# **Module IV**

# PORTFOLIO REVISION

# Meaning

Portfolio revision refers to the **process** of **making changes or adjustments** to an investment **portfolio**. This could involve **buying or selling assets**, **rebalancing** the allocation of different investments, or **adjusting the portfolio** to align with new **financial goals** or **market conditions**.

# **Example:**

Imagine you have a portfolio with 50% stocks (Rs 5000) and 50% bonds (Rs 5000).

Let's say the stocks double in value, going from Rs. 5,000 to Rs. 10,000.

The value of bonds stays the same at Rs. 5,000.

Now, your portfolio is 67% in stocks (10k/15k) and 33% in bonds (5k/15k), even though the amount of money in bonds hasn't changed.

**Portfolio revision** would involve selling some stocks and buying more bonds to return to your original 50/50 split. This helps keep your portfolio balanced according to your investment goals.

# Need

**Availability of Additional Funds:** You receive a bonus at work and decide to invest it; this might require adjusting your existing portfolio.

Example: Investing a Diwali bonus into your mutual funds.

**Change in Risk Tolerance:** As you age, you might prefer safer investments, leading you to reduce stock holdings.

Example: Moving from equity mutual funds to fixed deposits as retirement nears.

**Change in Goals:** You decide to save for a child's education, requiring a shift to less volatile investments. Example: Shifting from stocks to government bonds for a child's college fund.

**Market Conditions:** A stock market crash might prompt you to rebalance your portfolio to protect against further losses.

Example: After a market downturn, selling some stocks and increasing gold investments.

**Performance of Investments:** If a particular asset underperforms, you may want to replace it with a better-performing one.

Example: Selling a mutual fund that has been losing money and buying one with better returns.

# **Constraints in Portfolio Revision**

**Transaction Cost:** The fees charged for buying or selling investments.

Example: Paying a brokerage fee when selling stocks.

**Taxes:** Taxes that apply to gains or income from investments.

Example: Paying capital gains tax when selling shares for a profit.

**Statutory Requirement:** A statutory requirement is a rule or law that you must follow. It is set by the government and applies to certain activities, like investments.

Example: there is a statutory requirement that you can invest up to ₹1.5 lakh in **Equity-Linked** Savings Schemes (ELSS) each year to get tax benefits. If you invest more than ₹1.5 lakh, you won't get any extra tax savings on the additional amount.

**Intrinsic Difficulty:** Challenges in understanding or managing complex investments.

Example: Derivatives like options and futures are complex and require understanding terms like strike prices and expiry dates. If you're not familiar with these, managing them can be challenging.

# **Portfolio Revision Strategies**

# **Active Strategy**

**Meaning:** Regularly buying and selling investments to try to outperform the market. Actively changing your portfolio based on market conditions or investment performance to maximize returns or manage risk.

**Example:** An investor frequently buys and sells stocks based on market trends or news, aiming to take advantage of short-term opportunities. For instance, they might buy tech stocks during a tech boom and sell them once the market peaks.

# **Passive Strategy**

**Meaning:** Maintaining a consistent investment approach without frequent changes, aiming to match market performance.

**Example:** An investor buys a diversified set of index funds or ETFs( Exchange traded funds) and holds them long-term, such as investing in an Nifty 50 index fund and leaving it unchanged to reflect the overall market performance.

# Formula plans

Formula plans are systematic strategies designed to help investors benefit from market price fluctuations.

These plans use **predetermined rules** to **guide buying and selling decisions**, allowing investors to **buy low and sell high** maximizing profits by purchasing securities when their prices are low and selling them when their prices are high.

This approach seeks to take advantage of market fluctuations to secure better returns.

# **Constant Rupee Value Plan**

Concept: This plan involves maintaining a constant value in the aggressive portfolio (equity shares) while adjusting the defensive portfolio (bonds and debentures) based on market fluctuations.

