Institute and Faculty of Actuaries

EXAMINERS' REPORT

SP5 - Investment and Finance Specialist Principles

September 2023

Introduction

The Examiners' Report is written by the Chief Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

For some candidates, this may be their first attempt at answering an examination using open books and online. The Examiners expect all candidates to have a good level of knowledge and understanding of the topics and therefore candidates should not be overly dependent on open book materials. In our experience, candidates that spend too long researching answers in their materials will not be successful either because of time management issues or because they do not properly answer the questions.

Many candidates rely on past exam papers and examiner reports. Great caution must be exercised in doing so because each exam question is unique. As with all professional examinations, it is insufficient to repeat points of principle, formula or other text book works. The examinations are designed to test "higher order" thinking including candidates' ability to apply their knowledge to the facts presented in detail, synthesise and analyse their findings, and present conclusions or advice. Successful candidates concentrate on answering the questions asked rather than repeating their knowledge without application.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Sarah Hutchinson
Chair of the Board of Examiners
November 2023

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A. General comments on the *aims of this subject and how it is marked.*

The aim of this Investment and Finance Principles subject is to instil in successful candidates the ability to apply, in simple situations, the principles of actuarial planning and control to the appraisal of investments, and to the selection and management of investments appropriate to the needs of investors.

A mix of questions styles is used, covering *knowledge* of the material set out in Core Reading, application of this in calculations and case studies and *higher order skills* such as synthesis and collation of recommendations. Marks are awarded for the constituent elements of calculations, not just for the final answer generated. Scenario appraisal will similarly provide credit for evidence of the issues considered, not solely for the conclusions reached. There is necessarily an element of subjectivity in the answers and candidates who make well-reasoned points, not in the marking schedule, are awarded marks for doing so.

The examiners want to test the understanding of the candidates in relation to the principles of investment. To do that candidates will be asked to demonstrate that they know how investors might behave and what various terms mean. It also requires candidates to calculate and interpret certain investment related figures. It is not expected that the candidates are experts in the investment area, however they should have an overall understanding of investment markets and the function and needs of the various parties involved.

B. Comments on *candidate performance in this diet of the examination.*

Candidates generally performed well in this diet of the examination. There were a large number of marks available for a number of questions, making it possible to score well without finding every point on the marking schedule. There were two calculation questions and neither of the calculations should have been time consuming even if a spreadsheet wasn't used. There was little evidence that candidates were unduly pressured for time with consistent attempts being produced across all the questions.

Within the commentary for the individual questions the point has been made on more than one occasion that answering the question asked would save time and effort. This point has been made in previous commentaries; however it is still the most frequent error made by candidates.

Questions that required reasoning were generally the areas where candidates struggled the most. Candidates can help themselves by explaining how they arrived at their answer. Just making a statement without any reasoning makes it difficult to for Examiners to award full marks.

C. Pass Mark

The Pass Mark for this exam was 63
300 presented themselves and 153 passed.

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Solutions for Subject SP5 – September 2023

Q1

(i)

The main advantage is that it produces a definitive number which can be compared to either other fund managers or an index or market [1]
It will provide an incentive to perform well [½]
However if a fund manager is underperforming they may be tempted to take on greater risk to reach the required performance threshold. [½]
It may also allow the strengths and weaknesses of the fund manager to be identified. [½]
And it could allow the fund manager to learn from their mistakes or successes [½]
However the fund manager may have constraints placed on them [½]
Which may mean that the comparison is unfair [½]
For instance the fund manager be limited in the amount they can deviate from the index [½]
Or they may not be allowed to invest in certain stocks due to SRI considerations [½]
This may result in reducing their performance [½]
It is possible to adjust the performance of an index to take account of these constraints [½]
Equally risk adjusted measures of performance can be produced [½]
However this relies on the assumptions underlying CAPM being valid [½]
It also aligns fund manager interests with the investors' interests, e.g. if investors have a long-term investment period then a long-term performance measurement is appropriate to incentivise the manager to make longer-term decisions. [½]
Also any performance measure would need to take into account and cash flows into or out of the fund [½]
and any taxes [½]
It should be clearly stated whether the performance figures are including or excluding expenses. [½]
However, performance measurement could be ambiguous - it depends on a lot of factors such as time horizon of the performance measurement, method of performance measurement, frequency, etc. [1]
It should also be noted that it is preferable to look at a number of metrics when deciding on remuneration with performance being one of them. [1]

