value at Risk = vm (vi / v(i - 1))

M = the number of days from which historical data is taken vi =
the number of variables on the day i.

LIMITATIONS OF THE STUDY

- The present project deals with the observation of price fluctuations. This requires secondary data of three months.
- We cannot take all the companies which are attractive due to lack of time.

- This study requires lot of calculations to derive any interpretation regarding selection of security for investment. But according to the data insufficiency and inaccuracy it is not possible to analysis all the securities.
- Finally we cannot predict the fluctuations because there are so many factors influence the price movements at the same time.

REVIEW OF LITERATURE

Risk management is a structured approach to managing uncertainty related to a threat, a sequence of human activities including: risk assessment, strategies development to manage it, and mitigation of risk using managerial resources.

The strategies include transferring the risk to another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk.

Some traditional risk managements are focused on risks stemming from physical or legal causes (e.g. natural disasters or fires, accidents, ergonomics, death and lawsuits). Financial risk management, on the other hand, focuses on risks that can be managed using traded financial instruments.

The objective of risk management is to reduce different risks related to a preselected domain to the level accepted by society. It may refer to numerous types of threats caused by environment, technology, humans, organizations and politics. On the other hand it involves all means available for humans, or in particular, for a risk management entity (person, staff, organization).

Some explanations

INDUSTRY PROFILE

The securities market achieves one of the most important functions of channeling idle resources to productive resources or from less productive resources to more productive resources. Hence in the broader context the people who save and investors who invest focus more towards the economy's abilities to invest and save respectively. This enhances savings and investments in the economy, the two pillars for economic growth. The Indian Capital Market has come a long way in this process and with a strong regulator it has been able to usher an era of a modern capital market regime. The past decade in many ways has been remarkable for securities market in India. It has grown exponentially as measured in terms of amount raised from the market, the number of listed stocks, market capitalization, trading volumes and turnover on stock exchanges, and investor population. The market has witnessed fundamental institutional changes resulting in drastic reduction in transaction costs and significant improvements in efficiency, transparency and safety.

Stock market:

When investors think of the stock market, they Nov imagine a specific place - such as a stock exchange. In fact, the stock market is the abstract idea of stock trading and stock exchange. All selling of stocks - at stock exchanges and in other ways - affects the market overall.

Following stock market information in the news can help you make the right decisions about stock market investing.

Need of stock market:

The stock market is simply a term for the overall market or industry that is concerned with buying and selling company stock, both private and publicly traded securities. The stock market does many things. It helps to set prices of stocks. The more a stock is traded on the market and the more in demand the stock, the higher is its value. Having a stock market that is interconnected with stock markets around the world helps traders and investors to see how Specific stocks are doing.

COMPANY PROFILE

ZEN SECURITIES LTD.

Zen Securities Limited (ZSL) is one of the leading financial services company - providing Financial and Investment related Services and Products. The Company commenced as a proprietary concern of M/s K. Ravindra Babu in 1986 was converted to a Limited company in February 1995 as Zen Securities Ltd. Zen has the distinction of being the First Corporate Member from Hyderabad and also the first A.P. based broking firm to start trading on the National Stock Exchange (NSE). ZEN is a registered Member on the Capital Market Segment and Futures & Options segment of both NSE and BSE. ZEN is also a Depository Participant (DP) with National Securities Depository Ltd. (NSDL) and also with Central Depositories Services Ltd. (CDSL). ZEN is also a SEBI Registered Portfolio Manager offering Portfolio Management Services to clients. ZenComtradePvt. Limited a 100% subsidiary of ZSL and is a member of National Commodities & Derivatives Exchange Limited (NCDEX) and Multi Commodity Exchange (MCX). ZEN operates from Hyderabad as it head office and has branches and associates in Andhra Pradesh, Tamil Nadu, Maharashtra, Karnataka, West Bengal and Orissa. The Company operates from over 140 locations with over 500 trading terminals.

