Actuarial Society of South Africa

EXAMINATION

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Subject F205 - Investment Specialist Applications

EXAMINERS' REPORT

The standard of scripts for this subject continues to be disappointing overall. The few competent answers are outweighed by numerous scripts that reveal a weak grasp of the subject matter and an inability to apply it to the type of investment problems that are regularly encountered by investment practitioners.

Although the paper included topics not previously examined, candidates must remember that they still require analysis using the same fundamentals of economics, portfolio management, investor requirements, etc. that underpin more familiar subjects. The ability to bring these principles to bear on unfamiliar problems is primarily what is assessed in this subject.

It is evident that some candidates do not work in an investments environment. This hampers their ability to recognise the most relevant aspects of the problems presented as well as their ability to express their ideas fluently using the usual language of the investments world.

Question 1

This question was surprisingly poorly answered. A basic understanding of the rudimentary market statistics mentioned should have enabled any candidate to produce at least a passable discussion. Yet very few managed even that and most failed to capitalise on the easy marks available.

a)

- P/E is often used as a crude measure of market valuation – the higher the P/E the more expensive the market and v.v.
- Historical evidence shows that P/E's tend to vary within a limited range i.e. there is evidence of mean reversion
- That would suggest that variation from the historic mean is a reasonable indicator of over/under valuation
    - And so one might choose to act on it – at least on evidence of extreme variations

- The published P/E ratio is based on historic earnings and current prices
    - But markets are forward looking so current prices incorporate investors' future expectations of earnings
- In order to better judge the market valuation one would need to project earnings forward
    - This helps, for example, to distinguish a temporary drop/rise in earnings from a declining or rising trend
    - But it introduces an element of subjectivity into the valuation and the risk that the market view proves incorrect
    - The source should be neutral (e.g. a consensus forecast)
        - If the earnings estimate is provided by the asset manager of the portfolios, it will be mirrored in their tactical asset allocation and obscure any risk assessment

- The "average" level of P/E can change over time
    - And often after a long period of fluctuation around one value there appears to be a quantum shift to a different central value
- This could be caused by fundamental changes in the economy
    - For example, a shift in inflation or economic growth…
    - … or a declining trend in interest rates which would justify higher P/E's purely on the basis of discounting future cash flows at lower rates
- Trends - especially rising trends – in P/E's can last for 5 years or more
    - ... which could result in calling the market overpriced long before it suffers any correction with consequent under declaration of bonuses
- But extreme levels (especially very low levels) have been reliable indictors of valuation levels

- SWIX is a better proxy for institutional equity portfolios than the ALSI
    - Because it eliminates some of the biggest overweights
    - And excludes foreign holdings
- But it still has heavy concentration in some shares
    - And so does not realistically represent a typical institutional portfolio
- Because the SWIX P/E is a composite of all its constituents weighted by market cap

    - This may not reflect the actual equity portfolio and so give a false indication of the level of valuation
    - Different sectors and individual stocks have different drivers of earnings and/or of valuation

b)

- The difference between nominal and real bond yields should indicate inflation expectations
    - So the fluctuations between that difference between and actual inflation might be expected to indicate over/under valuation of bonds

Theoretical problems

- But markets are forward looking and the inflation rate that is assumed in the nominal bond yields is the expected inflation rate over the life of the bonds
    - And current inflation (historical)rates may not be a good proxy for that

Practical problems

- Real yields are usually derived from the yields on inflation linked bonds
    - But these have only been offered comparatively recently so there is limited history from which to derive long-term norms or the range of deviations that should be expected
- ILB's have been very illiquid in the past so their yields incorporate a liquidity premium which has varied over time (and generally been declining)
    - This will distort the predictive power of the suggested heuristic over time
- Although there is always an element of arbitrage between nominal and real bonds (based on individual investors' outlook for inflation), specific market dynamics can influence yields differently in different markets
    - For example, long-term real yields have declined from about 3.5% to almost 1.5% over the past 3 years – but this was driven by demand for real bonds as a matching instrument for certain liabilities (in addition to improving liquidity)
    - Likewise, nominal bond yields are often significantly influenced by the flow of funds from foreign investors seeking yield
    - ... and these flows are very volatile and can move in either direction based on investors' assessment of global market risks at any time

c)

