Actuarial Society of South Africa

EXAMINATION

24 October 2016

Subject F204 - Pensions and Other Benefits Specialist Applications

MARKING SCHEDULE

QUESTION 1

i. Explain the possible sources of difference between the results of the funding valuation and the accounting disclosure valuation done in terms of IAS19. [5]

- Assets in IAS 19 at fair value (market value). Discounted cashflow techniques may not be used
- Different dates for assessment? market conditions might be different etc
- Liabilities valued at high quality corporate bond rates, or if no deep market, government bond rates of similar duration as the liabilities. No credit risk premiums allowed. Expect liabilities to be higher under IAS19, depending on the actual investments of the fund, and the equity risk premium used in the funding valuation.
- No solvency reserve allowed for in IAS19 – results in a higher surplus
- Future surplus all belongs to the employer – IAS19 will not limit the asset the employer can recognise

ii. Discuss the points you would cover in your report. [32]

- Reasons to consider closure
  - Fund membership is decreasing
  - Ageing membership – increasing funding contribution rates
  - More volatility in the contribution rate as membership shrinks
  - impact on company balance sheet
  - Administration and other costs per member will increase as membership reduces

- Tax implications for members if increasing contributions exceed 27.5% of total remuneration allowed in terms of the TLAA
- Contribution and costs currently funded by the ESA but this may not last till the end of the life of the fund after which the employer will be expected to contribute
    - At a higher contribution rate
    - But for only a few members
- Surplus not available to the employer in cash – only available for contribution holiday or transfer to the DC fund
    - May access after the liquidation process but not guaranteed

- Conditions of employment
    - Members have previously had the option to convert – did not – implies they value the benefit
    - Employment contracts may promise benefits per the DB fund – cannot just be changed by the employer without negotiation
    - Cost implications
    - Members closer to retirement have less time to recover from taking additional risk – may need to consider separately
- Communication
    - Engagement with members and communication will be needed
    - Possibly provide advice for members
    - Would need a strategy to deal with complaints or employees who potentially refuse.

    - Cannot force the change.

- Process and timelines
    - Process would incur costs – actuaries, consultants, communication etc.
    - Liquidation process itself is costly and lengthy
    - Liquidator would replace the trustees in decision making
    - Would want to transfer as much of the assets and liabilities as possible out of the fund before appointing a liquidator
    - Adds to the timeframe
    - Process will require the following steps:
        - Engaging with the employer to establish exact goals of the process
        - Engaging with the fund
        - Trustees would need to approve any change to the fund/rules
            - and the fund actuary
        - Impact would need to be quantified
            - By fund actuary and possibly employer actuary
            - Impact on fund and employer
            - Employer and fund to agree basis of the change of member benefits
        - Fund rules to be amended if converting to DC
        - Conversion report by valuator requires FSB approval
        - May take a number of months
        - If not converting – would need to transfer members out via Section 14 – also possibly a 12 month process
        - Final liquidation of the fund could take up to 24 months

- Surplus availability
    - Surplus ultimately available to the employer will not necessarily be that disclosed in the IAS19 valuation
    - Benefit enhancements to members will eat into surplus
    - Existence of surplus will make the fund closure viable without too many additional costs to be funded from the employer
    - Members will expect to share in the surplus
    - Members who exited the fund in the 12 months prior to its closure might also need to be considered if there is a distribution of surplus
    - Would the employer still wish to convert/close the fund if the surplus is expected to cover all future costs of the fund?
- Options for member benefits going forward
    - Most likely option would be to convert member's benefits into DC benefits
    - With no enhancements
    - With enhancements – cost implications
    - With a DB underpin – cost implications
    - Existing fund is a provident fund though
    - Not tax efficient to transfer members from a pension arrangement into a provident one
    - Could convert to a DC pension fund – but would negate the cost savings of running a small fund

    - Would not simplify the employer's retirement arrangements
    - Although the DC fund will be cheaper and carry less risk than the DB one
    - What level of contributions would be paid under the DC?
    - If lower employer contribution, will that be compensated in member's pay