Services Offered by Zen Securities Limited:

- Investment advisory services
- Trading in cash market of NSE and BSE
- Trading in Futures and Options on NSE and BSE
- Internet Trading in Stocks, futures and Options both NSE and BSE
- Mutual Funds advisory service
- Depository Services in Both NSDL and CDSL
- Trading in Commodities on MCX and NCDEX
- Portfolio Management Services
- NRI Investor Services
- PAN Application Service
- Mutual Fund KYC Registration Service
- New Pension System(NPS)
- Fixed Income Securities / Fixed Deposits / RBI Bonds / Tax Saving Bonds

DATA ANALYSIS AND INTERPRETATION

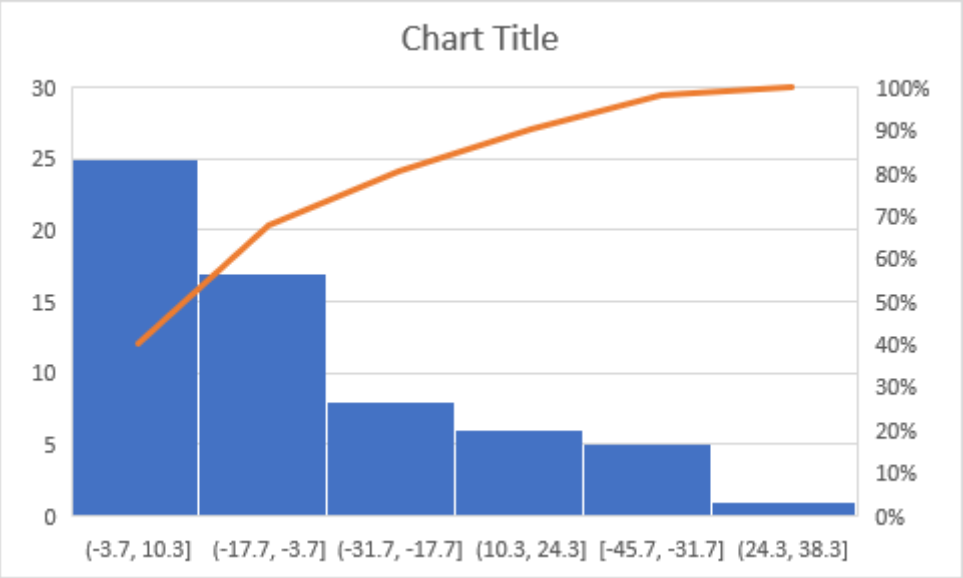
4.1 BATA INDIA

Date	PREV. CLOSE	close	Returns	standard deviation
28-Mar-24	1,367.30	1,364.20	-4.1	-4.1
27-Mar-24	1,372.40	1,367.30	-6.1	-6.1
26-Mar-24	1,382.70	1,372.40	-11.3	-11.3
22-Mar-24	1,379.65	1,382.70	2.05	2.05
21-Mar-24	1,375.10	1,379.65	3.55	3.55
20-Mar-24	1,371.45	1,375.10	2.65	2.65
19-Mar-24	1,377.25	1,371.45	-6.8	-6.8
18-Mar-24	1,390.50	1,377.25	-14.25	-14.25
15-Mar-24	1,407.15	1,390.50	-17.65	-17.65
14-Mar-24	1,403.50	1,407.15	2.65	2.65
13-Mar-24	1,427.05	1,403.50	-24.55	-24.55
12-Mar-24	1,447.10	1,427.05	-21.05	-21.05
11-Mar-24	1,450.45	1,447.10	-4.35	-4.35
07-Mar-24	1,434.30	1,450.45	15.15	15.15
06-Mar-24	1,448.75	1,434.30	-15.45	-15.45
05-Mar-24	1,425.25	1,448.75	22.5	22.5
04-Mar-24	1,435.40	1,425.25	-11.15	-11.15
02-Mar-24	1,432.50	1,435.40	1.9	1.9
01-Mar-24	1,409.55	1,432.50	21.95	21.95
29-Feb-24	1,406.35	1,409.55	2.2	2.2
28-Feb-24	1,437.75	1,406.35	-32.4	-32.4
27-Feb-24	1,428.55	1,437.75	8.2	8.2
26-Feb-24	1,426.50	1,428.55	1.05	1.05
23-Feb-24	1,417.60	1,426.50	7.9	7.9
22-Feb-24	1,431.95	1,417.60	-15.35	-15.35
21-Feb-24	1,437.85	1,431.95	-6.9	-6.9
20-Feb-24	1,433.85	1,437.85	3	3
19-Feb-24	1,432.80	1,433.85	0.05	0.05
16-Feb-24	1,410.20	1,432.80	21.6	21.6
15-Feb-24	1,411.15	1,410.20	-1.95	-1.95
14-Feb-24	1,410.40	1,411.15	-0.25	-0.25
13-Feb-24	1,410.30	1,410.40	-0.9	-0.9
12-Feb-24	1,421.30	1,410.30	-12	-12
09-Feb-24	1,415.45	1,421.30	4.85	4.85
08-Feb-24	1,421.45	1,415.45	-7	-7
07-Feb-24	1,442.35	1,421.45	-21.9	-21.9
06-Feb-24	1,431.90	1,442.35	9.45	9.45
05-Feb-24	1,452.40	1,431.90	-21.5	-21.5