- DY can sometimes be a crude indicator of equity valuation levels, however...
- The same problem of historic measures of dividends vs. forward looking market valuations pertains
- The DY on listed property has shown a very strong downward trend over most of the past decade
    - ...partly, but not entirely, driven by strongly declining interest rates
- Consequently a reading taken at most times would have indicated that listed property was expensive
- ... yet it continued to perform well in most subsequent periods (2008 excepted)
- The sector has grown and changed considerably over the past decade so drawing inferences from past data is dangerous
- So the metric does not seem useful
    - ... certainly not without taking a view on interest rate trends at the same time

- The usefulness will be limited to listed property; if the funds have direct property investments it will be a very poor indicator of value because listed property as an investment can behave quite differently from direct property because listed property is highly influenced by
    - ... equity market beta effects
    - ... short-term interest rates – as many individual investors use it as an income stream
    - … the levels of leverage used within the sector
    - ... revaluations that are often exaggerated for listed property and dampened for unlisted property
- It is quite possible to have contrary views on the valuation levels of the two classes

Question 2 a)

This part of the question was adequately answered in the main. However, candidates failed to address the topic in any great breadth and many did not demonstrate much understanding of the practical portfolio management issues involved.

- The scale of the funds under management would present some unique challenges
    - Buying and selling stocks at such large scale has the potential to distort market prices
    - Liquidity would also be a major issue when attempting to realise even normally liquid investments so a buy-and-hold strategy is to be expected
    - The universe of potential investments would be limited by the large scale of funds
        - Small cap equity or smaller bond issues may not be possible
    - It would also be difficult to exceed the returns of the general market
    - They could also potentially undermine the price discovery mechanism of the market – particularly if they hold large proportions of the free-float of a company and only buy and sell in large batches.
    - Alternative investments such as private equity would need to be sought to alleviate the investment limitations in mainstream markets
    - Distributing active management mandates is problematic
        - Either the mandates would be so large as to be unmanageable
        - Or so many that the fund ends up with an aggregate similar to the market as a whole
        - While still paying active management fees

- Public good requirement
    - Given that it is a public institution, investments that promote the public good and are socially responsible will be even more important than for a private-sector institution
        - E.g. job creating industries (high employment multipliers) are likely to be favoured
            - Such as infrastructure, service industries, agriculture and labour intensive industrial industries
            - As would capital investments that promote jobs

    - The PIC would be expected to be a leader in promoting BEE and ESG when formulating its strategies and choosing investments

    - The PIC is also in a key position to promote good governance in the private sector
        - By playing a shareholder activist role, it could demand clear and transparent reporting from companies. While this is in its best interests as an investor, it would have the secondary effect of improving standards of the market as a whole.

    - Similarly, it should play a role in demanding strong governance in the private sector, and ensuring that effective controls are implemented in companies.
    - From Government's perspective, it could promote tax compliance and play a role in preventing companies from pursuing corrupt practices in their dealings with governments (tenders etc)

- The scale of the PIC also positions it well to fund public infrastructure spending both at national and local levels
    - This represents another source of funds to government and drives down the cost and variability of borrowing for infrastructure spend

- To the extent that they sacrifice returns (for a given level of risk) to pursue a particular agenda (e.g. labour intensive industries, funding of infrastructure development) they run the risk of causing distorted capital allocation in the economy – and therefore costing long term growth and ultimately harming the economy.
    - For example – if the efficient decision is to invest in a capital intensive industry over a labour intensive industry, it will result in a larger economic growth and therefore more jobs in future (e.g. what would have happened if they had wanted to protect the jobs of the drivers of horse drawn carriages…)

- Preventing exploitation and rent-seeking activities
    - Locally, ensure compliance with labour practices and either put pressure on or disinvest from local companies that do not comply with labour laws
    - When making international investment decisions labour practices of the country and company should be considered
    - Also avoid monopolistic companies in different jurisdictions that abuse their position

- Other second order effects to consider:
    - The effect on public health of investment targets
    - The development of local industrial capacity – particularly via private equity
    - Considering ecological issues such as renewable vs. non-renewable energy sources.
    - Morally abhorrent products – particularly where they may have negative public effects (such as cigarettes) would be discouraged.