[Marks available 11, maximum 4]

(ii)

It should have the same investable universe as the fund [½]
An index should be investable [½]
i.e., it should be based on free floats [½]
It should be frequently calculated [½]
allow for income [½]
be representative of the market it aims to cover [½]
allow for new entrants [½]
and exits [½]
It should be chain linked [½]
arithmetic [½]
weighted [½]
It should be accessible [½]
It must be transparent [½]

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[Marks available 6½, maximum 4]

(iii)
While it is useful to compare a fund manager against their competitors there are a number of limitations, namely:
They may have different objectives e.g., a higher or lower target rate of return [½]
They may be required to treat income differently [½]
They may be operating under different constraints; these could relate to risk or ethics etc. [½]
They may be allowed to use different instruments e.g., derivatives [½]
or they be allowed to use gearing [½]
or be allowed to stock lend [½]
They may also be subject to differing cash flows [½]
There may be differing tax costs [½]
The figures may be calculated differently [½]
They may be a different style of investor e.g., growth or value [½]
The size of the funds may be very different, a small fund will face less liquidity issues when dealing. [½]
Not all of the information required may be available so making comparisons difficult [½]
Even if it is available, it may not be available in a timely manner. [½]
It is also important to ensure that fees are accounted for in the same manner [½]

[Marks available 7, maximum 3]

(iv)(a)
The splitting of the main index into sub-indices will increase its attractiveness to investors [½]
It allows them to select the appropriate sub-indices with which to measure their performance against. [½]
The investors know all the sub-indices will follow a similar methodology in their construction [½]
which will cause less issues. [½]
Sub-indices can be used for risk management purposes allowing investors to choose the level of risk exposure that corresponds with their investment objectives. [½]
Sub-indices can be used to develop new products e.g., structured products or ETFs [½]

(b)
By having sub-indices based on geography [½]
The investor can include or exclude countries or regions e.g., if the investor's mandate forbids investing in a certain country they can compare themselves to the world index excluding that country [½]
Equally those based on term or, credit rating or, coupon [½]
This will allow investors to compare themselves to a benchmark that reflects the same characteristics as their own portfolios. [½]
Other possible groupings could be based on industry allowing specialist funds e.g., a pharmaceutical based fund [½]
to compare themselves against an appropriate index. [½]
It may also be possible to create a 'green' sub index [½]
Reflecting the performance of corporate bonds issued by green companies [½]
(Any other reasonable sub index was given marks if accompanied by a reason)

[Marks available 7, maximum 4]

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[Total 15]

This question was fairly straightforward, and it was therefore not surprising that it was the best answered on the paper with candidates scoring particularly highly in parts (iii) and (iv).

Q2

(i)

An interest rate cap is an instrument that provides a payoff to the holder a sum of money if the interest rate exceeds the cap rate. [½]
An interest rate floor is an instrument that acts as a protective measure for a lender or investor [½]
An interest rate collar is an interest rate cap combined with an interest rate floor, whereby the holder pays a sum if the interest rate falls below the floor rate. [½]
It is an option on the movement in interest rates [½]
The interest rate is reset after defined periods (e.g., three months) [½]
The payoff (if any) occurs at the end of the tenor periods following each reset [½]
All are forms of over-the-counter derivative contracts. [½]
The aim is for the net price to be zero [½]

[Marks available 4, maximum 3]

(ii)

The industry is cyclical, so revenue and profit are likely to be volatile over the economic cycle [½]
So controlling the cost of debt will help to stabilise borrowing costs [½]
A collar places a limit on the interest cost of debt. [1]
A collar will be cheaper than a cap [½]
because the issuer potentially gives up the benefit of a fall in the interest rate below the floor. [½]
However, the debt-issuer will not benefit from any fall in interest rates below the floor. [1]
A collar can be used in conjunction with new or existing debt. [½]
There may be a cost to unwinding the contract before its maturity. [½]
A collar will not completely eliminate interest rate risk, it limits the range of rates, so there is still some exposure to changes in interest rates [½]
It will introduce counter party risk [½]
It requires expertise to manage these positions [½]

[Marks available 6½, maximum 4]

(iii)