      – or via top-ups to transfer values?
    - DC contributions going forward could be to a provident fund – now tax deductible, but possibly only to 1 March 2018 – uncertain thereafter
- Transfer value benefits to provide to members
    - Members will expect to be no worse off under the new arrangement than under the previous
    - Depending on the option chosen, members will need to be compensated for any expected loss of benefits
    - Compensation may also be expected for the loss of security and the fact that members are now taking over investment and longevity risk in the new arrangement
- Balance sheet impact
    - The cost of any enhancements to members would be reflected as an expense in the company's financials in the year that they were paid or accrued – this would directly impact the company's financials
    - For example, a 10% enhancement would increase the pension expense by an estimated R28million, which would mean recognising a net loss through the

    Profit and Loss statement, after taking into account the expected income on the ‘normal’ fund operation
    - Employer may find this unacceptable
    - Enhancements may well exceed the 10%, but would be based on calculations by the fund’s valuator
- Impact on DC provident fund (any sensible comment)

iii. Suggest how the fund valuator’s report might differ from yours. [4]

- Report addressed to trustees with the aim to facilitate the trustees engaging with the employer’s suggestion and being able to make an informed decision
- Report expected to included more regarding compliance with requirements of the Pension Funds Act
- High level of focus on member benefit expectations
- Considerations around transfer values, what the fund can afford, members close to retirement, members who exited just prior to any change
- Compensation for benefits lost and risks assumed
- Include more detail on the trustees considerations and highlighting any risks to the trustees

- Communication aspects would focus on the fund’s responsibilities
- The fund valuator would exclude considerations around the employer’s balance sheet

- Recommendations regarding the possible use of the surplus

iv. The fund valuator is also employed by your actuarial firm. Discuss how you propose to manage the conflict of interest that might arise in this situation. [3]

- Disclose the potential for conflicts of interest to both parties
  - Including identifying potential areas where the conflict may be the most difficult to manage
  - Agreeing with both parties how these can be addressed
- Fund actuary and employer actuary to interact with respective clients independently
- Fund actuary and employer actuary to engage and agree any basis for calculations in principle, before the calculation of any numbers to avoid targeting particular results for clients
- Ensure no actuary is remunerated on a basis linked to any particular outcome
  - Eg all charging per hour
- Possibly include independent peer review actuary, particularly to agree the proposed transfer value basis, and the use of surplus recommendations – but this would add to the costs

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QUESTION 2

i) Discuss the key aspects that should be considered in devising an appropriate communication strategy in assisting members to better plan for their retirement. **[8]**

- Basis of effective member communication would be:
  - Developing appropriate communication strategy and policies
  - Which should ensuring good governance processes, systems and monitoring around the strategy
  - Timely accurate and comprehensive communication
  - Appropriate response handling around member queries and complaints
  - Communication in different languages may be needed – costly
- Appropriate regulation to consider with regards to communication and access to information:
  - PF 86 active
  - PF 90 pensioners and beneficiaries
  - PF130: good governance – communication strategy
- Objectives should be:
  - To improve knowledge, understanding and ultimately financial well-being
  - To ensure transparent, open and honest feedback and information is provided to members
  - To reduce misunderstanding, queries and complaints
- Communication Strategy and Policy should address:
  - Areas relating to the operation of the Fund

- Administration of the Fund
- Investments: both in terms of understanding and reporting
- Needs to be informative, transparent, fair and display accountability

- Communication strategy will set out the targeted deliverables:
  - Annual benefit statements
  - Projection statements
  - Online projection and education tools
  - Trustee reports
  - Newsletters
  - Member booklets
  - Communication of policies:
    - Investment policy statement
    - Pension increase policy
    - Communication Policy
- And the delivery mechanisms:
  - Hard copies
  - Electronic /soft copies
  - Sms
  - Online web access
  - Notice boards and posters
  - Ad-hoc meetings / workshops / Road shows/ member sessions

ii) Discuss use, and limitations, of benefit projection statements as an education tool within a fund's communication strategy. **[12]**

- Provides an illustration to assist members with financial planning for retirement.

- Risks that the statements provide some but not enough information and in some cases perhaps too much information if not combined with detailed member education

- It is important that the short comings are clearly noted;
- Valid only at effective date.
- Provides a guide to benefits, not a quote/guarantee.
- Investments will not necessarily perform in line with assumptions.
- Results provided on deterministic basis and no sensitivity analysis
- Fluctuations in investment closer to retirement cause substantial change in value

- Salary growth will not necessarily be in line with assumptions.
- Contributions rates may differ – risk benefits change,
- expense deduction from assets may change
- may deduct administration expenses from contributions rather than as % of assets

- Small changes in the assumptions adopted can lead to large variation in the results.