- The PIC can promote the development of investment markets where these are insufficiently mature for example by...
    - Providing seed capital to emerging asset managers, for example
    - Or seeding new venture capital or private equity funds

Question 2 b)

This part of this question was very poorly answered for the most part. Although the topic is unusual, conflicts of interest are ubiquitous in professional life and actuaries must be able to recognise them and understand their consequences.

A lack of business knowledge is often evident in candidates' responses and topics such as this require the ability to understand business risks and dynamics. It might help candidates to tackle questions like this by mentally viewing the problem from the position of the CEO and imagining the issues that she would encounter regarding the particular topic.

Political interference

- While promoting the public good and receiving a mandate from government is important, the PIC should be careful about letting political interference hamper investment decisions
- In following government's mandate, it should ensure that this promotes the broader public good and not narrow political agendas
- This may require a critique of government's broader mandate
- They also run the risk of mismatching the liabilities of their clients (GEPF etc).
    - For example in the case of the SANRAL funding – which is at risk now - they took up 80% of the SANRAL debt and their exposure is massive
        - Did political mandate / pressure mean they took on more credit risk than they should have?

- A lot of recent shareholder activism by the PIC has been regarding political issues such as BEE etc.
    - This means that other key issues such as corporate governance activism may be lacking
- Another example – would they vote for large job losses if it was the best decision from an investment perspective?
- Pressure to support certain suppliers, fund managers and companies which are politically connected
- Also, potential for populist mandates from government that may have adverse secondary economic effects, and detrimental returns
- They and Treasury see themselves as policy institutions (like the Reserve Bank) - according to various speeches and publications - which could potentially conflict with their mandate to manage the GEPF and other funds in line with members' needs

Governance at scale

- Governance would be particularly important given the scale and the fact that it is a public institution
    - PIC would need to set and manage mandates of private institutions
    - This would require a strong capability for evaluating, selecting and managing relationships with these institutions (something like a multi-manager)
    - Strong governance systems would also need to be setup to manage custodianship – and the sheer scale of assets may introduce complexity

- Governance relating to external managers – particularly emergent managers
    - Operational risk – need to ensure that managers have the right systems and controls in place

  - Investment risk – risk with regard to investment decision processes and track record, expertise and integrity of the managers.
  - Viability and sustainability of the investment manager
  - PIC will want to encourage emergent asset managements for which these risks may be heightened

- Alienation is a particular challenge given the potential number of layers between the PIC and the end investment
  - As an example, the GEPF mandates the PIC, which mandates a private institution, which in turn purchases an ETF which holds the actual stock

- The PIC's ability to invest large sums and to grant lucrative asset management mandates makes it very influential - but it needs to avoid adopting a stance that is seen as bullying market participants

Question 2 c)

This straightforward question was well answered by many candidates. The poorer attempts resulted from candidates (inexplicably) not commenting on one or more of the five options listed in the question.