Reset date	**Payoff date**	**Payoff ($)**
1 July 2024	1 January 2025	$0
1 January 2025	1 July 2025	$50,000
1 July 2025	1 January 2026	$0
1 January 2026	1 July 2026	-$250,000

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Payoff in 2025 is payment to the company
Payoff in 2026 is payment by the company [6]

(iv)
A call option on an interest rate [1]
With the interest rate being that observed on 1 July 2025 [½]
And a strike price equal to the capped rate [½]
and
A put option on a zero-coupon bond [1]
Expiring on 1 July 2025. [½]

Or

Go short in a 6 month swaption where the underlying instrument is an interest rate swap receiving the floating leg and paying a fixed leg of 3% [1]
This would be exercised if rates fell below 3% [½]
Go long in a 6 month swaption where the underlying instrument is an interest rate swap paying the fixed leg of 5% and receiving the floating leg [1]
This would be exercised if rates rise above 5% [½]
(Other instruments are acceptable if they achieve the required result)
[Marks available 6½, maximum 3]
[Total 16]

This proved to be the question that candidates found the most challenging, most candidates could make satisfactory or good attempts at the first two parts, however the parts (iii) and (iv) presented more difficulties.

The calculations in part (iii) were not complex and many candidates scored well.

Where candidates made mistakes, it was often difficult to award marks for adopting the correct approach as little in the way of explanation or workings were given. In part (iv) candidates were asked to 'Outline two instruments .....' this required a brief description, and this was often missing.

Q3
(i)
Risk budgeting is the process of determining how the risk is allocated across the various asset classes. [1]
and between and strategic and active components [½]
The aim is to maximise return for a given level of risk [½]
or to minimise risk for a target level of return [½]

This is done as follows:
Define the set of investible asset classes, [½]
Set investment assumptions for each asset class, [½]
Return, volatility, correlations or covariances, [½]
Optimise against risk tolerances (volatility), [½]
Customer risk tolerances might be specified or a limited, [½]

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Monitor and adjust from time to time [½]
Rebalance as necessary [½]

[Marks available 6, maximum 3]

(ii)
Return to risk relationship - south-west to north-east line (a higher unit of return for the extra risk being taken). [1]
Higher risk assets (equities and Growth strategy) intuitively in the north-east quadrant. [½]
Lower risk assets (bonds and Cautious strategies in south-west quadrant) [½]
Balanced is in the middle of the chart. [½]
The modelled portfolios lie above a line between Defensive and Adventurous. [½]
Indicating the benefits of diversification away from concentration in single asset classes. [½]
Moderate is below that line, indicating it is not efficient, providing a poor risk/return profile [½]
Cautious 2 is not as efficient as Cautious 1: it has a higher volatility/risk but lower expected return. [½]
Cautious 1 has a higher volatility than Cautious 3, compensated by a higher expected return. [½]
Return per unit of risk Cautious 1 (57%) is arguably more attractive than Cautious 3 (45%). [½]
Cautious 1 Sharpe and Information Ratios are also superior. [½]
Hence, if a volatility of 5.3% is tolerable for a risk averse investor, Cautious 1 should be the chosen strategy. [½]
Cautious 1 also displays greater diversification with exposure to three asset classes whereas Cautious 2 and 3 are only exposed to 2 asset classes [½]
If Cautious 1 is chosen, then Moderate (similar return, higher volatility) and Defensive (similar volatility, lower return) could be dropped from the offering [½]
If the requirements are a combination of low risk, diversification benefits and a return over Gilts, then the Cautious 3 strategy should be chosen (Moderate could be retained, but Defensive dropped) [½]
Bonus: rather than retaining Moderate with Cautious 3, select Cautious 3 and investigate if a portfolio delivering a volatility of around 6.5% could deliver an efficient risk/return profile [½]
(Other reasonable comments were awarded marks, provided they were clear and they compared the portfolios to each other)

[Mark available 8½, maximum 6]

(iii)(a)
Do they agree with return assumptions? [½]
Do they agree with the volatility assumptions? [½]
Forward looking assumptions not necessarily the same as historic assumptions. [½]
They are not necessarily guarantees. [½]
Assuming investor does agree with assumptions, a choice may be made from the range on offer to position their strategy aligned with the profile & characteristics of their liabilities [½]

