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Question 1: Returns of a specific company TESCO PLC, United Kingdom, Retail Sector

TESCO is a retailer with its headquarters situated at Cheshunt, Hertfordshire, United Kingdom. It was founded in the year 1919 in Hackney in London. It is public limited company and its equity shares are traded on the London stock exchange with the ticker TSCO. Its founder is John Cohen. It is the third largest retailer in the world and when considering its revenues, it would be the second largest in the world. It has a total of 7,817 stores worldwide. The company is headed by John Allan who is acting as Non executive Chairman and Dave Louis as the Group CEO. It acts as both a supermarket and a hypermarket – which is combination of a supermarket and a departmental store. The company has total revenue of 62.28 billion GBP as of 2015. It has a net income of 5.76 billion GBP along with a total equity of about 7.07 billion GBP as of the 2015. The company employs a total of about 500,000 employees worldwide. The company has various subsidiaries and some of the main ones include Tesco Stores Ltd, Tesco Bank, Tesco Mobile and Tesco Ireland (limited, 2015).

When we look at the external sources of finance for the company, we see that the company is majorly financed by debt and has a lesser portion of equity. The total debt of the company stands at 12,518 Million GBP and the equity portion of the company stands at 6,163 Million GBP. We can see that the proportion of equity to debt for TESCO PLC is in the ratio of 1:2. The diagrammatic representation of it debt and equity is as shown below (Finance, 2015):

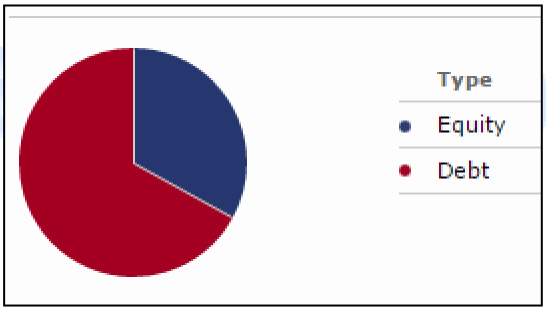

Figure 1: Capital Structure of TESCO PLC

Performance of Stock of TESCO PLC

The Stock price of TESCO PLC is as shown below

Year	2011	2012	2013	2014	2015
Stock Price in (GBP)	425	403	349	330	188

Table 1: Movement of Stock prices of TESCO PLC over the last five years

If one had invested in the share of TESCO PLC in the year 2011 at GBP 430, then the present price of the stock is GBP 188 which shows that there is a loss of 56% over the last five years. Hence The average loss is about 11% per year. Investors would have lost half the wealth has they invested in the stock of TESCO PLC. The main reason for the fall in the share price is the large amount of debt that has been accumulated in the year 2014. Hence, the investors consider the company risky which reduces the return on equity and in turn the return to the investor. Hence the annualized return on the stock is -11.15% annually

Performance of Bonds of TESCO PLC

TESCO has bonds issued with a five year horizon, a coupon rate of 5.5% with a price of 106 GBP on a face value of GBP 100. The current yield to maturity of these bonds stands at 3.65%. Hence the investor would have got better returns by investing in the bond rather than the stock of TESCO PLC.

The annual return assuming you invested 50% in stock would be -11.15% and in bond would be 5.5%. Taking the average it would be -2.8%.The most difficult part of this assignment was to collate the data an identify reasons for the performance of the stock.

Question 2 – Building a personal portfolio

Based on the age of the person, the time horizon and also on the specific goals in mind, one has to design a portfolio.

Taking an investor (as myself) in realistic terms, there are three specific and important goals which have different time horizons. The first goal is purchase my own home in about seven to ten years which would approximately cost 200,000 CHF. Secondly I would like to invest for my child's professional education which is fifteen to twenty years away. The requirement for child's education is about 300,000 CHF. Lastly, I need to save enough for my retirement in about 35 years time and the money required for that would be 1 Million CHF.

Now, for the three mentioned goals which are of different time horizons, I would have to carefully think of the different assets classes that I need to invest in. For short term goals which are due in about five years (that is you require money in five years from today), we have to select asset classes which are less volatile and give assured returns. This is because the time horizon is near. However, the returns may be lower and may require a larger corpus to begin with. Secondly, for goals that are further away, say 10 years and later, we can select assets classes which have some volatility and give better returns, but should not be very risky. Lastly, for very long term goals, we can choose risky assets with higher volatility since there a large amount of time available and highly volatile assets always give better returns and beat inflation by a big margin. These assets are chosen when the goals are very long, say more than 30 years and specifically for retirement (Costa, 2011).

Portfolio for Goal 1: Purchasing a home in about five years time

For my first goal, that is to purchase my own home in about five years time, I would have to choose debt assets specifically AAA rated corporate debt funds and long term government funds which give stable returns.

The five funds for this specific short term goal are as follow. The table below gives the name of the funds as well as the five year return % as in the morning star funds database:

Name of the fund	Annualized return (%)
1. American Century Zero Coupon 2025 Adv	6.44
2. PIMCO Long –term US Government A	6.13
3. Invesco AAA rated Corporate Bond	5.23
4. Fidelity Corporate Bond	5.14
5. Blackrock emerging markets Dynamic Bond Fund	5.88

Table 2: Portfolio of funds for the short term goal of purchasing a home

The above five funds will be chosen to make a portfolio for the first goal, that is purchase of a house which is only five years away and is relatively short term.

The Average return of these funds would be 5.76% annually and in order to build a corpus of about CHF 200,000 in five years time the monthly investment that is required would be about 2,885 CHF (The annuity each month for the next 60 months is calculated using the time value of money concept) per month as per the calculations. Hence I have to save about 2,885 USD each month for five years and invest in the above funds equally in order to achieve my goal.

