EQUITY RESEARCH ASSIGNMENT

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The task was to construct a diversified portfolio using the capital 5 Lakh Rupees.

Objective:

The portfolio aims to generate returns through a combination of **capital appreciation, dividend income** and **interest installments** by investing in **Value stocks** and a relatively high return bond.

Thus, I have tried to keep the **risks low**.
The objective of this portfolio is to **give steady and guaranteed returns in the long term.**

The portfolio will need adjustments from time to time according to the market conditions. But the frequency of these adjustments would not be high. The revisions in the portfolio could be made once in about 6-8 months.

Split:

For the split between sectors and that between equity and debt, I studied the split of some value Mutual Funds.

The Split I chose for the portfolio is:
80% Equity
20% Debt

I did not choose ETFs or commodities because I was not familiar with the fundamentals and working of these.
Also, the lowest investment in a government secured bond was Rs. 100000. That is why, although I wanted to allot a slightly lower percentage of the fund towards Debt, I had to keep it 20%.

The Interest payments from the Bond would add in the fund as Cash or may be reallocated to equity as and when required.

Debt:

I chose to go with debt to balance the risk associated with equities. The Bond I chose would give steady quarterly interest payments, which could be reallocated to the equity every time the portfolio is revised.

The Bond I chose is the 8.95% KERALA INFRASTRUCTURE INVESTMENT FUND BOARD 20/Dec/2030. This would yield 9.25% per annum. It will give simple interest installments quarterly until its maturity. This is a PSU bond and it has State Government Guarantee. This ensures minimum risk and steady returns.

Equity:

I tried the best to diversify my portfolio across sectors. I tried to give fair weightage to each sector and each stock.
The parameters/financial metrics I used to choose the stocks are:

1. **Prominence Of the Company:**
   I gave my first preference to the Market Capitalization and prominence of the company in its sector. This includes the basic financials and income statement of the company (Revenue, Revenue Growth Percentage, Profit, etc.).
   This ensures that the company would not default in the coming years. Also, it minimizes the risk of loss.
   I have only included Large Cap and Mid Cap companies in the portfolio. This would ensure low volatility of the stocks and reliability.

2. **P/E Ratio:**
   The price-to-earnings ratio (P/E ratio) is a metric that helps investors determine the market value of a stock compared to the company's earnings. The P/E ratio is important because it provides a measuring stick for comparing whether a stock is overvalued or undervalued. A high P/E ratio could mean that a stock's price is expensive relative to earnings and possibly overvalued. Conversely, a low P/E ratio might indicate that the current stock price is cheap relative to earnings.
   A company’s P/E ratio is only comparable to companies within its sector. I sought stocks with a low P/E Ratio from each sector. This was done to find and identify undervalued stocks and to maximize value in the portfolio.

3. **Price-to-Book Ratio**
   The price-to-book ratio or P/B ratio measures whether a stock is over or undervalued by comparing the net value (assets - liabilities) of a company to its market capitalization. Essentially, the P/B ratio divides a stock's share price by its book value per share (BVPS). The P/B ratio is a good indication of what investors are willing to pay for each rupee of a company's net value. The reason the ratio is important to value investors is that it shows the difference between the market value of a company's stock and its book value. The market value is the price investors are willing to pay for the stock based on expected future earnings.
   I tried to choose stocks with a low PB Ratio. This indicates that the stock is undervalued.

4. **Dividend Yield Percentage:**
   The dividend yield is a financial ratio that shows how much a company pays out in dividends each year relative to its stock price.
   As mentioned in the objective, one of the main aims of this portfolio is to generate returns through dividend income.
   Thus, I gave priority to the stocks with higher dividend yield in the previous financial year, to maximize the dividend income.

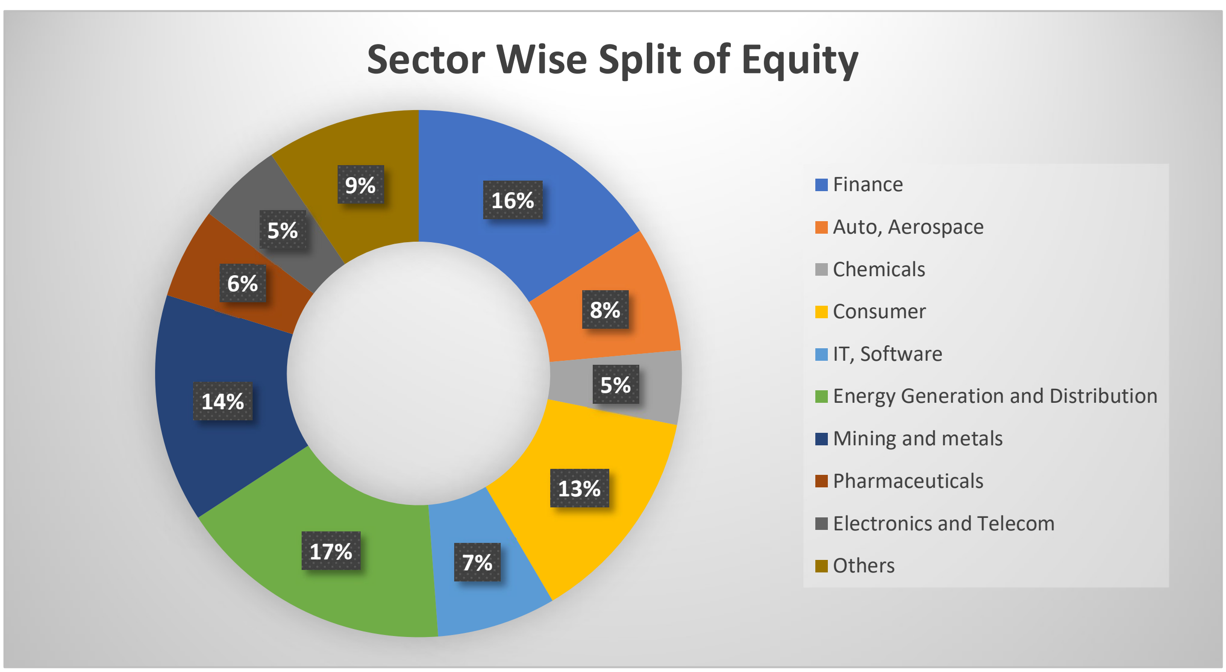
5. **Debt-to-Equity Ratio:**
   The debt-to-equity ratio (D/E) is a stock metric that helps investors determine how a company finances its assets. The ratio shows the proportion of equity to debt a company is using to finance its assets. A low debt-to-equity ratio means the company uses a lower amount of debt for financing versus shareholder equity. A high debt-equity ratio means the company derives more of its financing from debt relative to equity. Too much debt can pose a risk to a company if they do not have the earnings or cash flow to meet its debt obligations.
   This ratio can vary from sector to sector. So, I chose the companies with a low D/E ratio from each sector. This was done to avoid risk of defaulting by the company.