(b)
The investor's liability profile v profiles of assets/portfolios. [½]

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The asset profile needs to closely match the liability profile to avoid an inability to pay liabilities when they fall due. [½]
Investor's target return [½]
If the fund is unlikely to meet the investor's target return, then other higher return investments will need to be considered [½]
Investor's target volatility [½]
If the investor has a target volatility, then they will have to consider how volatile the fund is and whether they can stand the level of volatility that is being targeted [½]
Investor's risk budget [½]
The same thoughts regarding volatility also apply to the risk budget [½]
Future liquidity: further cash being invested [½]
and future cash requirements [½]
If the investor will have more cash to invest or will require cash, they will have to consider how liquid the cautious fund is and any charges relating to withdrawals or further investment [½]
Size of portfolio
The size of the portfolio is important especially relative to the fund size, if the portfolio is large in comparison to the fund this may cause liquidity issues and may distort prices. [½]
Availability of expertise. Own knowledge: do they need to pay fees to manager for modelled portfolios [½]
If the investor is knowledgeable then they may need minimal advice, however if they lack the financial knowledge they will need advice on a regular basis which will cost money. [½]
Existing assets [½]
Are they already invested in any of these assets, that would lead to a larger concentration in the broader asset allocation? [½]
Fees to be charged [½]
The fees charged will detract from the investment return, so it is important to establish how much they are and how they are likely to change in the future. [½]
Skills & experience displayed by the manager [½]
Track record of the manager [½]
The track record of the manager is often the most accessible information regarding the skill of the fund manager [½]
However there is no guarantee that it will persist in the future [½]
It may also be possible to meet the fund manager and determine their investment process [½]
Competitive alternatives [½]
The investor will have the option of investing in a large number of alternatives and they are likely to choose the one that most closely matches their needs [½]
Tax status of investor and the offering [½]
Tax is an important factor and if the level of tax levied on a fund is lower than another fund the investor is more likely to choose the lower taxed fund [½]
Review product features such as lock-in conditions [½]
The investor will need to assure themselves that the terms and conditions are not onerous and are in line with industry levels [½]
Do the products match the investor's ESG criteria requirements [½]
If the investor has ethical beliefs then they will want to ensure that the investment fund shares those beliefs. [½]

[Marks available 18, maximum 7]

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[Total 16]

This question was well answered by most candidates.

A number of candidates could have scored more highly had they made more points in parts (ii) and (iii), the two parts were worth 13 marks which should indicate that candidates were expected to make a significant number of points. Where candidates failed to score highly the points they made were often correct, however there wasn't enough of them to gain maximum marks.

Q4

(i)

When considering any investment the members should consider how much risk they want to take	[½]
The time they have left until retirement	[½]
The fees charged to invest in these funds	[½]
Whether or not there are any liquidity issues	[½]
Whether there are any tax benefits relating to one fund as opposed to the other	[½]
Both types of these assets have the following features	[½]
Specialist knowledge (maybe familiar with existing options),	[½]
Uncorrelated = diversification benefits,	[½]
Liquidity challenges suggest they are not appropriate for those close to retirement	[½]
Infrastructure: minimum size of investment (initially and ongoing),	[½]
Potentially long-term investment periods during which there may be more cash raising and no income generated followed by	[½]
There may be delays	[½]
Potentially long-term income generating periods	[½]
However there may be maintenance costs	[½]
Fixed duration for development and payback	[½]
Fixed income, possibly guaranteed by government	[½]
Reinvestment risk if future income is not needed for benefit payments	[½]
Political interference	[½]
Unique projects	[½]
Delayed income	[½]
Overseas based projects carry a currency risk	[½]
Valuation is difficult/subjective	[½]
Reinvestment issues for dividends and future cash flows	[½]
ESG issues may arise, such as when construction is harming the environment	[½]
Property: lots of different types (residential, commercial, overseas = currency risk)	[½]
Large units (liquidity issues for direct investment)	[½]
High transaction costs	[½]
There is risk of voids occurring	[½]
Management costs (tenants, rent collection, upkeep, vacancies),	[½]
Maintenance costs	[½]
Investment horizon matches?	[½]
Already own residential property personally = concentration risk?	[½]