02-Feb-24	1,459.15	1,452.40	-7.75	-7.75
01-Feb-24	1,488.45	1,459.15	-30.3	-30.3
31-Jan-24	1,460.35	1,488.45	27.1	27.1
30-Jan-24	1,458.25	1,460.35	1.1	1.1
29-Jan-24	1,449.30	1,458.25	7.95	7.95
25-Jan-24	1,466.45	1,449.30	-18.15	-18.15
24-Jan-24	1,464.95	1,466.45	0.5	0.5
23-Jan-24	1,507.15	1,464.95	-43.2	-43.2
20-Jan-24	1,515.80	1,507.15	-9.65	-9.65
19-Jan-24	1,516.70	1,515.80	-1.9	-1.9
18-Jan-24	1,543.40	1,516.70	-27.7	-27.7
17-Jan-24	1,578.50	1,543.40	-36.1	-36.1
16-Jan-24	1,581.05	1,578.50	-3.55	-3.55
15-Jan-24	1,576.00	1,581.05	4.05	4.05
12-Jan-24	1,576.40	1,576.00	-1.4	-1.4
11-Jan-24	1,565.25	1,576.40	10.15	10.15
10-Jan-24	1,569.20	1,565.25	-4.95	-4.95
09-Jan-24	1,588.10	1,569.20	-19.9	-19.9
08-Jan-24	1,621.20	1,588.10	-34.1	-34.1
05-Jan-24	1,608.00	1,621.20	12.2	12.2
04-Jan-24	1,595.20	1,608.00	11.8	11.8
03-Jan-24	1,596.95	1,595.20	-2.75	-2.75
02-Jan-24	1,641.65	1,596.95	-45.7	-45.7
01-Jan-24	1,651.40	1,641.65	-10.75	-10.75
			-5.63	15.69

calculate daily returns = Today’s close price -previous close price -1

And next we have to calculate mean and standard deviation for the daily returns
Mean=-5.63 and standard deviation =15.68
To calculate NORMAL DISTRIBUTION VAR =
VAR at the bottom of 10% = (=NORMINV (0.10, -5.63, 15.68)) = -25.7
VAR at the bottom of 5% = = (=NORMINV (0.5, -5. 63,15.68)) = -31.4



INTERPRETATION –

From the above table and graph represents the VAR of BATA INDIA for the period of 3months i.e. from 01-Jan-2024 to 31-Mar-2024. The BATA INDIA has the mean of -5.63, standard deviation of 15.68. var for 10% is -25.7 and var for 5% is -31.4.

