

PTSA

Assignment - 1

Unit 2

Q1 → D. None

Q2 → D. All of the above.

Q3 → D. All of the above.

Q4 → D. All of the above.

Q5 → A. an endowment

Q6 → A. Higher tax rate on dividend income than on capital gains.

Q7 → B. high within each asset class and low among asset class

Q8 → C. Consider the investor's risk tolerance and future needs but not forecasts of Market condition

Q9 → Considering the fact that the investor is young he or she has a longer Time horizon and to invest when compared to an old timer.

and since the investor is young he may take an irrational risk. For example:

like here the investor is young and he is willing to take or invest in derivatives and leveraged products in his Portfolio.

Assuming that the investor does not have enough capital to sustain for heavy losses.

he or she do not have the ability or capacity to take a leverage. High leverage position in the market because the downside risk is immense, the investor may lose the money that he or she cannot repay, but ~~and also and similarly~~ in case of derivatives, the investor needs to have enough fund or capacity to fulfill the obligation and carryout a derivatives contract.

Q10

The components of an investment Policy Statement are : ~~see~~ governance investment

- scope and purpose.
- return and risk objectives
- Risk management

1. scope and purpose: The main objective of this component is to identify the investors source of wealth, defining the investor, meaning what type of investor he is setting roles and responsibilities for the portfolio and indentifying risk management structure.

2. Governance.

here ~~and~~ the IPS specifies the responsibilities in determining, executing and monitoring the result of the implementation of the IPS.

3. Investment, risk and return objective.
 It describes the overall objective of the investment. States the return risk and spending assumption. ~~here one determines the risk~~. The risk tolerance is specified.

4. Risk management.
 Defining the process of rebalancing and target asset allocation :
 specifying the matrices and parameters used in evaluating risk //

8.11. Investment constraints can mainly be classified as.

- Liquidity : This constraint mainly come into the picture when the liquidity needs of the investor is high for example. Banks have high liquidity needs and therefore they invest in safe and liquid security like Nifty Index.

- time horizon : Suppose an investor is planning a major future expenditure so he or she may invest his or her investment capital for a fixed time horizon in order to ^{successfully} incur the future expenditure on ~~time~~ the set time. here the investor must keep the risk in mind before investing.

- tax concerns : It is a major constrain for some investor especially wealthy investors is that they are looking Tax. and therefore tax can be a ~~no~~ concern. and hence the IPS for such.

Investments should be made accordingly.
the investment should be a

The securities should be chosen in such way that they have pay minimum tax.
for e.g.: Long term investment are subject to tax exemption under section 80C of Indian

- Legal and Regulatory concern:

For institutional investors like Insurance companies. They are bound to invest in some pre determined fashion. and also they are it is mandated for them to comply with the regulatory requirement.

Q12

Environmental social governance and corporate governance is an evaluation of a firm's collective conscientiousness for social and environmental factors. It is typically a score that is compiled from data collected surrounding specific metrics related to intangible assets within the enterprise. and some investor might be concern when it comes to the parameters like ESG. Whether the reason it is a moral issue or concerns about its effect on society and environment. This parameter is hard to ignore for some investors, and therefore proper measures should be taken to construct the portfolio in such a way so it satisfies the investors needs.

Q3. Diversification Ratio = $\frac{\text{Standard deviation of stocks combined}}{\text{Standard deviation of Portfolio}}$

$$\Rightarrow \sqrt{\frac{3.24\%}{625\%}} = \frac{18\%}{25\%} = 0.72$$

This means that the portfolio minimizes the risk of combination of the stock by 28%.

Q4

	Risk Tol	Investment Hor.	Liq. Needs	Income needs
Individual	Depends on Individual	Subjective	Subjective	Subjective
Bonds	Low	Short	High	Pay interest
Endowment	High	Long	Low	Spending level
Mutual funds	Depends on funds	Depend on fund	High	Depend on fund
Deferred Benefit Pension	High	Long	Low	Depend on age
Insurance	Low	Long for life Short for P&C	High	Low

Q15

~~Describe defined contribution~~

As the name implies defined benefit plan also known as a traditionally pension plan provides a specific payment amount in retirement. A defined contribution plan allows employees and employer (if they choose) to contribute and invest funds over time to save for retirement.

Unit 4

Q1. B. The sensitivity of their earnings to the business cycles.

Q2. D. All of the above

Q3. A. Output

Q4. D. None

Q5. B. Power of suppliers and threat of substitutes

Q6. B. Market concentration

Q7. A. and greater ease of exit decrease pricing power.

Q8. C. Maturity

Q9. A. an energy exploration firm in financial distress that owns drilling rights for offshore areas.

Q10. D. Asset based models.

Porter's five forces

Threat of new entrance

This force refers to the effort that goes into entering any market, or to simply put it, how hard is to enter and capture a share of a market.

Telecom sector is a very concentrated market. It would be almost impossible to enter into the

Indian telecom sector. Most of the market share is already ~~acq~~ been acquired by companies like Bharti Airtel, Jio and Vodafone Idea.

~~The pricing in this sector is not very good, and there is no cost advantage because of high industry concentration.~~ The pricing power in this sector is not very good, and there is no cost advantage because of high industry concentration.

Threat of substitute

Being one of the most an oligopoly and one of the most concentrated sectors of Indian economy.

The three leading companies holds the pricing power and are always trying to price more competitively.

Competitive rivalry

There is a cut throat rivalry in the ^{Telecom} industry with every firm trying to ~~cover~~ another. This shows how competitive the market is.