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Direct property investment is costly due to management of sales/purchases, finding tenants, collecting rents, dealing with defaulters, etc. [½]
Open ended funds solve some of the management issues, providing management expertise, although the management costs remain [½]
Closed end funds (REITs) have equity market sentiment overlays to performance [½]
Valuation is subjective [½]
And suffers from serial correlation [½]
Lock-in can occur hurting liquidity (although may not be an issue for long term investors) [½]
Closer to cash and the bond element of the balance fund on offer - so some diversification benefits [½]

[Marks available 19½, maximum 8]

(ii)
Passive: follows the market (or "a" market, depending on the benchmark chosen) [½]
Tend to have low turnover, where sales and purchases arise due to cash-flow dividend/interest reinvestment and rebalancing in response to benchmark changes [½]
Need to identify a benchmark that is [½]
Transparent [½]
Can be calculated frequently [½]
Available (at a cost?) and [½]
Investible, replication v synthesised (use of derivatives) [½]
Active: manager expected to achieve a return in excess of the (chosen) benchmark [½]
By choosing stocks such that the portfolio differs from the benchmark [½]
After fees (in excess of running it passively) [½]
Multiple types of active management (value, growth, momentum, etc.) [½]
Generally higher risk [½]
Fewer stocks in portfolio [½]
Higher fees [½]

[Marks available 7, maximum 4]

(iii)
Passive: typically managed through a closed or open-ended fund that tracks a defined market related benchmark [½]
Less expertise is required when selecting a passive fund manager [½]
Benchmark maybe difficult to find [½]
Benchmark may have many holdings which will lead to high transaction and custody costs [½]
Large number of holdings could mean trading difficulties in small holdings [½]
Cheap to run, [½]
Low transaction fees, [½]
No down-side (ignoring fees) compared to the benchmark [½]
Assuming no basis risk [½]
Loss of upside compared to the benchmark [½]
Reduced risk against the benchmark [½]
No peer pressure, [½]
Rather than replication of the benchmark, a synthesized version could help reduce costs and the small holdings issues [½]
A synthesized version might offend the use of derivatives within trust rules/regulations [½]

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Though finding derivatives for some types of property or infrastructure might be difficult [½]
Closed-ended funds (such as REITs) have equity type features which reduces the diversification feature [½]
Investor cannot influence which assets are included - this might offend ESG policies [½]
Active: portfolio of either direct holdings or a fund that does not necessarily track a benchmark, or aims to outperform a benchmark [½]
Expensive, need to find a manager (time and effort) [½]
Ongoing monitoring costs [½]
Upside potential (outperformance of benchmark) [½]
Downside risks against benchmark and [½]
Peer group [½]
Transaction costs [½]
Costs contained by having fewer stocks than in the benchmark (avoids holding stocks at the bottom of a market capital weighted benchmark which might be more difficult to trade), [½]
Lot of data suggests active managers under-perform (at least in developed efficient markets) [½]
Though it might be argued that both infrastructure and property are less efficient than some other asset classes [½]
Flexibility to apply ESG policies in construction of the portfolio [½]

[Marks available 14, maximum 7]

[Total 19]

There were a number of points that could be made in either part (ii) or part (iii), where candidates made a point when answering part (ii) that appears in part (iii) of the marking schedule they received the appropriate mark and vice versa for points made in answering part (iii) that appear in part (ii) of the schedule.

Despite this part (iii) proved the most challenging, well-prepared candidates did well but others struggled. It should be noted that many candidates ignored the market risk associated with passive investment. Passive investment reduces the risk of underperforming the index.

Q5

(i)

The following factors can influence the after-tax return:
The pre-tax return - all other things being equal a higher pre-tax return will result in a higher post tax return [1]
And the tax status of the investor - some types of investors may be subject to reduced tax levels [1]
The country in which the investor operates, countries have different taxation regimes which mean that a dollar earned in one country may be worth more after tax in one country than another. [½]

