Overview for Questions #1-4 of 102

Question ID: 1611245

TOPIC: PORTFOLIO MANAGEMENT FOR INSTITUTIONAL INVESTORS

TOTAL POINT VALUE OF THIS QUESTION SET IS 12 POINTS

Donna Harding is a U.K.-based investment adviser whose institutional clients include a defined benefit pension plan sponsored by Flexible Fabricators Plc (FF Plc), a long-established U.K.-based engineering conglomerate. The FF Plc defined benefit pension plan is not available to new joiners to the company, who are only eligible to participate in the company's defined contribution scheme. Harding is aware that the pension plan has seen a declining ratio of plan assets to plan liabilities, and she has decided to compare company, workforce, and pension plan data for FF Plc with similar information for an average company in the UK engineering industry. Her comparison is given in Exhibit 1.

Exhibit 1: FF Plc and average UK engineering company – data regarding the company, the workforce and the pension plan

	Company		Workforce		Pension Plan	
	Profitability Relative to Average	Debt Ratio Relative to Average	Average age (yrs)	Average years service	Ratio of assets to liabilities	Retired lives to active lives ratio, relative to average
FF Plc	Lower	Higher	45	22	0.86	Higher
Average company			40	15	1.02	

The pension plan is managed by a board of trustees whose duty under trust law is to act solely in the best financial interests of the beneficiaries, and the assets and liabilities of the pension plan are legally separate from FF Plc. The plan's portfolio is invested in U.K. government fixed-coupon bonds and U.K. equities, with dividends received by the portfolio being taxable. A recent extended period of uncertainty, with correspondingly weak equity markets, has resulted in poor returns. For actuarial purposes, the assumed annual long-term rate of return on plan assets is 6%, and the current discount rate applied to the plan liabilities is 5%.

The trustees have asked Harding to evaluate the pension plan's current investment policy statement. They are particularly concerned about the plan's risk tolerance and two of the plan's constraints: the liquidity requirement and the time horizon. The trustees have also asked Harding to assess the plan's actuarial assumptions.

Question #1 of 102

Question ID: 1611246

State whether the FF Plc pension plan has below average, average, or above average risk tolerance compared with the average engineering company pension plan. **Justify** your response with *three* reasons based on the specific circumstances of FF Plc and/or the FF Plc pension plan.

Question #2 of 102

Question ID: 1605984

State, for the FF Plc pension plan, relative to the average engineering company pension plan, whether the FF Plc pension plan's liquidity need is lower, similar, or higher. **Justify** your response with *two* reasons.

Question #3 of 102

Question ID: 1605985

State, for the FF Plc pension plan, relative to the average engineering company pension plan, whether the FF Plc pension plan's time horizon is shorter, similar, or longer. **Justify** your response with *two* reasons.

Question #4 of 102

Question ID: 1611247

Determine whether a change to 6% in the discount rate applied to the plan liabilities would cause the funded status of the FF Plc pension plan to deteriorate or improve, given that the assumed long-term rate of return on plan assets remains unchanged. **Justify** your response with specific reference to the FF Plc pension plan.

Overview for Questions #5-8 of 102

Question ID: 1605973

TOPIC: PRIVATE WEALTH MANAGEMENT

TOTAL POINT VALUE OF THIS QUESTION SET IS 12 POINTS

Ella and James Cleary are both 30 years old and have been married for three years.

Ella is employed as a nurse in the government-funded public health service industry. A very high demand for health care services and a long-term undersupply of nursing staff have been a feature of the public health service for many decades, and this situation is not expected to change. While this brings job stability, there are low prospects for large future pay raises and bonuses. James is an orthodontist who set up an independent practice two years ago as a joint venture with two other dental surgeons. The practice is based in a wealthy financial district of the city in which they live and is heavily dependent on the discretionary spending of financial market workers on cosmetic dental surgery. It has been very profitable over the past two years, but James has reinvested profits rather than taken income.

They meet with Remi Garrick, a financial advisor, to discuss their financial goals.

Garrick begins their meeting by questioning the couple about their current circumstances. He collates the following information.

Financial Assets and Liabilities

The Clearys have a combined savings of GBP 40,000 and combined accrued DB government pension plan benefits of GBP 3,000 (split equally). They have combined credit card debt of GBP 4,000 and combined student loan balances of GBP 33,000.

Income and Expenses

The net incomes of Ella and James are currently GBP 20,000 each. Annual living expenses are GBP 35,200, which are incurred equally by James and Ella. Both Ella and James have the intention of retiring when they are 65 years old.

Garrick identifies that the Clearys are rich in human capital, but they have limited financial assets. Actuarial mortality tables relevant for the Clearys show that the probability of survival to any given age is slightly lower for males than it is for females. Garrick notes that mortality rates are a key input to the estimation of human capital alongside other key inputs, such as expected growth in earnings and occupational income volatility.

Garrick recommends the Clearys mitigate their risk to human capital from premature death by purchasing life insurance. He assumes the following, upon the death of either spouse:

- Funeral expenses and legal fees would be GBP 10,000.
- An emergency fund of GBP 15,000 should be established to help the surviving spouse deal with unexpected costs.
- The life insurance payout should clear any debts of the couple.
- The living expenses of the surviving spouse would grow at 2% until death at age 90, discounted at 3% as an annuity due.
- The human capital of the surviving spouse would be GBP 700,000.

Question #5 of 102

Question ID: 1605974

Based on occupational income volatility, how is the value of Ella's human capital *most likely* to compare with James's human capital? (Note: Assume both their annual incomes are the same.)

A) Higher than James.
B) The same as James.
C) Lower than James.

Question #6 of 102

Question ID: 1605975

Justify your response to the previous answer with *one* reason.

Question #7 of 102

Question ID: 1605976

Identify *one* major source of earnings risk that the Clearys face in their current stage of life. For the source of earnings risk identified, **discuss** *one* appropriate method to manage the risk.

Question #8 of 102

Question ID: 1605977

What is the amount of life insurance needed by the Clearys under the needs analysis method?

Overview for Questions #9-12 of 102

Question ID: 1606012

TOPIC: ETHICAL AND PROFESSIONAL STANDARDS

TOTAL POINT VALUE OF THIS QUESTION SET IS 12 POINTS

Lewis Smithers, CFA, is the lead portfolio manager for Fundamental Investments Corp., a money manager serving individual investors. He has researched Pineda Canyon Development (PCD), an owner of mountainside real estate perfect for the development of ski resorts. However, he concludes that PCD lacks the cash to build the resorts.

Smithers has lunch with a friend, Judith Carson. Carson is managing partner of a land developer that owns thousands of acres of prime real estate. During the course of their conversation, Carson asked Smithers to invest in one of their limited partnerships, which is about to buy a land developer and its acreage near Sassy River.

Smithers talks with Liam O'Toole, his largest client. O'Toole is a knowledgeable real estate investor. When asked, O'Toole mentions that he saw in a newsletter that a large Arizona real estate developer is expected to soon sell property in the Sassy River Valley. The article only mentions the amount of acreage and rumored sale price, not the buyer and seller. O'Toole offers to make Smithers a participant in the deal. O'Toole also mentions he would like to use Smithers's condo for a week this summer.

Smithers suspects these are the same transaction, and that PCD is the seller. He calls Carson and asks if this is true; Carson will neither confirm nor deny. Later, Smithers sees Carson having dinner at a public restaurant with two PCD senior executives.