Bargaining power of customers

Prices are fixed and there is no scope of negotiation. When it comes to price of the service

But since the cost of switching is very low, and so there is always a threat or a concern in the companies mind that the customer may switch, so in some ways they have bargaining power indirectly.

5. Bargaining Power of Suppliers.
The suppliers in their are majority ~~two~~³ suppliers in the telecom industry.

- i Mobile Tower companies
- ii Sim ~~manufact~~ cards manufacturer
- iii Mobile phone Handsets

so there is a significant Power in the hands of the Supplier.

In conclusion, since all the players in the industry are established and in their maturity stage. They have a significant pricing power and cost advantages.

Q.12. The Macroeconomic factors
GDP, interest rates, inflation, the availability of credit etc

Technological influences
Established companies face the threat of technological obsolescence, e.g. Kodak or Nokia. While technological developments may also help established industries reinforce growth. Infant industries face the threat of a new product not being accepted by the marketplace.

Demographic influences
Broad shifts in population, distribution, age and income can have very marked effects on different industries. For example, a great deal of sports in the lives of many

People
~~As a result~~ has increased demand for sports trauma orthopedics.

Government influences

Government regulations law and tax policies can have marked influence on many industries. They may potentially increase or decrease an industry's prospects.

Social influence

Fashion changes tend to be short-term and less predictable. For example as a result of greater health consciousness, natural food new products in the cosmetics industries may enjoy a brief spike in demand, which will dissipate shortly.

Stock Split

In a stock split, the company divides the existing shares of its stocks into new shares. though the total value of the shares remain same.

Reverse Stock split

A reverse stock split is the measure taken by a company to reduce their number of outstanding shares in the market.

Share Repurchase

A share repurchase refers to the management of a public company buying back company shares that were previously sold to the public.

Cash dividends

A cash dividend is a payment made by a company out of its earnings to investors in the form of cash.

Extra dividend

An extra dividend is a one time dividend paid to a company's shareholders. An extra dividend is paid out by a company when they have surplus cash and are able to reward their shareholders.

Stock dividend

A method used by companies to distribute wealth to shareholders, is a dividend payment made in the form of shares rather than cash.

Q14. F

Free cash flow to equity is a metric of how much cash can be distributed to the equity shareholders of the company as dividends to the equity shareholders of the company or stock buy backs after all expenses, reinvestment and debt repayment are taken care of.

$$D_0 = 12$$

$$K = 10\%$$

$$g_1 = 12\%$$

$$g_2 = 9\%$$

$$g_3 = 8\%$$

$$g_4 = 5\%$$

DCF

$$\text{Intrinsic value} = \frac{12 \times (1+12\%)^1}{(1+10\%)^1} + \frac{12 \times (1+9\%)^2}{(1+10\%)^2} + \frac{12 \times (1+8\%)^3}{(1+10\%)^3} + \frac{12 \times (1+5\%)^4}{(1+10\%)^4} + \frac{12 \times (1+5\%)^5}{10\%}$$

$$\Rightarrow 229,000 \text{ £/share}$$

~~$$\text{Enterprise value} = \$50 \times 160,000 +$$~~

$$\text{Market cap of the Firm} = \$50 \times 160,000$$

$$\text{Market value of debt} = \$700,000$$

~~$$\text{Bank}$$~~
$$\text{Book value Short Term debt} = 1,100,000$$

Cost and dividend

$$\text{marketable security} = \$200,000$$

$$\begin{aligned} \text{Enterprise value} &= 50 \times 160,000 + 700,000 + 1,100,000 \\ &\quad - 200,000 \\ &= 9,600,000 \end{aligned}$$

$$\text{EV/EBITDA} = \frac{9,600,000}{1,000,000} = 9.6$$

Q17. $P/E = \frac{\text{Price}}{\text{Earning Per Share}}$

$$\text{Price} = \frac{\frac{\text{Dividend}}{\text{EPS}} \times (1 + \text{Growth rate})}{(K_e - \text{growth rate})}$$

$$= \frac{\frac{50 \times 0.9}{\left(\frac{1,000,000}{160,000} \right)} \times (1.09)}{(12\% - 4\%)}$$

$P/E = 41.6$

Unit 3

Q1

$$W_p = \frac{V_a - \text{Cov}(P, a)}{V_p - 2\text{Cov}(P, a) + V_a}$$

here $V_a = (20)^2$ $\text{Cov} = 20 \times 25 \times 0.5$
 $V_p = (25)^2$

$W_p = 0.2857 = 28.57\%$

$W_a = 1 - 0.2857 = 0.7143 = 71.43\%$

The & In order to minimize the risk the following weights W_p and W_a should be given to both stocks respectively

$$R_E \cdot W_L = \frac{V_m - C_m}{-V_L - 2C_m + V_m}$$

$$= 0.546$$

$$W_m = 0.454$$

$$R_p = \frac{1}{3} \times 27\% + \frac{1}{3} \times 24\% + \frac{1}{3} \times 22\%$$

$$= 24.33\%$$

$$V_p = \left(\frac{1 \times 33}{3} \right)^2 + \left(\frac{28}{3} \right)^2 + \left(\frac{26}{3} \right)^2 + \frac{2}{9} \times (33 \times 28 \times 0.2)$$

$$+ \frac{2}{9} \times (28 \times 26 \times 0.32) + \frac{2}{9} (26 \times 33 \times 0.5)$$

$$= 622.6411\%$$