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The financial position of the investor - wealthy individuals may be subject to higher marginal rates of tax [½]
Whether or not they are investing in tax efficient vehicles [½]
What the returns are classed as, there are several possible classifications, the two main ones are usually income or capital, [½]
However, some countries will also tax earned and unearned income separately [½]
And may tax inheritance, [½]
Equally it is possible to differentiate between realised and unrealised capital gains. [½]
The rates of taxation [½]
The total amount earned; many countries have lower marginal rates of tax for people on lower incomes and higher rates for those earning above certain thresholds. [½]
There is also often a tax-free allowance meaning if the earnings are below this level no tax is paid. These limits can apply to all the classifications mentioned above. [½]
The time the asset has been held, tax may fall if the asset has been held for a longer period [½]
The purpose for which the asset has been held, e.g., a residential property may be exempt from capital gain tax if it a person's main residence [½]
The degree to which losses in different asset classes can be used to reduce the tax liability in other asset classes, sometimes losses incurred can only be offset against profits made in the same asset class [½]
On other occasions losses and profits can be aggregated across many different types of asset. [½]
Linked to this is whether losses can be carried forward to future time periods and if they can how long they can be carried forward. [½]
The timing of any payments can also influence the return sometimes tax is deducted at source [½]
However, if the tax is payable some time in the future the amount payable can be invested to earn an additional return. [½]
Finally, there may allowable expenses that can be deducted before calculating the amount of tax that is payable. [½]

[Marks available 11, maximum 6]

(ii)
The actions the investor could take are:
The post tax return is made up of two components, the pre-tax return and the amount of tax that is paid on that pre-tax return. [½]
A higher post-tax return may be earned by investing in an asset that produces a high rate of return despite the fact that it also attracts a higher rate of tax. [½]
Therefore the investor should not be driven by tax considerations alone, minimising the amount of tax payable may not maximise post tax returns. [1]
The investor should ensure that they fully understand the tax system as it applies to themselves. [½]
This includes studying any proposed changes in the taxation regime in case the taxation status is likely to change which may increase or reduce tax paid. [½]
The investor may choose to relocate to a country that raises less tax, however this is likely only to be an option for the very rich. [½]
There may be an option to pay tax in a country that has lower rates of tax without changing residence, offshore investments [½]
However, the investor would also need to consider what would happen when they transfer the assets back to their own country of residence. [½]

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They could choose tax efficient vehicles in which to invest, there may be vehicles that allow the investor to gain exposure to the assets they want in a more tax efficient manner than direct investment. [½]
The investor should seek to use any tax allowances that are open to them. [½]
And they should also ensure that they have claimed for any allowable expenses e.g. interest. [½]
They can also use any losses incurred in previous time periods. [½]
They may also try to time the taxable events so that tax is minimised e.g. deferring until a future time period when there may be offsetting losses. [½]
They could use derivatives to reduce their exposure to an asset [½]
Though any gains on the derivative may be taxable [½]
Hold assets for longer if this reduces the tax burden [½]
They could take ensure they were aware of any potential changes to the tax regime so that they were prepared for any potential changes [½]

[Marks available 9, maximum 6]

[Total 12]

This was a reasonably straightforward question and well-prepared candidates scored highly.

A number of candidates didn't read the question and used the answer to part (ii) as an opportunity to write about everything they knew about tax avoidance, including strategies that were appropriate for a company rather than for an investor.

Q6

There are a number of ways consumers can be protected:
Ensure that there is full disclosure regarding the terms and conditions [½]
Ensure that there is a robust legal framework [½]
Possibly with a regulator overseeing this area [½]
And good corporate governance [½]
There should be transparency in all transactions [½]
Including disclosure of what payments are being made and to whom they are payable [½]
The consumer should understand the product they are buying [½]
And institutions should be obliged to make sure they understand the risks [½]
In cases where consumers have been mis-led there should be a means to receive compensation [½]
Only schemes that have been approved by the regulator can accept investments [½]
And ensuring that investors have access to good advice [½]
There could be restrictions on what schemes are allowed to invest in [½]
They could limit the charges that a manager could charge [½]

[Marks available 6½, maximum 3]

(ii)
The government will want to assure themselves that money deposited with the ethical funds is safe [1]
This will involve the separation of client assets [½]

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Is the fund manager financially stable?	[½]
Proper record keeping	[½]
They have the correct level of expertise or	[½]
Experience	[½]
The fees charged are reasonable	[½]
That the back and front office are separated	[½]
That all literature is factually correct	[½]
And any forecasts made are realistic	[½]
That the funds and processes are subject to regular audit	[½]
They have a properly constituted board of directors	[½]
There are plans in place to cope with any disasters	[½]
Whether there is a monitoring operation (a compliance department)	[½]
Is the IT system sufficient to cope with the operations?	[½]
and can the group can cope with additional business?	[½]
They are doing what they say they are doing and	[½]
The policyholders can see how they are performing	[½]

