EXAMINERS' REPORT

June 2017 examinations

Subject F204 - Pensions and Other Benefits Specialist Applications

QUESTION 1

i. Discuss the points you would make to Bob.

Suitable ratio

- Common practice is to target a NRR of 75% of pensionable salary
- May need to adjust this though for:
    - Total package may be significantly higher than pensionable salary. 75% NNR may therefore be inadequate.
    - Level of income. Lower paid employees will probably require a higher NRR than higher paid employees as the former have less discretionary spending on non-essentials

Bob's NRR

- Contributions of 15.0% of pensionable salary towards retirement provision, with reasonable investment performance, should result in a reasonable NRR over a working lifetime (40 years).
- Bob is 35 years old and has 30 years to go to retirement.
- Ideally Bob should have accumulated about 10 years of retirement savings already.
- Bob has 13 month's service in the new fund. His R100 000 fund credit is consistent with 13 monthly contributions (about 15% x R600 000 / 12 x 13 = R97 500 plus some adjustments for salary increase and investment returns).
- The main reason for the low NRR is that it appears that Bob did not transfer in any previous retirement fund benefits (if he did, then investment performance in the current fund was very poor - unlikely).
- Alternatively, Bob could have had a large salary increase on changing jobs.

ii. Allowing for this additional information, estimate the revised net replacement ratio at age 65 for Bob. State any assumptions that you make.

Recreate original calculation

- Assume salary increases are continuous
- Monthly contribution = R 7 500 (15% of R600 000 / 12)
- Month interest (i) = 1.10^(1/12)-1 = 0.797414%
- Monthly salary increase rate (s) = 1.07^(1/12)-1 = 0.565415%
- FV Contributions = 7 500 x (1+s)^360 x S360 at (1+i)/(1+s)-1 = 0.230695%

  = 7 500 x 7.61225398 x 560.16686

  = 31 980 993
- FV Existing Share = 100 000 x (1+i)^360 = 1 744 940
- Total Future Share = 33 725 933
- Future salary = R600 000 x (1+s)^360 = 4 567 353
- Annuity used at age 65: 0.5= 33 725 933/(Annuity x 4 567 353)

  Annuity = 14.768

(Can skip the above step here but needed later on – give credit if annuity calculated somewhere)

Add preservation fund

- Assume the preservation fund will earn same long term investment return as pension fund
- Impact of external savings: R200 000 x (1+i)^360 / 14.768 /4 567 353 = 5.2%
- Revised NRR = 55.2%

iii. Estimate the impact of using a single life annuity at retirement, stating any assumptions that you make. Comment of Bob's suggestion.

Revised calculations

- Joint life annuity at retirement = 14.768 (from ii)
- Assume the pension fund uses a 4 year age difference for males vs females
- Estimate value of 75% spouse revision based on PMA92C20 and PFA92C20 at 4%:
    - Annuity for 65 year old male: 13.666
    - Annuity for 61 year old female: 16.311
    - Joint annuity for M65,F61: 12.560
    - So 100% female reversion = 16.311-12.560 = 3.751
    - Impact of spouse revision: (13.666 +75% x 3.751)/13.666 = 1.206

{Other approaches possible}

- Assume similar impact applies in the case of the pension fund's annuity basis
- Estimated single life annuity = 14.768/1.206 = 12.247
- NRR on single life = 14.768/12.247 x 55.2% = 66.6%

Comment

- Bob is correct, if his wife will also receive retirement benefits, there is an element of double counting
- Check the rules of the pension fund Bob belongs to. Do the rules allow choice of spouse's pension?
- Need to look at his wife's projected benefits on a similar basis to those of Bob. If her expected pension is roughly equivalent to Bob's (or 75% of Bob's) then can remove the spouse's pension.
- If wife's projected pension substantially lower, then prudent for Bob to retain a spouse's pension (possibly lower than 75%).
- Consider if wife will belong to the retirement fund in future (maternity leave etc.). If not then better to provide for a spouse's pension.
- Bob and his wife should probably go see a financial advisor who can consider their joint financial position, including all their other assets / liabilities.

iv. **Based on your calculations to iii) above, estimate how much extra Bob would need to contribute to the pension fund each month to obtain a 75% net replacement ratio. State any further assumptions that you make.**