6. **Free Cash Flow:**
   Free cash flow (FCF) is the cash produced by a company through its operations, minus the cost of expenditures. In other words, free cash flow is the cash left over after a company pays for its operating expenses and capital expenditures (CapEx). Free cash flow shows how efficient a company is at generating cash and is an important metric in determining

whether a company has sufficient cash, after funding operations and capital expenditures, to reward shareholders through dividends and share buybacks. Free cash flow can be an early indicator to value investors that earnings may increase in the future since increasing free cash flow typically precedes increased earnings.
I tried to ensure low Price to FCF ratio of the stock from each sector. This I did to identify undervalued stocks and to increase dividend income.

7. **PEG Ratio:**
   The price/earnings-to-growth (PEG) ratio is a modified version of the P/E ratio that also takes earnings growth into account. The P/E ratio does not always tell you whether or not the ratio is appropriate for the company's forecasted growth rate. The PEG ratio measures the relationship between the price/earnings ratio and earnings growth. The PEG ratio provides a more complete picture of whether a stock's price is overvalued or undervalued by analyzing both today's earnings and the expected growth rate. Stocks with low PEGs are undervalued.
   Thus, I tried to choose the stocks with low PEG to increase value.

Equity Split:



Finance (15.88%):
This sector includes banks and financial institutions that often pay out regular dividends. The financial sector is critical for economic growth. The allocation suggests a belief in the stability and growth potential of the financial sector in India and investing in well-established banks and financial institutions can offer stable returns and dividends.

Energy Generation and Distribution (16.98%):
This sector includes companies involved in the production and distribution of energy. Given the increasing demand for energy in India, this allocation can provide stability. Companies in this sector can offer stable cash flows and are often known for paying consistent dividends. The allocation here suggests a focus on both value and dividend income.

Mining and Metals (14.02%):
Investments in mining and metals can offer a hedge against inflation and benefit from global demand for raw materials, especially in a rapidly industrializing economy like India. This sector can be volatile, but companies in this sector that have strong fundamentals can be good value investments. They can also offer dividend income.

Consumer (13.38%):
Consumer goods and services companies tend to be resilient and can provide consistent performance. Consumer companies can offer both value and growth potential. They can also be a good source of dividend income, especially those in the FMCG sector.

Auto, Aerospace (7.72%):
The automotive and aerospace sectors can benefit from technological advancements and increasing demand. These sectors have companies with strong fundamentals. They can also offer decent dividends.

IT, Software (7.29%):
With India being a hub for IT and software services, this sector can provide significant value. While IT companies are typically growth-oriented, there are several mature IT firms that offer regular dividends, making them suitable for a value and income-focused portfolio.

Pharmaceuticals (5.58%):
The pharma sector is known for its R&D and export potential, making it a strategic choice for long-term growth. Pharma companies can be good value

buys given the evergreen nature of the healthcare sector. Some pharma companies also offer regular dividends.

Electronics and Telecom (5.19%):
As technology advances, electronics and telecom can offer growth potential, especially with the digital transformation in India. The scope of Electronics in India is going to increase exponentially in India in the coming years making this sector a growing one.

Chemicals (4.54%):
The chemical sector is integral to various industries, and investing here can tap into the broader industrial growth. The chemicals sector includes companies that can be cyclical in nature. However, companies with strong fundamentals can be good value buys. Established chemical companies also offer regular dividends.

Others (9.43%):
These include companies from sectors of Construction, Ports, Shipbuilding and Entertainment. These companies were primarily chosen because they are the most prominent players in their sector.

The portfolio is designed to balance value with risk management, focusing on sectors that are essential to India's economy and have the potential for long-term appreciation.

Sources

The sources I used for finding information regarding the financial metrics are:
1. Investopedia
2. Yahoo Finance
3. Netsuite by Oracle
4. TickerTape
5. Trading View
6. Screener.in