#### **How It Works:**

- 1. Two Portfolios:
  - **Aggressive Portfolio:** Consists of equity shares.
  - **Defensive Portfolio:** Consists of bonds and debentures.
- 2. **Objective:** The Constant Rupee Value Plan keeps the aggressive portfolio (equities) fixed to ensure **steady growth exposure. Adjustments** are made in the **defensive portfolio (bonds)** based on market changes to manage overall risk. This methods keeps investment in high-growth assets stable while adjusting defensive assets to balance risk.
- 3. Actions Based on Market Fluctuations:
  - When Share Prices Rise: Sell some shares to bring the aggressive portfolio's value back to the original investment amount. The proceeds are invested in the defensive portfolio.
  - When Share Prices Fall: Buy additional shares to maintain the original value of the aggressive portfolio. Funds for buying shares are raised by liquidating part of the defensive portfolio.

### **Constant Rupee Value Plan:**

- 1. Initial Setup:
  - Aggressive Portfolio (Equity Shares): ₹50,000
  - O Defensive Portfolio (Bonds): ₹50,000
  - Share Price: ₹40 per share (buy 1250 shares)
- 2. When Share Prices Rise:
  - o New Share Price: ₹45
  - New Value of Aggressive Portfolio: ₹56,250 (1250 shares × ₹45)
  - o **Action:** Sell shares to reduce the aggressive portfolio value back to ₹50,000.
  - **Proceeds from Sale:** ₹6,250 (to be invested in the defensive portfolio).
- 3. When Share Prices Fall:
  - New Share Price: ₹32
  - o New Value of Aggressive Portfolio: ₹40,000 (1250 shares × ₹32)
  - Action: Buy more shares to increase the aggressive portfolio value back to ₹50,000.
  - o **Funds Needed:** ₹10,000 (raised by selling part of the defensive portfolio).

### 4. Revision Points:

**Revision points** are specific **price levels or values** at which you **adjust your portfolio** to maintain the desired balance. They help determine **when to rebalance** between the aggressive (equity) and defensive (bonds) portfolios.

#### **Example:**

- 1. **Initial Investment:** 
  - o Aggressive Portfolio (Equity Shares): ₹50,000
- 2. Setting Revision Points:
  - **20% Above:** ₹50,000 + (20% of ₹50,000) = ₹60,000
  - **20% Below:** ₹50,000 (20% of ₹50,000) = ₹40,000

#### When to Rebalance:

- If the Value Rises Above ₹60,000:
  - Action: Sell some shares to reduce the value back to ₹50,000.
- If the Value Falls Below ₹40,000:
  - Action: Buy more shares to increase the value back to ₹50,000.

These revision points ensure that you automatically make adjustments to keep the aggressive portfolio value within a specific range, helping to capitalize on market fluctuations effectively.

### **Constant Ratio Plan**

Constant Ratio Plan involves maintaining a fixed percentage allocation between different asset classes in your portfolio. The goal is to keep the ratio of investments in various assets (like stocks and bonds) constant over time. Rebalancing is done periodically or when the portfolio deviates significantly from the target ratio.

#### **How It Works:**

- 1. **Initial Setup:** 
  - O Decide on the target ratio for your asset allocation. For example, you might want 60% in stocks and 40% in bonds.
- 2. Maintain the Ratio:
  - Continuously adjust your investments to keep the portfolio at the target ratio.

### **Example:**

- 1. Initial Investment:
  - **O Total Portfolio Value: ₹1,00,000**
  - Target Ratio: 60% stocks and 40% bonds
  - Initial Allocation:
    - **Stocks:** ₹60,000 (60% of ₹1,00,000)
    - **Bonds:** ₹40,000 (40% of ₹1,00,000)

# **Market Changes:**

Scenario 1: Stock increase in by 20000, and the portfolio value becomes ₹1,20,000.

# Target Allocation:

- New Stock Value: 60% of ₹1,20,000 = ₹72,000
- New Bond Value: 40% of ₹1,20,000 = ₹48,000

Current Value of Stocks: 60000+20000= ₹80,000 (exceeds target, need to sell stocks)

Current Value of Bonds: ₹40,000(remained same) (below target, need to buy

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- Amount to Sell from Stocks: Amount to Sell=₹80,000-₹72,000=₹8,000
- Amount to Sen From Stocks: Amount to Sen = ₹80,000 = ₹72,000 = ₹8,000
   Amount to Buy in Bonds: Amount to Buy=₹48,000 = ₹40,000 = ₹8,000

# **Market Changes:**

Scenario 2: Stocks decrease in by 20000, and the portfolio value becomes ₹80,000.