- Assume that AVC's attract no further fees in the pension fund.
- Addition capital required at 65: (75% - 66.6%) x 4 567 353 x 12.247

  = 4 698 655

- Additional contribution rate required: 4 698 655 / 7.61225398 / 560.16686 /50 000

  = 2.2% of salaries

v. **Estimate how the amount in iv) might need to be revised if Bob intends to use the retirement annuity to obtain the 75% net replacement ratio. State any assumptions that you make**

- The RA policy will charge higher fees compared to making AVC's to the pension fund.
- There will often be a contribution based fee to cover commission / administration (say 5% of contributions) or alternatively these expenses will be bundled into the investment fee.
- In addition, retail investment manager fees will apply which will be higher than the investment fees incurred by retirement funds. An additional 0.5% to 1.0% per annum in investment fees is likely. Say 0.5% per annum.
- Additional contribution rate required:

  4 698 655/ (1-5%) / 7.61225398 / S360 @i' /50 000

  Where i' = ((1+0.10-0.05)/(1.07))^(1/12)-1 = 0.1926496%

  Contribution rate = 2.5% (or R1 250 per month increasing with salary increases).

vi. What would your advice be to Bob with regard to making additional savings for retirement?

- Bob needs to see a qualified financial advisor. You can give him some numbers and ideas but not in depth financial planning advice.
- RA is more costly.
- And RA cannot ordinarily be accessed before age 55.
- RA will also require more administration on Bob's part as he will need to adjust the Rand amount of monthly contribution to keep pace with 2.5% of salary.
- RA might offer better flexibility with once-off contributions allowed (but pension fund might also allow this).
- Unless the RA offers some compelling underlying investment, or Bob is unhappy with the pension fund's investments, the pension fund would be the better option.
- The total retirement funding contributions in respect of Bob will be well below the 27.5% of taxable income / R350 000 per annum limit imposed by SARS. The entire contribution will be tax deductible.
- The additional contributions of 2.5% will also amount to less than R33 000 per annum. Bob could therefore also consider a tax free savings account which offers greater flexibility than either the RA or pension fund.
- But can be accessed before NRA.
- And might not have the same long term investment strategy as the Fund.

QUESTION 2

i. Describe in detail the previous and current treatment of divorce benefits within pension funds in South Africa?

- Previously, in South Africa, the divorced party was entitled to a portion of the benefit that would have been payable
- specified in the divorce order
- if the member had resigned from the fund at the date of divorce.
- The entitlement was noted in the benefits of the fund and was paid whenever a benefit became payable to the member,
- without interest.
- Tax was applied on the total benefit and the member paid the tax on both portions.
- The Pension Funds Act was amended during 2007 to allow for a clean break between divorced spouses.
- For divorce orders dated after 13 September 2007, the immediate payment of an amount assigned to the non-member spouse is allowed.
- The benefit is also now taxed in the hands of the non-member spouse.
- The member's accumulated retirement benefit must be reduced at the date of clean break to take account of the divorce settlement.

ii. Set out how the member's pension benefit can be adjusted to take account of the divorce settlement?

- There are several methods to allow for this.
- Reduce pensionable service by the number of years that equates the value of the reduction in actuarial reserve value to the amount of the divorce settlement. This method is cost neutral to the fund. Care must be taken where funds have split accrual arrangements.
- A similar method is to calculate the reduction in accrual that equates the value of the reduction in actuarial reserve value to the amount of the divorce settlement (as opposed to the number of years of pensionable service). This reduction is then applied at retirement. This method is also cost neutral and can easily be applied in funds with split accrual.
- The amount of the divorce settlement can be accumulated with interest to the date of exit and deducted from the member's benefit. Care must be taken at retirement to convert the accumulated amount of the divorce settlement to a reduction in pension.
- In a DC fund, naturally the simplest method is to reduce the member's accumulated account by the amount paid to the spouse at the date of settlement.
- The treatment of additional voluntary contributions to the fund to "purchase" additional pension can be used (likely to be one of the methods mentioned above), i.e. the divorce settlement is a negative "contribution". This allows the member to offset the impact of the divorce settlement through additional contributions.

iii. You have been asked by the legal team for Mr Salz to set out why the divorce benefit should not be at the level claimed and provide a more reasonable range in which the benefit should fall.