Merits are focussed around the following issues:

The requirement to build up internal governance and capacity in the PIC

- Direct investments would mean a greater capacity to be involved at board level of these companies...
  - ... as well as the ability to assess and select investments would need to be built in the PIC
- On the other hand, this may mean greater level of return – as returns are not diluted or fees paid to external managers.
- However, the speed with which this could be developed would be limited, and focusing on building an internal mechanism would limit positive externalities (i.e. building up an industry focused on this kind of investment)
- Partnership with other institutions would mean the benefit of their expertise and access to opportunities, as well as ensure a capability is built up outside the PIC (even though this would likely remain in the public sector)
- Fund of funds approach would require the lowest internal capacity – essentially it would be outsourced
  - however a capacity would need to be built to manage these managers (though the existing PIC capacity could be leveraged for this)
  - and it is doubtful that sufficient scale exists for the needs of the PIC
  - The costs may be higher for this option as there is no economy of scale and each fund will charge management fees and high performance fees as is usual in private equity

Return levels, access to opportunities and diversification

- Direct and co-investments are likely to yield the highest return, though with limited supply of opportunities.
- Co-investments are likely to yield a greater degree of access to opportunities.
- A fund of funds approach would enable the PIC to gain access to the existing sector

- though it would need to reduce its return expectations somewhat (unless it believes that fund managers have an edge over what it could achieve internally in selecting and managing these investments)
- A fund of funds approach would also mean easier diversification.

Positive externalities

- Building a meaningful national private equity investment – outside of the PIC – would promote fund development management and co-Investments with other institutions.
- Fund manager development could also directly aid in policies such as job creation and BBEEE
- This is not without its risks however, as emerging fund managers would be risky to deal with and could potentially take a lot more capacity from the PIC to set up and to monitor and manage risks going forward – versus existing fund managers.

Question 3 a)

This part of the question elicited weak answers from most candidates. Many failed to grasp that a medical aid fund has overwhelmingly short-term liabilities, most of which will be met from its continuing premium income.

Some equated the younger membership with longer than average liabilities evidently unaware that regardless of age most claims are paid within a very short time and that premiums and benefits can be adjusted annually.

Another common misunderstanding was that the younger age group of the fund in question automatically made it more profitable than an average fund. This assumption is unjustified as no information was given regarding benefits and expenses relative to premiums.

Those candidates who did understand the nature of the liability more fully often failed to cover the topic in the depth required to earn good marks.

Regulatory requirement is part of the economic liability

- From a regulatory perspective the scheme does not have significant excess
- Given that the scheme has no other backing for a shortfall than the members, it is critical that the investment strategy be set to match the regulatory position
- This will necessitate a more conservative strategy
- There is however, the property fund shareholding which would act as an extra cushion if it could be realised and invested in such a way that it will be recognised
- The extent to which this investment is liquid will affect the investment strategy
- Alternatively, the medical scheme could lobby the regulator to make an exception to investment rules for this investment
- Would need to consider if there are there imminent regulatory / legislative changes that could affect the implied liability

Contribution levels relative to claims and expenses will inform their cash flow needs in the short, medium and long term

- The contribution levels relative to the expected claims and expense experience for different healthcare options will inform whether the net cash flow of the scheme will be positive or negative in the short term.

    - In medical schemes the emphasis will be on short tail liabilities with relative little delay to reporting and settlement.
- If it is heavily positive, is this expected to be sustainable? As the scheme matures or as other schemes start to cut premiums?
- If negative, what scope is there to increase premiums in the future? Or to change the benefit structures to reduce claims? What effect will this have on new membership?

Current liabilities

- Current IBNR claims will need to be backed by cash
- Likewise for claims reported but not yet paid.

The age and socioeconomic profile of members will affect the expectation of the liability in future years:

- Heavily dependent on the age profile of the scheme
- Also the relative affluence of the members will affect experience
- The industries that members work for will affect the relative claims experience
- The profile of new members will indicate whether this profile may change over time

Expectation of expenses – healthcare related, and administration

- Current levels of medical inflation will influence the liability expectation
- The current and expected exchange rate will strongly affect expenses
- The expectation of non-medical expenses and how they will change over time. These are likely to be driven by salary inflation.

Question 3 b)

The misapprehensions of some candidates mentioned in a) above unavoidably continued to bedevil their answers in this section. They further demonstrated their confusion by inappropriate references to portfolio management techniques, like diversification benefits, more relevant to long-term funding scenario. Very few thought to mention matching of known cash flows.

