

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.

Explanation

The FF Plc plan has below-average risk tolerance.

Reasons (3 required):

- FF's pension plan is underfunded, with plan assets to plan liabilities at 0.86, so it lacks a cushion against periods of poor fund returns, whereas the average engineering company plan is overfunded, with an average of 1.02.
- FF's workforce is older on average, hence closer to retirement, meaning the FF plan's liability duration is shorter than for the average plan, giving it less time to recover from periods of poor performance.
- FF's workforce has a higher ratio of retired lives to active lives, so relatively more of the plan's liabilities require cash outflows now, reducing the plan's liability duration, and increasing the need for liquid assets.
- FF's workforce have higher years of service. This once again reduces the plan's liability duration and means the size of the associated pension payments is likely higher.
- FF is less profitable, thus, there is less certainty that the company can support the plan in the event that it suffers poor returns.
- FF has a higher debt ratio, which means the company's performance is likely to be more volatile than the industry average, giving less certainty that the company will be able to contribute to the plan when the company is struggling.

Candidate discussion: *Given the similarity between reasons 2-4, and between reasons 5-6, it would be a wise tactic for the answers you give to be reason 1, plus one from 2-4 and one from 5-6. Note that 'justify' requires more than just stating the relevant factor – it is necessary to indicate the mechanism by which the risk tolerance is affected.*

Scoring key: (4 points possible)

1 point for the correct risk tolerance, 1 point (up to a maximum of 3) for each valid reason that supports the choice.

(Module 22.2, LOS 22.e)

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.

Explanation

The FF Plc plan has a higher liquidity need.

Reasons (2 required):

- The older-than-average workforce will lead to higher cash outflows sooner.
- The higher-than-average ratio of retired lives to active lives implies higher cash outflows.
- The higher-than-average years of service implies higher cash outflows sooner.

Scoring key: (3 points possible)

1 point for the correct liquidity need, 1 point (up to a maximum of 2) for each valid reason that supports the choice.

(Module 22.2, LOS 22.e)

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.

Explanation

The FF Plc plan has a shorter time horizon.

Reasons (2 required):

- The older-than-average workforce will lead to more retirements occurring sooner.
- The higher-than-average ratio of retired lives to active lives shortens the time horizon due to the greater proportion of older retired workers.
- The higher-than-average years of service implies more retirements will occur sooner.

Scoring key: (3 points possible)

1 point for the correct length of time horizon, 1 point (up to a maximum of 2) for each valid reason that supports the choice.

(Module 22.2, LOS 22.c)

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.

Explanation

Increasing the discount rate from the current 5% to 6% will decrease the present value of the plan liabilities, but not change the value of plan assets. This will decrease the extent to which the plan is underfunded.

The advantage to the client is to see how high-priority goals are less likely to be endangered by market declines and, thus, help the client stick with the investment plan during stressful market periods.

Scoring key: (2 points possible)

1 point for determining that the funded status would improve, 1 point for a valid justification.

(Module 22.2, LOS 22.c)

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.