- The spouse appears to have simply claimed 50% of the total target benefit at the date of divorce;
- The scheme rules provide that this is the targeted benefit on completion of the total potential service and would be the lump sum at the date of retirement;
- There was still 15 years to retirement and as such the time value of money had not been taken into account in her calculations
- At the date of divorce the accrued service was only 25 of 40 years or 62.5% and a such the member had only accrued 62.5% of the benefit
- In addition, it could be argued that only 18 years of the 25 years accrued service were attributable to the marriage and as such the divorce benefit could be based on that portion of the benefit only, 72
- Finally, in terms of the Act the divorce benefit would be based on the benefit on withdrawal which in this case must be the accrued discounted benefit
- Reasonable range:
- The member had accrued service of 25 years at the date of divorce
- He had therefore accrued 25 / 40 of the targeted benefit of R315000
- With a discount rate of 2% p.a. and 15 years to NRA
- The discounted minimum benefit would be equal to (25/40)*R315000*(1+2%)^-15
- Which would be equal to R146281.
- This would have been Mr Salz's withdrawal benefit at the date of divorce and therefore at the top end of the range of options Mrs Salz could claim 50% of this accrued benefit at R73140.
- It could also be argued that of the 25 years accrued service only 18 of those relate to the period of marriage. Therefore 18/25 or 72% of the accrued benefits accrued over the marriage period
- The discounted minimum benefit would be equal to (18/40)*R315000*(1+2%)^-15
- Which would be equal to R105322.
- This would have been Mr Salz's withdrawal benefit that accrued during the marriage and therefore at the lower end of the range of options. Mrs Salz could claim 50% of this accrued benefit at R52661

iv. Calculate the retirement benefit due to Mr Salz?

- At the date of divorce the discounted accrued benefit was R146281
- If a payment of R60 000 was agreed as part of the settlement it would imply that the members benefit would need to be adjusted to take account of this payment
- The adjustment in the case of a defined benefit would need to be in terms of an adjustment to service;
- The divorce benefit as a percentage of the accrued benefit was R60 000 / R146 281
- The members benefit needed to be reduced by 41% at the date of divorce or by 10.25 years
- The 10.25 years would need to be flagged on the system until the member's exit
- At exit:
- Mr Salz is 50 years plus 13 years equal 63yrs.
- He is retiring early and is entitled to the accrued target benefit at retirement date
- Accrued service would be equal to 63 – 25 = 38 years
- Adjusted for the divorce settlement would imply accrued service of 38 – 10.25 = 27.75years
- The target benefit is R850 000 at the date of retirement and as such the accrued target benefit would be equal to 27.75 / 40 x R850 000
- =R589687.50.

QUESTION 3

i. Explain the South African regulatory and tax environment within which retirement, death, disability and leave benefits would be offered, setting out any limitations, maximums or minimums, as applicable, and outlining the structures through which these benefits are typically offered.

- Currently no comprehensive state sponsored retirement savings system
- Retirement savings take place predominantly through employer sponsored retirement funds
- Move away from DB to DC
- Most newly established funds would be DC
- Employers and employees would typically contribute
- Most savings done through compulsory retirement funds of the employer
- Individual retirement annuity options exist to supplement or as an alternative to employer sponsored
- State Old Age Grant the only provision made by the state – provides a safety net for those meeting the means test requirements
- Retirement funds could be pension or provident
- Provident preferred by most – more control, less paternalism over how savings are accessed
- Unionised workforce – unions push for provident, no preservation, lower retirement savings in places
- Pension and Provident Funds fall under the Pension Funds Act 1956
- Oversight currently provided by the Financial Services Board
- But Twin Peaks model replaces the FSB with two bodies – the Financial Sector Conduct Authority and the Prudential Authority
- Funds receive tax approval through the Income Tax Act
- The Income Tax act sets out conditions for approval of a pension fund as follows:
- Fund rules must specify recurrent contributions at specified scales.
- Membership must be a condition of employment for all or a specified class of employees (however, not a trivial or artificial class).
- When a fund is established, current employees must be given the option to join within
- 12 months.
- Not more than one third of the annuity may be commuted for cash.
- Management of the fund must preclude the employer from control of the fund or the fund's assets, and from deriving any monetary advantage.
- SARS must be notified of all changes to the rules.
- The rules of the fund must be complied with.
- The definition of a provident fund is similar except for the definition of retirement benefit,
- which may be taken as a lump sum.