Portfolio for Goal 2: Corpus for child's professional education

My second goal is to save for the professional education of my child which is a medium to a long term goal and the time horizon is about fifteen years. For this case we will select large cap funds which invest in large companies and return will be volatile only upto a certain extend. We will also invest in three small cap funds which may give better returns than large cap, but will be more volatile. Since the time horizon is fifteen year, the large cap stock funds will give the stability and the small cap fund will provide incremental return over above the average index return. So 60% of the capital will be allocated to large cap funds and 40% to small cap and mid cap funds.

For this purpose 6 funds have been chosen which are shown in the table along with their annualized return.

Fund name	Annualized Return (%)
AXA World funds Framlington Switzerland F Capitalization	11.16%
Fidelity Switzerland Fund	13.72%
Blackrock UK focus Fund	11.21%
Alger American Asset growth	10.23%
Blackrock Swiss Mid and Small Cap opportunities	19.77%
Schroder Equity Mid and Small Cap Fund	15.15%
Blackrock US mid and small cap fund	18.46%

Table 3: Portfolio for the achieving a corpus for children's education

Hence the average return of the portfolio can be calculated to be 14.25%. Hence in order to save 300,000 CHF for child's education that is fifteen years away we need to save CHF 484 (The annuity each month for the next 180 months is calculated using the time value of money concept) per month for 15 years and invest the money in equal proportions in each of the above mentioned funds in order to receive the requires sum fifteen years later (Ramsey, 2010).

Portfolio for goal 3: Corpus for Retirement

Finally retirement is a long term goal which requires substantial corpus to be created. Here the investor can choose funds which give high returns and where the risk factor is also higher. Hence the investor can choose mid and small company funds to wholly achieve this long term goal. The corpus required is also large about 1 Million CHF, but when done systematically over the next thirty years could easily be achieved. The investor could also use emerging market funds in addition to the mid and small cap fund portfolio. Hence in our portfolio we would have a 80% mix of small and mid cap funds with along with emerging nation ETFs which will help gain incremental returns. Emerging nations such as India are expected to grow at a higher rate when compared to the rest of the world. Hence investment in such funds over long periods of time would be beneficial to the investors.

For the purpose we have chosen five mid and small cap funds along with two emerging nations exchange traded funds. The descriptions of the portfolio along with the annualized returns of these funds are as shown below.

Name of the fund	Annualized return (%)
Blackrock Swiss Mid and Small Cap opportunities	19.77%
Mirabaud Swiss Equities Small and Mid cap und	17.51%
Aberdeen UK smaller companies fund	14.51%
AXA Framlington UK Mid cap fund	20.28%
Brown Advisory US Smaller companies fund	17.43%
Alliance China Equity Fund	10.52%
Aberdeen global Indian Equity Fund	11.51%

Table 4: Portfolio for investor's retirement

The average return on the portfolio can calculated to be 15.93%. Therefore in order to accumulate a corpus of 1 Million CHF over the next 30 years, the investor will have to invest 117 CHF (The annuity each month for the next 360 months is calculated using the time value of money concept) each month for the next 360 months in order achieve a corpus of 1 Million CHF over the 30 year. This money has to be invested in each of the seven funds in equal proportion in order to achieve the corpus (Dominguez, 2012 (Original 1992)).

The annualized rates of return of these funds are over the last three years and the same cannot be promised over the next 30 years. Hence considering the volatility factor, it is only the expected returns. The emerging nations fund may have underperformed in the last few years, hence it is having a lower returns. Considering emerging nations like India and China which may be in bit of a bother in the short term will definitely result in excellent returns over the next 30 years. Hence we have select one fund from India and China in our portfolio with the expectation that these countries will grow the fastest and give exceptional returns over the next thirty years.

Question 3: How will one use the nest egg for retirement?

In our construction of the goal wise portfolio list, we have retirement as one of the goals. In the last part of the previous question we have highlighted the funds or the portfolio that the investor has to follow in order to reach the retirement corpus of 1 Million.

Once the retirement age has been reached, the investor will now have to make a systematic withdrawal plan in order to grow the money and withdraw equal portions of money throughout his or her life time. Suppose we assume the life expectancy of our investor to be 85 and he or she retires, at 65, then the corpus should be utilized in such a way the he or she will not run out of money in the later year of life. The inflation (rise in prices over time) should also be considered.

The best approach would be to remove the amount of money required for the next three years and continue the remaining investment as is. The money required for the next three years can be invested in a short term treasury or corporate bond funds which will give stable returns. We follow this approach in order to reduce the volatility with respect to equity and continue being invested for the long term.

For example if the individual requires 100,000 CHF for the next three years, then this sum needs to be removed from the retirement corpus and get invested bonds funds and they can used for day to day needs. The remaining 900,000 CHF can continue in the same funds to get assured returns. This process can be continued for the rest of the retired investor's life so that the corpus keeps growing at higher rate and retiree can take required amount of money and enjoy retired life.

Bibliography

Costa, D., 2011. *Portable Private Banker.* Student's Copy ed. Online: Student's Copy.

Dominguez, V. R. a. J., 2012 (Original 1992). *Your Money or your life.* Online ed. Worldwide: Online.

Finance, Y., 2015. *Financial Ratios of Tesco PLC.* [Online]
Available at: https://in.finance.yahoo.com/q?s=TSCO.L
[Accessed 14 11 2015].

limited, C. W. o. T. p., 2015. *Business Model of Tesco PLC.* [Online]
Available at: www.tescoplc.com/files/pdf/reports/ar14/download_business_model.pdf
[Accessed 13 10 2015].

Ramsey, D., 2010. *The total Money Makeover.* 1st ed. New York: New York Times.