In addition some candidates fail to distinguish between liquidity (i.e. the ability to convert investments to cash easily) and market value risk (the risk that the value of an investment can fluctuate and is low when it needs to be realised) and assume that cash is the only liquid asset.

Key principles:

- Departure point should be appropriateness of the investment strategy vs. the economic liability of the scheme
- But constrained by the regulatory requirement both in terms of solvency requirement and investment constraints on assets backing solvency reserve
- Current economic conditions should also be taken into account in deciding what to allocate to
- Current holdings should be considered – particularly how realisable the property fund holding would be.

- Require cash flow-matched investments for known future liabilities in the next few years
    - This suggests fixed interest investment of high credit quality and appropriate term
- Require real assets for future claims and contingencies beyond that

  - These assets should ideally keep pace with medical inflation which has far exceeded CPI in the past
- It is to be hoped that the full solvency buffer is never drawn down
  - So some part of it should be invested to support future growth of the scheme
  - This again suggests real assets – but possibly with the aim of matching salary inflation
- All assets should preferably be liquid
  - as the timing of individual claims and the unevenness of overall claims experience could be quite variable

- Suggested asset allocation (subject to quantifying the various liabilities):
  - 10% in cash
    - For immediate liquidity requirements
  - 30% in government bonds
    - To cover near-term IBNR claims and other predictable liabilities
    - To improve the yield over current cash instruments
  - 20% bonds of rating no worse than AA (especially bank paper)
    - As above, but to provide some yield uplift
  - 40% in a diversified listed equity portfolio
    - Possibly with a SWIX Top 40 benchmark
      - To maintain the long-term real growth of these assets
      - Without sacrificing liquidity
  - Sale of the property fund
    - As it represents unnecessary concentration
    - ... and lacks liquidity
    - And more liquid property exposure can be obtained in the equity market

- Issues around transitioning:
  - A change to a balanced approach may require the appointment of an external asset manager
    - With all the attendant due diligence
  - Phasing may be required to reduce or eliminate the property investment
    - To avoid moving the price adversely if it is illiquid
    - Also there may have been historic reasons for the property holding and there could be resistance to selling it
  - New processes will need to be put in place to monitor the more complex asset structure
    - …. wrt performance reporting, risk reporting, compliance etc.

Question 3 c)

Very few candidates answered this section satisfactorily. Many ignored the request for a critique of the regulatory framework in the first part which was distinct from the discussion of specific recommendations required in the latter part.

- A hard capping of investment allowances can restrict the scheme from making decisions that are in its economic best interests.
- For instance, a limit of 2.5% in unlisted equity may mean that the scheme loses out on the opportunity to maximise returns subject to an acceptable level of risk
- There is no requirement that schemes will apply their own risk measures and take a considered approach to investment strategy

  - This would be an issue under the current regime – as funds without an effective investment strategy could potentially mismatch their liabilities and still be compliant with the regulations
- The high allowance for foreign investment is a case in point and could introduce significant mismatching risk
- Also, the regulations are silent regarding the assets that do not back the solvency reserve – which is up to the trustee's discretion
- There is no explicit reference to derivatives which could be used in managing risks
  - Although the allowance for SAFEX margins indicates that traded derivatives are permitted
- Equally there is no proscription on writing naked options, for example
- Many allowed assets – municipal bonds, immovable property, unlisted shares and bonds etc. – are very illiquid yet no minimum liquidity level for the fund as a whole is specified

- The investment strategy should be required to take into account duration of the liabilities, liquidity needs of the scheme, economic conditions, medical and other expense inflation matching
- A regime that ensures that scheme trustees formulate an investment strategy that is matched to their implied liability would be preferred
- This could be formalised in that it should be periodically submitted to the regulator for approval
- This may, however, require changes to the solvency regime – in order to align it with economic reality and risk based solvency thinking
  - … in much the same way that SAM is being developed for insurers
  - … where each risk is quantified and attracts a specific capital requirement

Question 4 a)

This type of question, covering a large, open-ended topic, is seldom well answered. This was no exception although it was pleasing to see that some candidates had given thought to the structure of their answers which ensured that they covered the subject with some breadth.