FINDINGS-

1) The BATA INDIA has the VAR at bottom of 10% is-25.7, VAR at the bottom of 5% is -31.4, its mean is -5.63 and its standard deviation is 15.68.
2) The NEULAND LABORATORIES LTD has the VAR at bottom of 10% is -236.2 and VAR at the 5% is-307.6, mean is 15.6 and its standard deviation is 196.5.
3) The DR REDDY LABORATORIES has the VAR at bottom of 10% is - 103.4, VAR at the bottom of 5% is -134.1, its mean is 4.81 and its standard deviation is 84.43.
4) The INFOSYS LIMITED has the VAR at bottom of 10% is -34.6, VAR at the bottom of 5% is -43.9, its mean is-1.72 and its standard deviation is 25.62.
5) The RELIANCE INDUSTRIES LIMITED has the VAR at bottom of 10% is - 49.6, VAR at the bottom of 5% is -65.2, its mean is 5.2, its standard deviation is 42.82.
6) The BHARATHI AIRTEL LIMITED has the VAR at bottom of 10% is -18.4 , VAR at bottom of 5% is -24.2, its mean is 2.17 and its standard deviation is 16.06.

SUGGESTIONS

BATA INDIA:

BATA INDIA demonstrates relatively moderate VaR values compared to other companies. Given its lower volatility (standard deviation), investors may consider maintaining current exposure. However, periodic monitoring is recommended to ensure VaR remains within acceptable levels.

NEULAND LABORATORIES LTD:

Neuland Laboratories Ltd. exhibits exceptionally high VaR values, indicating significant downside risk. Investors should implement stringent risk management measures, including portfolio diversification, hedging strategies, and close monitoring of market conditions to mitigate potential losses.

DR REDDY LABORATORIES:

Dr. Reddy Laboratories' VaR values suggest a moderate level of risk, albeit higher than BATA INDIA. Investors may consider implementing risk mitigation strategies such as options strategies or dynamic asset allocation to manage downside risk effectively.

INFOSYS LIMITED:

Infosys Limited demonstrates moderate VaR values with relatively low volatility. Investors can maintain exposure while implementing risk management techniques such as stop-loss

orders or portfolio rebalancing to protect against adverse market movements.

RELIANCE INDUSTRIES LIMITED:

Reliance Industries Limited exhibits moderate to high VaR values, indicating considerable downside risk. Investors should adopt active risk management strategies,
including diversification across sectors, to mitigate exposure to Reliance's specific risks, such as regulatory or geopolitical factors.

BHARATHI AIRTEL LIMITED:

Bharathi Airtel Limited demonstrates relatively low VaR values with moderate volatility. Investors may consider maintaining or increasing exposure, particularly if the company aligns with their investment objectives and risk tolerance.

In summary, while each company presents unique risk profiles, proactive risk management practices are essential across the board. Investors should tailor their strategies based on individual company characteristics, market conditions, and their risk tolerance to optimize portfolio performance and safeguard against potential losses. Regular monitoring and adaptation of risk management strategies are crucial to navigate the dynamic nature of financial markets effectively.

CONCLUSION

The analysis of Value at Risk (VaR) data for the companies reveals a spectrum of risk profiles, necessitating tailored risk management approaches to optimize investment decisions.

Companies exhibit varied VaR values, reflecting the diverse nature of risks inherent in their investment profiles. From BATA INDIA's moderate risk to NEULAND LABORATORIES LTD's high risk, each company presents unique challenges and opportunities for investors.

The significance of proactive risk management strategies cannot be overstated, particularly for companies with elevated VaR values like NEULAND LABORATORIES LTD and RELIANCE INDUSTRIES LIMITED. Robust risk
mitigation measures are imperative to safeguard against potential losses and ensure portfolio resilience.

Portfolio diversification emerges as a key strategy to mitigate risk exposure across companies with varying VaR profiles. By spreading investments across sectors and asset classes, investors can enhance risk-adjusted returns and minimize the impact of adverse market movements.

The dynamic nature of financial markets underscores the importance of continuous monitoring and adaptation of risk management strategies. Regular reassessment of VaR values, market conditions, and company fundamentals is essential to align investment decisions with evolving risk profiles.

BIBLIOGRAPHY

- Prasanna Chandra: investment analysis and portfolio management "4th edition,TMH,2012.
- punithavathi pandian: security analysis and portfolio management, vikas.2012.
- jones: invest analysis management, wiley
- kevin,sapm,phi,2011

WEBSITES:

http://www.moneycontrol.com http://www.nseindia.com
http://www.zenmoney.com http://www.bseindia.com