- For pension fund members tax deductibility of member contributions changed in 2016 from 7.5% of pensionable earnings, to 27.5% of the greater of their taxable income or the total
- remuneration received from their employer.
- This is subject to a yearly maximum of 350 000.
- The definition of earnings has been extended to include passive income from 1 March 2017
- A lifetime exemption of R500 000 applies to lump sum retirement benefits. On retirement, the first R500 000 (the lifetime exemption) is tax-free, the next R200 000 is taxed at 18%, the next R250 000 at 27%, and the balance (i.e. the benefit in excess of R1 050 000) is taxed at 36%.
- Withdrawal benefits previously taken are included in the R500 000 lifetime exemption. The tax-free amount is therefore reduced by any previous withdrawal amounts taken.
- On resignation, the first R25 000 (which counts towards the lifetime exemption amount) is tax-exempt and the next R635 000 is taxed at 18%, the next R330 000 at 27% and the balance at 36%.
- The tax position of a provident fund is exactly the same as that for a pension fund, except that any contributions not allowed for tax are added to the tax-free lump sum when a benefit becomes payable.
- Furthermore, any retirement from a provident fund before the age of 55 is taxed as a resignation benefit.
- Investment income of retirement funds, including capital gains tax and dividends, is exempt from tax.
- It is permitted for contribution structures to be fixed, or for members to elect their level of contributions
- Employees can take cash on resignation
- But subject to tax structure above
- Option to provide the annuities through the fund
- Either guaranteed or living
- Or annuities (guaranteed or living) can be purchased from a registered insurer
- Preservation of benefits on resignation (withdrawal) is possible through registered pension and provident preservation benefits
- Or can leave as paid up in the fund
- Retirement benefits would be provided through the fund and it is a separate legal entity
- Management of the fund rests with a Board of Trustees
- Not in control of the employer – creditor remote
- Trustees have fiduciary responsibilities as set out in the Pension Funds Act
- Assets of the fund are owned by the fund
- Funds invested in a range of asset classes
- Limits exist as to how much to invest in each asset class
- Via regulation 28
- Example – limit of 75% in equities, 25% offshore, 25% in listed property,
- Members of funds often given option to elect their own investment strategies

- Usually done via portfolios selected by the trustees that the member chooses between
- Pension Funds Act sets out reporting requirements for funds
- And timelines to submit these
- Examples include Annual Financial Statements, Actuarial valuations (where not valuation exempt)
- Penalties imposed if funds do not comply
- Benefits provided by the fund usually payable on resignation, death, retirement (and disability – although PHI not approved)
- Death benefits can be a lump sum or offered via spouse's and children's pensions
- Can be approved – with contributions and benefits paid from the retirement fund
- Subject to the same tax regime on contributions and benefits as the retirement benefits
- Can also be unapproved – no tax deductibility on contributions but benefits then not subject to tax
- Trustees are responsible for the distribution of death benefits via Section 37C of the ITA if approved
- If unapproved, contributions will be paid from the employer, not from the fund
- Unapproved will usually be done via an insurer
- Approved can be insured or 'self-insured' by the fund
- Benefits usually defined in terms of salary (pensionable or full)
- Disability benefits can be approved or unapproved
- Approved usually lump sum – linked to the death benefit
- Unapproved often income replacement
- Benefit levels linked to salary
- PHI – contributions not tax deductible but benefits tax free
- Benefit limits in place to prevent anti-selection
- Usually 75% of salary as maximum benefit
- Additional employer waiver benefit to facilitate the contribution to retirement fund
- Death and disability benefits usually compulsory
- Particularly if insured
- Impacts pricing and underwriting requirements
- Flexibility of risk benefits is also permitted
- Structure could facilitate younger members selecting lower levels of benefits with higher levels of benefits being chosen at older ages
- PHI benefits may be limited so that employees are not incentivised to claim a disability benefit
- Leave is governed under the Basic Conditions of Employment Act
- Statutory minimum of 15 work days must be provided (or 1 day/hour per 17 day/hours)
- 10 working days must be taken consecutively
- Employer may provide more than the statutory minimum

- Employees may be allowed to purchase more leave or to commute leave into cash – subject to the statutory minimum.

ii. Explain the two options to facilitate the provision of housing loans through a retirement fund structure?