However, substantive content was often very meagre. A distressing number of answers showed little comprehension of how the events and trends of the past have shaped the atypical markets and economies of today. Glib references to "the credit crunch" or "the global financial crisis" and baffling statements like "governments lowered interest rates to reduce the cost of their increasing fiscal deficits" could not substitute for the clearly articulated analysis that was required to do well in this question and garner the bulk of its 15 marks.

Interestingly, candidates who acquitted themselves well in this question were invariably among the top scorers for the examination overall.

- Yields in the US and UK have been in a declining trend for more than 2 decades ...
  - ... largely because inflation fell dramatically from its 1980's highs
  - ... while relatively strong economic growth made public deficits manageable
- During the early part of the century there was unprecedented growth in lending in developed markets
- Lax monetary policy (in the absence of inflationary pressures and also to support markets after the tech stock crash) ...
  - ... and weak regulation of banks ...
  - ... led to an explosion of credit

- Credit was made increasingly available to consumers on very lenient terms
  - A substantial amount (such as mortgage loans in the USA and credit card debt) was given to borrowers who were unable to repay the debt ...
  - ... leading to the housing bubble that eventually burst in 2008 precipitating the financial crisis
- At the same time credit derivatives had grown exponentially
  - without institutions realising the extent of the risks (or holding sufficient capital to cover them)
    - Model risk and model uncertainty were ignored or miscalculated
  - ... feeding a boom in institutional funding of consumer credit via innovative structures that bypassed banks' balance sheets

- As the foundations of the credit boom crumbled, governments had to bail out banks for fear that the banking system would collapse
  - And in turn they tightened the rules regarding the capital banks must hold ...
  - ... which further constrained banks' ability to lend
- The combined effect was a massive contraction in lending ...
  - ... as banks sought to restore their balance sheets
  - ... and consumers and other borrowers reduced debt levels (deleveraging)
- The interconnectedness of the global banking system caused contagion in many countries in the developed world where similar conditions prevailed

- At the same time governments in Europe had been steadily, and unwisely, increasing borrowings to fund current expenditure such as social security payments
- The bursting of the consumer credit bubble focused investors' attention on the viability of government borrowing
- And in particular the yawning gaps between the borrowings and fiscal condition of the various countries in the Euro zone
- The situation deteriorated when deficits ballooned following the financial crisis
  - ... as countries felt compelled to bail out the worst hit banks which were significant holders of sovereign debt
  - ... and the deleveraging process, which promises to be protracted, stifled growth
- Ironically, fears about the stability of the eurozone and its potential to precipitate another global recession generated massive demand for US government bonds and German Bunds as safe haven assets, regardless of the decline in yields

- The response of monetary authorities has been to aggressively ease monetary policy
  - ... most notably in the US and UK by the mechanism of purchasing bonds in the market to create liquidity (quantitative easing)
  - ... and hence lower interest rates
- As it became evident that several countries (the PIIGS) were in dire fiscal straits, the European Central Bank also pumped money into the struggling economies
  - ... using various monetising strategies such as buying member nations' debt and moving bad or weak assets onto the ECB balance sheet

- But the *quid pro quo* required those nations to scale back expenditure and reduce national debt
    - ... thereby strongly lowering demand in the economy and causing negative growth
    - ... providing further downward pressure on yields

- Japan is a special case in that it has been struggling with the threat of deflation for several decades ...
    - ... after experiencing a financial crisis of its own in the late 1980's
- Despite numerous attempts to stimulate the economy and persuade consumers to borrow and spend rather than save excessively, Japanese authorities have been unable to break the deflationary forces in the economy
- As a result Japanese interest rates have been chronically low for a long time
    - ... but even they have shown a declining trend over the past 5 years with 10 year bonds now at 0.6%
- Some economists fear that the economic crisis in the West could presage a period of low growth and low interest rates – the so-called "Japanification" of many developed economies as they struggle to break out of a deflationary cycle