[Marks available 9½, maximum 4]

(iii)
The investment management agreement (IMA) will contain the following:

The aim of the fund	[½]
Define what is ethical	[½]
Any benchmark	[½]
The performance target	[½]
The level of risk permitted -e.g., deviations from benchmark	[½]
Limits on counterparty exposure	[½]
The level of fees and charges	[½]
What instruments are permitted	[½]
Whether borrowing is permitted	[½]
and if so to what extent	[½]
Any liquidity requirement	[½]
The currency that the fund will report in	[½]
Whether stock lending is permitted	[½]
Who will act as custodian	[½]
How often the fund manager will report	[½]
How fund managers are renumerated (fees)	[½]
How performance will be measured	[½]
How clients will be compensated in the case of errors	[½]
How the fund will vote on various issues	[½]
How conflicts of interest will be handled	[½]
What would happen in the event that the contract is terminated	[½]

[Marks available 10½, maximum 5]

This question was one that this was generally well answered by candidates.

Again, candidates could have saved themselves some time by answering the question, in particular the answers to part (i) produced a number of points unrelated to the protection of consumers.

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Q7

(i)

Both growth and value fund managers are looking for stocks that outperform the market [1]

They will both be interested in the management teams as they are crucial to executing the company's plans [½]

They will both be looking at the P / E ratio [1]

Growth fund managers are looking for stocks that are forecast to show higher than average growth over both the medium and long term [½]

and will have probably grown faster than average in the past [½]

They also might look at the current internal growth rate

and the long-term historical earnings growth and

Sales growth

They will look for factors that will enable the company to grow faster in the future e.g. [½]

A technological advantage [½]

Barriers to entry [½]

Regulation [½]

The amount of competition [½]

Growth managers will also look at the book to price ratio [½]

and the yield [½]

Whether or not a company represents good value would be determined by fundamental analysis [½]

They will look for factors that will ensure that the company will be able to produce the required cash flows e.g. [½]

The market that they are in [½]

Their position within the market [½]

What competition they have [½]

What margin of safety they have in the event of a downturn [½]

[Marks available 10, maximum 4]

(ii)

A rotational investor will switch between value and growth stocks depending on how they view the market [1]

They may also move between countries, sectors or industries [1]

[Marks available 2, maximum 1]

(iii)

Fund	**1**	**2**	**3**	**4**		**4 Year Return**	**Annualised 4 Year Return**	**Annualised Relative Return**	**Annualised Relative Return (alternative)**
A	1.06	1.03	1.01	0.94	1.037	3.66%	0.902%	-0.046%	-0.047%
B	0.98	0.98	1	1.08	1.037	3.72%	0.918%	-0.029%	-0.030%
C	1.03	1	1	1.01	1.040	4.03%	0.993%	0.045%	0.046%
D	0.95	0.97	0.99	1.15	1.049	4.91%	1.206%	0.259%	0.266%
Index	1.05	1.02	1.01	0.96	1.038	3.84%	0.947%		

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(½ mark per fund) [2]

(iv)
Fund A has outperformed the index when the index is rising however it has underperformed when the market fell, this implies it has a beta greater than 1 [½]
and is likely to be a growth fund [½]
Fund B has underperformed the index when the index has risen however it has outperformed when the market fell, this implies a beta of less than 1 [½]
and it is likely to a value fund [½]
Fund C has only outperformed in year 4, however the relative performance in the other three years was negative; however they were less negative than fund D [½]
So this could be a rotational investor or possibly an investor who has no firm bias. [½]
Fund D has shown the most extreme relative performance changes [½]
Suggesting that they are a deep value investor [½]
(Other well explained answers received marks) [4]

[Total 11]

The first three parts of the question were well answered by the majority of candidates, though it was surprising how many failed to produce the required answers in part (iii), however in this case there was more explanation or workings than in question 2 so partial marks were awarded where appropriate.

Part ((iv) required more thought and was not as well answered, there were a number of possible answers all of which received marks, however just stating an investment style with no reasoning made it more difficult to award marks.

[Paper Total 100]

END OF EXAMINERS' REPORT

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