# **Target Allocation:**

- New Stock Value: 60% of 80000 = 48000
- New Bond Value: 40% of \$80000 = \$32000

### **Current Allocation:**

- Current Value of Stocks: (60000-20000) = ₹40,000
- Current Value of Bonds: ₹40,000

## 3. Rebalance the Portfolio:

- Amount to Buy in Stocks=₹48,000-₹40,000=₹8,000
- Amount to Sell from Bonds=₹40,000-₹32,000=₹8,000

# Variable Ratio Plan

The **Variable Ratio Plan** is a portfolio rebalancing strategy that allows for more flexibility compared to a Constant Ratio Plan.

Under this approach, the **target allocation** between asset classes (e.g., stocks and bonds) **isn't fixed**; instead, it adjusts based on certain market conditions or predefined rules.

The idea is to be more aggressive when the market is favorable and more conservative when the market is uncertain or declining.

When the market is doing well, you increase your investment in stocks (e.g., 70%) to maximize gains. When the market is uncertain or declining, you shift more into bonds (e.g., 50%) to protect your investment.

# Variable Ratio Plan Example

# Initial Setup: 60:40

- Total Portfolio Value: ₹1,00,000
- Allocation: 60% in stocks (₹60,000) and 40% in bonds (₹40,000).

## **Market Scenarios: Portfolio Value Increases to: ₹1,30,000 (Favourable)**

## **New Target Allocation: 70:30**

- 70% in stocks = ₹91,000
- 30% in bonds = ₹39,000

# **Rebalancing**: You need to adjust the portfolio to the new target allocation.

• Current allocation after the market increase:

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Stocks: ₹78,000 (60% of ₹1,30,000) Bonds: ₹52,000 (40% of ₹1,30,000)
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- To achieve the new target allocation:
  - Increase stock holdings to ₹78,000 + 13000 = ₹91,000.
  - You can do this by selling ₹13,000 worth of bonds ₹52,000 -13000 = ₹39,000

# Variable Ratio Plan Example

## **Initial Setup:**

- Total Portfolio Value: ₹1,00,000
- Allocation: 60% in stocks (₹60,000) and 40% in bonds (₹40,000).

## Market Scenarios: Portfolio Value Declines to: ₹90,000 (Unfavorable)

- New Target Allocation:
  - 50% in stocks = ₹45,000
  - 50% in bonds = ₹45,000
- **Rebalancing**: You need to adjust the portfolio to the new target allocation.
- Current allocation after the market increase:
- Stocks: ₹54,000 (60% of ₹90,000) Bonds: ₹36,000 (40% of ₹90,000)
  - Decrease stock holdings to ₹54,000 9000 = ₹45,000.
  - Invest in bonds ₹36,000 + 9000 = ₹45,000

# **Selection of Equity Portfolio**

### 1. Define Investment Objectives:

• Risk Tolerance: Assess how much risk you are willing to take. This can vary from conservative (low risk) to aggressive (high risk).

**Conservative:** You are a retiree who prefers stable returns and minimal risk. You invest in government bonds, aiming for lower but consistent returns.

**Aggressive:** You are a young professional with a high risk tolerance. You invest in emerging markets and tech startups, seeking higher returns despite the higher volatility.

• **Investment Horizon:** Determine the **time frame** for which you plan to invest, which can range from **short-term to long-term.** 

**Short-Term:** You plan to buy a car in two years, so you invest in low-risk assets like fixed deposits or short-term bonds.

**Long-Term:** You are saving for retirement 30 years from now. You invest in growth stocks and equity mutual funds to benefit from compound growth over a long period.

• Return Expectations: Set realistic return goals based on your risk comfort level and market conditions.

**Conservative Return Goal:** Invest ₹5,00,000 in bonds and dividend-paying stocks, earning ₹20,000 (4% return) with low risk.

**Aggressive Return Goal:** Invest ₹5,00,000 in high-growth tech stocks, growing to ₹6,00,000 (20% return) with higher risk.

#### 2. Stock Selection Criteria:

- **Fundamental Analysis:** Evaluate the financial health of companies through key metrics such as P/E ratio, earnings growth, return on equity (ROE), and debt-to-equity ratio.
- **Technical Analysis:** Analyze stock price trends, trading volumes, and other market indicators to forecast future price movements.

