

We are having a sum of **5 Lac**. So, considering one of the most important aspects of investing, i.e., Risk management, I have distributed the total amount across various asset classes involving **Equity, Commodities** and **Index funds**. This helps spread risk and reduces the impact of any single company or sector's performance on the overall portfolio.

Concentration risk is when a portfolio is heavily weighted towards a specific sector. By **diversifying** across sectors, you **reduce concentration risk** and avoid being overly reliant on the performance of a single sector. This can help protect the portfolio from potential downturns or challenges specific to one sector.

See, The ratio in which one allocates investments across asset classes is dependent on the **risk appetite** of the investor.

Asset Allocation :

Equity: Allocate a portion of the total capital to Indian equities for long-term growth potential. This could be around 70% of the portfolio (Rs 3.5 lakh).

Index Funds: Invest in index funds that track broad-based market indices like Nifty 50 or BSE Sensex. Allocate around 20% of the portfolio (Rs 1 lakh) to gain exposure to the overall market.

Commodities: Allocate a smaller portion, about 10% (Rs 50,000), to commodities like gold or silver to provide a hedge against inflation and diversify the portfolio.

Explanation behind such an Asset Allocation :

The distributed asset allocation is designed to strike a balance between growth potential and risk management. The higher allocation to equities and index funds aims to capture the growth potential of the stock market, while the inclusion of fixed income and a smaller allocation to commodities helps provide stability.

- Allocating a significant portion of the portfolio to Indian equities aims to capture long-term growth potential. Equities have historically provided **higher returns compared to other asset classes** over the long term. By investing in a diversified

portfolio of equities, we can participate in the growth of Indian companies and the overall economy.

- Index Funds: Allocating around 20% of the portfolio to index funds allows us to gain exposure to the broader market while diversifying risk. Index funds **provide a cost-effective way to invest in a diversified basket of stocks** such as Nifty 50 or BSE Sensex. This allocation helps ensure broad market participation and reduces the risk associated with investing in individual stocks.
- Commodities: Allocating a smaller portion to commodities like gold or silver **provides diversification and acts as a hedge against inflation**. Commodities can provide a store of value during periods of high inflation, they can also be volatile and **carry their own risks**. Hence, a smaller allocation is suggested to limit the impact of their volatility on the overall portfolio.

Equity Selection :



















We will diversify the 3.5 lacs across different sectors and market caps to reduce concentration risk. We will be investing in blue-chip stocks, mid-cap stocks based on market analysis. I have selected fundamentally strong companies with a history of consistent performance and strong management.

Stocks	Sector
HDFC Bank	Banking
Infosys	Information Technology
Hindustan Aeronautics	Aerospace
ITC Ltd.	FMCG

Stocks	Market Cap.	NSE - Code	BSE - Code
HDFC Bank	LARGE	HDFCBANK	500180
Infosys	LARGE	INFY	500209
Hindustan Aeronautics	LARGE	HAL	541154
ITC Ltd.	LARGE	ITC	500875

I choose those stocks that are **well-established** and have a proven track record of **operating successfully** in their respective industries. They typically have a **strong market presence, brand recognition, and stable revenue streams**.

Portfolio

Stock Name	Live Price  Change	Day's Gain  % Change	Quantity  Per Unit Cost	Investment Cost  Weight(%)	Latest Value  Weight(%)	Unrealized Gain  % Change
HDFC Bank	1,728.20  8.40	420  0.49%	50 1,701.40	85,070.00 23.1%	86,410.00 23.2%	1,340  1.58%
Hindustan Aeron	3,722.10  -47.95	-1,198.75  -1.27%	25 3,664.89	91,622.18 24.9%	93,052.50 25.0%	1,430  1.56%
Infosys (3)	1,345.15  11.45	1,145  0.86%	100 1,335.19	1,33,518.50 36.3%	1,34,515.00 36.1%	997  0.75%
ITC	466.35  3.10	387.5  0.67%	125 463.73	57,966.13 15.7%	58,293.75 15.7%	328  0.57%

A Bit of Technical Analysis

Technical Analysis is used for short-term but we can still use technical indicators, such as **moving averages** or **trend lines** as they can provide insights into the stock's price patterns and **potential future trends**. However, they are typically used in conjunction with fundamental analysis to gain a more understanding of the investment opportunity. I have also done **fundamental analysis later**.

HDFC Bank (HDFCBANK)

Let us study the SMA and the Exponential Moving Average (EMA) indicator of the company. When applying EMA for long-term investment we **use longer time periods**, such as 100-day or 200-day EMAs, to **smooth out short-term volatility and focus on the broader price trends**.



As we can see that in the last 10 years the stock price has **traded above its average price**, it means the traders are willing to buy the stock at a price higher than its average price. This means the traders are **optimistic** about the stock.



EMA200 - Yellow

EMA100 - Blue

Again if we see the with respect to the EMA and apply moving average crossover system, we can see that the **chart turns out to be bullish** as the faster EMA (shorter EMA/100) crosses and is above the slower EMA (longer EMA/200).

Based on the technical analysis conducted, the company's moving averages and exponential moving averages indicate a positive trend, suggesting that it has the potential to perform well in the long term.