- Because of the international nature of markets low interest rates in one market will cause investors to seek yield in other markets
    - ... allowing for relative levels of risk, of course
- As a result the decline in interest rates among the world's biggest borrowers has caused yields to decline everywhere as investors look for opportunities in a world that is increasingly devoid of attractive fixed interest returns

Question 4 b)

This question covered what should be fairly familiar portfolio management ground albeit the very specific asset class on which it focussed tends to be a minor part of South African institutional portfolios. Despite this it was extremely poorly answered.

The main cause of this is candidates not using all the information in the question when addressing the topic. The "current investment approach" candidates were invited to discuss includes everything from the strategic asset allocation to the details of the choice of investment vehicle. Candidates routinely failed to cover most the ground. And despite the context of the question, many also failed to mention such obvious risks such as the prospect of foreign bond yields rising.

i)

- There is a risk that the assumptions underlying the strategic asset allocation to bonds have been invalidated
    - The allocation to bonds was probably done based on past history when yields were higher and warranted bond exposure – at least for the diversification benefits
- Those conditions no longer pertain and although the portfolio would have benefited from declining yields over the past years...
    - ... the question is whether that has changed so fundamentally as to warrant a review of the SAA
    - It does not seem as if the current conditions are likely to change much in the next few years – so remedial action could be justified
- Currency volatility further weakens the case for bonds if returns remain this low

- The prospects for returns from G3 government bonds are very poor
  - yields are excessively low – Japan 0.6%, US 0.75%, Germany 1.5%
  - The potential of returns to be enhanced by capital growth is very limited
  - ... while the downside could be large should rates rise from these levels
  - At these levels investors are not being rewarded for the usual investment risks
  - ... so much as being made to pay over the odds for safe-haven assets
  - Ironically if growth prospects improve in those countries to the point that monetary policy can return to normal, the impact will be highly detrimental for bonds
- There is also a risk that the determination of "safe" assets may change over time if investors adjust their view of high-deficit issuers

- The benchmark being used for foreign bonds is one of the standard cap weighted indices
- It has a very high exposure (about 50%) to the G3 (US, the eurozone and Japan) who are the biggest issuers of debt
  - ... and are increasing debt issuance as their fiscal deficits grow
- But they are also the ones that have historically low yields
- By investing in an ETF tracker the fund is tied into that composition with no scope to vary the exposure to benefit from a mix offering more remunerative yields
- The inclusion of bonds into the ETF depends on the credit ratings assigned by the very agencies that showed themselves unfit for the task in the past
  - … independent managers might differ in their credit assessments and hence the composition of the fund

- The ETF structure carries very few risks
  - There is good governance if it is listed on a major exchange, however there could be...
  - Tracking error risk (which varies depending on the methodology used)
  - Counterparty risk - mainly from scrip lending activities or swaps used in synthetic replication

ii)

- In the light of the prospects for foreign fixed interest markets the trustees may wish to revisit the rationale for investing in this asset class at all
- Any ALM study should be refreshed with revised assumptions on future returns and volatility
- This could lead to the complete exclusion of this asset class or a reduced allocation
  - … or substitution of local bonds for yield pick-up

- The fund could choose a different benchmark with less exposure to the lowest yielding markets (especially G3 sovereign debt)
  - GDP weighted indices are touted as a solution but these are complex to implement
  - And trackers may not be available

- The fund might consider active management of this asset class
- This would allow:
  - Overweighting government debt of countries with better economic and fiscal fundamentals and less yield compression, so improving yields

    - More freedom to extract value from corporate and other non-government debt by overweighting credit exposure
        - ... which offers better value than sovereign debt despite the recent rally
        - ... and making selective industry and company bets
- But would be at the cost of higher fees
- And a wider range of potential outcomes – both positive and negative