- Either directly through the fund
- Fund itself lends the member money
- Technically the member borrows his/her own retirement benefit from the fund
- Limited to the member's benefit in the fund less tax
- Fund would need to comply with Consumer Protection regulations and be a registered credit provider
- Administrator reduces members benefit in the fund, and will not pay a benefit that exceeds the member's original retirement benefit less the amount of the outstanding loan
- The fund charges the member interest on the loan
- The employer often facilitates the repayment of the loan via payroll deductions which are then paid over to the fund
- Other option is the loan is made by a bank
- The fund attempts to negotiate favourable interest rates
- The member's retirement benefit is used as collateral against the loan
- The amount of collateral is limited to the member's benefit in the retirement fund less tax
- Loan repayments are made to the bank
- Repayments can be facilitated through the employer's payroll
- On exit from the retirement fund, the outstanding loan is settled with the bank and the balance of the member's benefit is then the exit benefit

iii. Highlight the prevailing socio economic factors in South Africa and how these may affect the allocations to benefit types that employees might choose.

- High levels of unemployment in SA
- An employed person's income therefore typically required to support a number of people
- Likely to be more so in the semi-skilled / unskilled work environments
- Long-term savings therefore seem less important than immediate needs
- Similarly for insurances – death/disability benefits
- Therefore employees likely to value their cash components highly
- Make elections around levels of other benefits to maximise this
- Younger employees may not value retirement benefits
- Or want high levels of death or disability benefits
- Culture of showing respect to the deceased
- Therefore funeral benefits likely to be highly valued across most staff
- Nature of retail staff members is possibly a younger profile – higher turnover possibly
- Makes retirement fund seem less relevant or appealing
- Housing benefits likely to be valued
- Gym memberships unlikely to be valued by all except perhaps the most senior staff
- Older employees may also value their death benefits more highly than retirement
- Many staff may choose minimum amounts of leave to maximise take home pay
- Savings levels in South Africa poor
- Also suggests employees would choose lower levels of retirement contributions
- Alternatively employees are saving through alternative savings structures eg stokvels
- Would prefer to opt out of employer arrangements

iv. Describe the benefits and risks of a flexible remuneration structure of this nature for employees and U-Save.

- Staff may value the benefits
- Decrease staff turnover if employees happier
- Staff in control of their benefits
- Less paternalism – trusted to know what's best for themselves
- Each employee's needs are different and they have the option to structure their remuneration to suit their needs
- Employees may engage more with their benefits
- Standardisation across the employer – all employees worldwide have the same benefit structures
- Employees will be able to see the value of the time given in leave, which is masked in other remuneration structures
- Employees may feel like they only pay for what they want to consume
- Employees make poor decisions
- For short-term benefits
- Long-term detriment
- May not understand all the options
- Staff do not have enough to retire on
- Under pressure to keep working after NRA – when possibly not productive or well
- Or retire with insufficient benefits and reputation or brand of the company may suffer
- May look to the company for recourse
- Insufficient death benefits – beneficiaries may look to the employer for assistance
- Added complexity of the system
- From an HR system and service provider perspective
- Costs of flexibility are higher
- If mistakes or poor decisions are made these may only be discovered when too late to change/fix
- Makes it difficult to compare with other employers on fixed or very different remuneration structures
- Errors may occur in the administration
- Once an employee is used to living on a certain cash component, may be difficult to change it later – less flexible in reality
- Risk of anti-selection – employees will know more about their state of health than the employer or insurer
- May attract employees who join to take advantage of particular aspects of the structure
- Example high death benefits
- Can be very complicated – if employees can choose what benefits, and then within those benefits there are more options (eg investment and/or contribution choices) – can be onerous and too many decisions)

- Including leave in the total remuneration number inflates it, and increases the complexity around comparison to other employers
- Depending on where else the client is based, remuneration structures that work in one country may not automatically work in another
- Lower paid employees may struggle to afford meaningful benefits in each category
- May lead to dissatisfaction
- Cost effectiveness of group arrangements is compromised if not enough take up to benefit from economies of scale in particular benefits