### 3. Screening and Filtering:

• Use financial tools and stock screeners to filter stocks based on predefined criteria like market capitalization, dividend yield, and growth prospects.

Example: Use a stock screener to find large companies (market cap > ₹10,000 crores), paying at least 3% in dividends, with steady revenue growth.

**Example:** You shortlist Reliance Industries, TCS, and HDFC Bank.

#### 4. Portfolio Construction:

• Asset Allocation: Allocate funds to different stocks based on their risk-reward profile. Typically, this involves a mix of growth stocks and income-generating stocks.

Example: Distribute funds within each category, like ₹2,50,000 in Infosys for growth and ₹2,00,000 in HDFC Bank for income.

# **Revision of Equity Portfolio**

# 1. Monitoring Performance:

- **Regular Reviews:** Check your portfolio regularly to see how it's doing compared to your goals and market benchmarks.
- **Performance Metrics:** Use tools like **total return** (how much you've earned), **Sharpe ratio** (return per unit of risk), **beta** (portfolio's market sensitivity), and **alpha** (performance vs. the market) to assess how well your portfolio is performing.

## 2. Rebalancing:

- Constant Ratio Plan: Maintain a fixed proportion of different asset classes (e.g., 60% equities, 40% bonds) by periodically buying or selling assets.
- Constant Rupee Value Plan: Maintain a constant investment amount in each stock, buying more when prices drop and selling when they rise.

# 3. Evaluating Stock Performance:

- Underperformers: Identify and replace stocks that consistently underperform relative to their sector or the market.
- Overvalued Stocks: Consider selling stocks that have become overvalued or have reached your target price.

Example: If you bought Infosys shares at ₹1,000 with a target price of ₹1,500 and the price rises to ₹1,700, you might sell since it's overvalued compared to your target price of ₹1,500.

• Changing Fundamentals: Replace stocks if there are significant changes in the company's fundamentals or industry dynamics.

Examples: In 2015, Volkswagen was caught using software to cheat emissions tests. This major scandal led to a significant drop in its stock price, forcing many investors to sell their shares and invest in companies with better fundamentals.

#### 4. Tax Considerations:

STCG on Listed Shares:

Tax Payable = 15% of ₹1,10,000 = ₹16,500

• Tax-Loss Harvesting: Sell losing stocks to offset capital gains tax on profitable investments.

You invested ₹1,00,000 in **Company A**, which dropped to ₹70,000, resulting in a ₹30,000 loss. You sell **Company A** and use this ₹30,000 loss to offset a ₹30,000 gain from selling **Company B** in the same year, eliminating the capital gains tax on the profit.

• Long-Term vs. Short-Term Gains: Optimize sales to benefit from lower long-term capital gains tax rates.

LTCG on Listed Shares:

	Purchase Price of Shares: ₹1,40,000
Purchase Price of Shares: ₹1,40,000	Turchase Trice of Shares. \$1,40,000
1 41-14-15-15-15-15-15-15-15-15-15-15-15-15-15-	Selling Price of Shares: ₹2,50,000
Selling Price of Shares: ₹2,50,000	Holding Period: More than a year (LTCG)
	Holding Feriod. More than a year (LTCG)
<b>Holding Period</b> : Less than a year (STCG)	<b>LTCG</b> = ₹2,50,000 - ₹1,40,000 = ₹1,10,000
STCC = \$2.50,000 \$1.40,000 = \$1.10,000	Tay Payable = $(71.10.000  71.00.000 \text{ ayamatian})$
$\mathbf{STCG} = 2,50,000 - 1,40,000 = 1,10,000$	<b>Tax Payable</b> = (₹1,10,000 - ₹1,00,000 exemption)
Tay Payable - 15% of $\pm 1.10.000 - \pm 16.500$	Tax = ₹1,000 (10%  of  ₹10,000).

#### 5. Strategy Revision:

- Adjust the investment strategy if your financial goals, risk tolerance, or market conditions change.
- This could involve shifting focus from growth stocks to dividend-paying stocks or vice versa.

#### 6. Economic and Market Conditions:

• Stay informed about macroeconomic factors like interest rates, inflation, and geopolitical events that could impact the market and your portfolio.

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