- May choose an annuity that is not in the prescribed form (e.g. pension increases, spouse s benefits).
- Cost of annuities will depend on level of increases and spouse s benefits chosen.

- Annuity rates change over time
- Cost will also depend on nominal and real interest rates at time of retirement and on mortality bases considered appropriate at that time.
- Expense allowance may change in the future.
- DC risk to member needs to be clearly communicated:
- Give clear statement/indication of risks (investment returns, inflation, mortality post retirement, expenses).
- Important for members to understand that cash and bonds also have risk.
- Provide figures on a range of investment assumptions (e.g. to show the impact of +/ change in these).
- Could illustrate different investment options
- Explanation why different asset classes can be expected to give different returns.

- Provide figures on a range of salary growth assumptions.
- Provide figures using a range of annuity options.
- Provide figures at an early retirement date.
- Could provide stochastic illustrations (funnel of doubt).
- Assumes nil AVCs and no changes in member and company contributions.

- Provide indication of the additional saving required to ascertain additional NRR levels
- A member might need to consider what additional saving he will need and he might need to seek independent advice.

iii) Discuss the various options that may be available to address these concerns [5]

- Investment strategy:
    - The Trustees can relook at their investment strategy to ensure an appropriate balance between long term performance and risk
    - Use of stochastic ALM to assist in identifying the optimal mix of assets for a given level of acceptable risk
    - Target higher yielding long terms investments for greater portion of assets;
    - Greater diversification of higher growth assets
- Consider their member investment choice portfolios or lifestage options
    - Allow for higher risk higher expected return portfolios as an option, with appropriate education
    - Consider carefully the lifestage transitions
    - Consider appropriateness of final stage portfolio relative to targeted annuity,

    - Possible options for members based on their intentions
- Review various costs
    - Allocation to death and disability relative to the retirement savings

    - Consider impact of administration fees included as % of assets versus per member fee or contribution deduction
- In consultation with Employer could consider:
    - Changes to the normal retirement age
    - Changes to contribution rates
    - Or allowance for additional contributions
    - Wider financial education (less debt = higher preservation?)
- Preservation
    - Targeted education of members with regards to preservation
    - Improve the access to preservation opportunities
    - Encourage preservation as part of the employee joining and leaving processes

iv) Discuss the appropriateness of the current death benefit to all members and set out some of the considerations with regards to agreeing an appropriate level of death benefits. [5]

The current strategy allows for a fixed multiple of salary together with the return of the member saving:

- This may be appropriate to a group of employees who have savings based on their entire working careers and who are within a few years of retirement
- This is unlikely to suit a young employee with a young family and only a few years of savings

- The expected cost of death benefits will increase by age and as such the current structure has significant cross subsidisation
- The Trustees may need to conduct some form of needs analysis
- An age related multiple may be more appropriate and using a fixed allocation of contributions may allow for less cross-subsidisation
- An analysis of the alternative arrangements across the industry may also be appropriate
- Could consider a flexible death benefit option allowing members to elect a level of cover that would be suitable
    - Need policies and processes to manage selection and other risks
- Balancing of costs / contributions
    - Retirement benefits versus other benefits
    - Current mortality experience
- Alternative arrangements:
    - Cell captives
    - Self insurance
    - Unapproved GLA scheme
- Further education and communication
    - Death benefits needs analysis tools or communication
    - Encouragement to seek financial advice
    - Offer of Fund employed financial advisor

QUESTION 3

i.) **Set out the regulator's requirements and conditions for valuation exemption application.** **[5]**

Conditions:

- All active members operate on DC principles
- Fund not in deficit
- Pension payments are either:
    - Secured through annuities purchased from a **registered** insurer, or
    - Fund provided living annuities, where the fund liability is always limited to what is available per member
    - Benefits due that are greater than the member's account are fully insured
    - Reserve accounts are provided per the rules
    - Contingency reserve accounts cannot have a negative balance
        - With the exception of the processing error reserve account
    - The fund must have been previously valuation exempt after the fund's surplus apportionment date
        - If not, the valuation subsequent to the surplus apportionment date must have been accepted by the registrar
    - Exemption will be valid for a period of 3 years
    - Must be renewed within 12 months after valuation date

ii.) Describe the possible advantages and disadvantages the trustees should be aware of in considering such an application. Suggest how the trustees might address the disadvantages. [7]