Infosys (INFY)

Again, Analyzing the EMA and SMA for Infosys, so that we can figure out its investment potential in the long run.



We can see that the yellow line that represents Faster EMA is under the Blue line (majority of the time) that represents slower EMA.

This implies the **bullishness of the stock** in the long term.

While technical analysis provides insights based on historical price patterns, it alone cannot determine a company's potential. It is important to consider the fundamental aspects of the company, such as its financial health and financial stability. In the case of INFY, these fundamentals are strong, indicating a solid foundation for long-term success.

Therefore, it is necessary to consider both technical and fundamental factors when making investment decisions.

Hindustan Aeronautics (HAL)



EMA200 - Yellow EMA100 - Blue

Applying the moving average crossover system to HAL's chart, we observe a **bullish signal** as the shorter-term EMA (100-day) crosses above the longer-term EMA (200-day). This indicates a positive trend and suggests **potential upward momentum** for the stock. I have greater confidence in HAL's long-term potential.



Based on the technical analysis conducted, the company's moving averages and exponential moving averages indicate a positive trend, suggesting that it has the potential to perform well in the long term.

ITC Ltd. (ITC)



EMA200 - Yellow **EMA100 - Blue**

Applying the moving average crossover system to ITC's chart, we observe a **bullish signal** as the shorter-term EMA (100-day) crosses above the longer-term EMA (200-day). This indicates a positive trend and suggests potential upward momentum for the stock. I have greater confidence in ITC's long-term potential.

Moving Averages: Classic

Indicator	Simple	Signal
5 - SMA	447.30	Bullish
10 - SMA	449.08	Bullish
20 - SMA	445.89	Bullish
50 - SMA	434.04	Bullish
100 - SMA	408.68	Bullish

Moving Averages: Exponential

Indicator	Simple	Signal
5 - EMA	448.74	Bullish
10 - EMA	447.82	Bullish
20 - EMA	445.13	Bullish
50 - EMA	432.07	Bullish
100 - EMA	410.83	Bullish

A Bit of Fundamental Analysis

Getting into the reason why I picked these stocks and also going through some stats.

HDFC Bank (HDFCBANK)



Pros :

- Company has delivered good profit growth of **20.0% CAGR** over last 5 years
- Company has been maintaining a healthy dividend payout of 19.0%

Now as I grow through the FY22 Annual Report of HDFC Bank, I can calculate the **Interest coverage ratio**, which is equal to EBITA/Interests.

$$\text{ICR} = 50,775.25 / 13,470.33 = 3.768$$

Interest Coverage Ratio of HDFC Bank Ltd. with value of 3.76 indicates the company does have sufficient profit to service its debt.

Net Profit Margin	17.99%	18.53%	20.42%	22.69%	22.47%
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The net profit margin is also increasing year on year and is $\geq 20\%$ in FY23 which is a good sign. It tells how the company is using the revenues to generate profits.

Also, the **Return on Equity** is 17.81%, which is a good figure for the shareholders as the company is able to generate profits from their investment in the company.

This indicates a strong performance and consistent growth potential.

Infosys (INFY)



Pros:

- Company has a good **return on equity (ROE)** track record: 3 Years **ROE 29.4%**
- Company has been maintaining a healthy **dividend payout** of **58.8%**

Interest Coverage Ratio of INFY has fallen by 0 % compared to the previous Financial Year. **Interest Coverage Ratio** with value of 151.55 was highest in Year Mar-22 in the last Five Years. Interest Coverage Ratio of 151.55 is amazing and the company have a lot of funds to service its financial expenditure.

The **Gross profit margin** is 27.74% which is again great as higher the profit margin higher the efficiency of the company.

Also, the **Return on Equity** is 34.31%, which is an excellent figure for the shareholders as the company is able to generate profits from their investment in the company.

This indicates a strong performance and consistent growth potential.

Hindustan Aeronautics (HAL)



Pros:

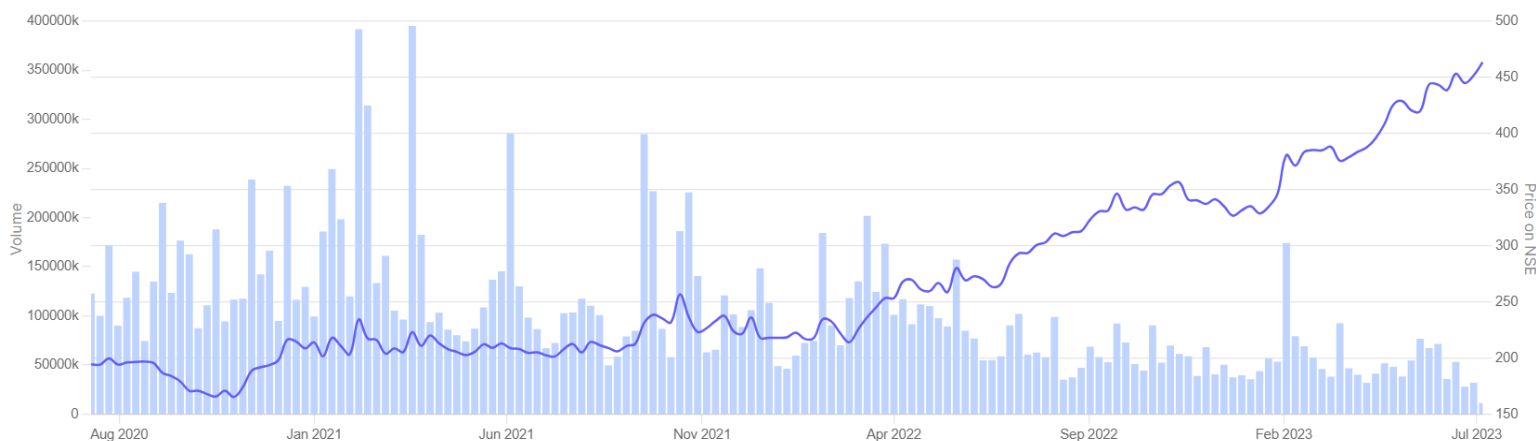
- Company has reduced debt.
- Company is almost **debt free**.
- Company has delivered good profit growth of **23.9% CAGR** over last 5 years
- Company has a good return on equity (ROE) track record: 3 Years **ROE 26.7%**
- Company has been maintaining a healthy **dividend** payout of **26.8%**
- Moreover, Company has a healthy **Interest coverage ratio** of 81.31.

HAL has delivered a strong **return on equity** of 26.7% and a **Compound Annual Growth Rate (CAGR)** of 23.9% over the last 5 years. This indicates a strong performance and consistent growth potential.

Additionally, the **interest coverage rate** of 81.31 suggests that the company's earnings are sufficient to cover its interest expenses comfortably.

These positive indicators make HAL an attractive investment option, showcasing its potential for generating favorable returns and financial stability.

ITC Ltd. (ITC)



Pros:

- Company is almost **debt free**.
- Company has a good return on equity (ROE) track record: **3 Years ROE 25.0%**
- Company has been maintaining a healthy **dividend payout of 98.0%**.
- Company has a healthy **Interest coverage ratio** of 328.60.

ITC is a highly promising investment option with a remarkable **return on investment (ROI)** of **25%**.

Additionally, the **interest coverage ratio** of **328.60** suggests that the company has a strong ability to meet its interest obligations, indicating financial stability.

Moreover, the **dividend** payout ratio of **98%** signifies that the company distributes a significant portion of its earnings to shareholders in the form of dividends. This high dividend payout ratio reflects the company's commitment to rewarding investors and sharing its profits.

These positive indicators make ITC an attractive investment option, showcasing its potential for generating favorable returns and financial stability.

Index Fund :

Index funds are open-ended and equity-oriented mutual fund schemes that invest at least 95% of their total portfolio in securities of a particular index they track. We will be Choosing reputable index funds with a low expense ratio and a track record of closely tracking the underlying index.

We have allocated a capital of 1 lac for investing into Index Funds.

Bandhan Nifty 50 Index Fund

This Index Fund is an attractive investment option with assets under management **(AUM) of Rs 760 crore**. This indicates that the fund has garnered a significant amount of capital from investors who trust its investment strategy.

The fund has an impressive **annual return of 15.91%**. This indicates that over a one-year period, investors in the fund have earned an average return of 15.91% on their investment. This return is reflective of the fund's ability to generate favorable investment performance relative to the benchmark index it tracks.

Additionally, the **expense ratio** of the fund is **0.1 percent**. The expense ratio represents the annual fee charged by the fund for managing investors' money. A low expense ratio of 0.1 percent indicates that the fund has relatively low operating costs, which benefits investors by maximizing their net returns.

This fund aims to **replicate the performance of a NIFTY50 index**, providing broad market exposure and diversification.

A total Lump Sum of 1 lakh if invested in Bandhan Nifty50 Index Fund for 10 yrs will generate the following returns, according to past performances.

Total Investment	Profit	Current Value
1 Lakh	2.64 Lakh	3.64 Lakh

Commodities :

Commodity **prices often follow inflation**, which makes them appealing to **diversify the portfolio**. Commodities such as gold and silver have been serving as a store of value for ages and are doing so even now.

Commodities can be **volatile** as they are cyclical in nature and **depend on demand and supply cycles**, situations like wars, pandemics and natural disasters can impact the prices of certain commodities.

While commodities can provide a store of **value during** periods of **economic uncertainty** or **high inflation**, they can also be **volatile and carry their own risks**. Hence, We are allocating a small amount of capital in commodities to diversify the portfolio.

To summarize, the investment portfolio is designed to achieve long-term growth while minimizing risk. It includes a mix of index funds, commodities, and Indian equity to spread out investments.

The allocation strategy is based on careful analysis of each asset class. Risk is managed by diversifying and adjusting the portfolio as needed. Overall, the goal is to meet the investment objectives and maximize long-term success.

I enjoyed completing the assignment. It was an interesting and very amazing learning experience and I am excited about the opportunity to work with the team and contribute my skills and interests to achieve our shared investment and career objectives.