- Cheaper for the fund as no fees incurred for valuation
- Section 14 transfers are not required when members transfer between two valuation exempt funds, and these transfers can take place via a 'recognition of transfer' process.
    - Process of transfers also then more streamlined, faster and cheaper

- Regular valuations of funds will disclose possible errors made in the administration of the fund, including:
    - Mismatching of assets and liabilities
    - Errors in the calculations of fund liabilities, eg (any sensible egs)
        - Contributions not allocated or allocated inaccurately
        - Errors in expense allocations
    - Errors in the calculations of benefits paid
- Mitigated by the fund still requesting that regular valuations be done, although these would not need to be submitted to the FSB. Increased expense.

- Rule amendments will not need to be signed by an actuary (advantage), which could potentially result in rules being submitted to the financial services board which jeopardise the financial solvency of the fund (risk)
    - This will be partially mitigated by the process of submitting rule amendments to the FSB for approval – FSB might reject
    - The fund will not have an actuary appointed to do regular submissions for valuation exemption
        - Will need to possibly appoint someone temporarily
        - Or the fund may still wish to appoint an actuary to review rule amendments and apply for continued exemption etc.

iii.) **Describe the contingency reserves that a valuation exempt fund may decide to hold, indicating for each how you would decide on the appropriate level for such a reserve.** **[8]**

Data reserve

- The data reserve is normally established to hold a provision for differences between the administrator's records and reality – usually caused by a delay in the transfer of information.
    - Example, delayed submission of claims information or payroll change data (salary changes, new entrants exits etc.)
- The level of the reserve can be set using 'incurred but not reported' techniques, similar to those used in short-term insurance claims (eg run-off triangles) using the

fund’s own historical data to estimate the extent of the delays and hence the appropriate level of the reserve.

- Type of employer and complexity of payroll systems will influence the amount

- As will the quality of the administration

Expense reserve

- If the fund operates such that the employer pays specific (estimated) contributions towards risk premiums and expenses
- may be higher or lower than the actual costs
- The reserve can be built up over time:
    - with amounts being credited to the reserve being the premiums deducted from contributions in respect of expenses and risk benefits
    - and credited with the actual expense payments and payments towards risk benefits
    - would have to be insured risk premiums in the case of an exempt fund

Processing error reserve

- DC funds typically hold this type of reserve to deal with timing differences in the investment and disinvestment of members’ accounts
- Instructions to invest and disinvest moneys from the investment managers are not always actioned timeously by the administrators.

- Management boards will want the members to be put in the situation that they should have been in, if the instruction had been actioned when it should have been.

- This can give rise to profits and losses that are carried through to a processing error reserve
- Calculation could be done ‘technically’ from past experience
- Or the fund is permitted to hold a maximum of 2% of corresponding assets, so the fund has the discretion to hold up to this amount.
- Amount will also be influenced by the quality and efficiency of investment administration

iv.) Briefly describe two appropriate options that are available to the fund in terms of the draft regulations and list the advantages and disadvantages of each. [6]

Living annuities paid from the fund

- Accumulated benefit at retirement is invested on behalf of pensioner
- Monthly amounts are drawn from the lump sum
    - Restrictions on these provided in the draft regulations

Advantages and disadvantages for the fund:

- -ve will have a pensioner pool of assets to manage

- -ve will have to deal with pensioners benefit expectations regarding investment returns
- +ve maintain link with pensioners, which may be desirable
- +ve larger asset pool a positive for investment fees

- -ve risks to the fund if the pensioners 'run out' of their assets – ie. draw down too quickly

Life annuity from insurer

- Accumulated benefit transferred to an insurer to secure a pension
- Guaranteed for the life of the pensioner
- Options regarding annuities the fund can choose – guaranteed increases, with profit etc.
- With-profit – increases must relate to an independently verifiable source

Advantages and disadvantages

- +ve Pensions guaranteed for life – security ensured
- -ve Risks of insurer default
- -ve Fund liability ultimately – depending on if GN18 purchase
- -ve Choice of insurer risk sits with fund