TPE 2023 – Mock 3

Quaerum – Case Study Part 1

Comprehensive Case Study
Initial Information

You have **2½ hours** to complete this paper

History

TPE examination, May 2021.
Pass rate 70%.
2½hrs in the morning
3hrs in the afternoon.

Technical Content

FA2022

This mock exam is taking place remotely.

ICAS would remind you to continue to be ethical and observe the exam conditions applicable to the TPE exam.

Background notes

It is early February Year 22

You are Taylor Norris, a newly qualified chartered accountant working for an investment management company, Quaerum Investments Limited (QI), based in Glasgow. QI operates a variety of funds investing in the commodities sector on behalf of its clients, who are a mixture of financial institutions and private investors. The company specialises in investments with a strong ethical and sustainable element, attracting investors who value socially responsible investing.

As part of your graduate training programme, you are spending time in different parts of the business and you have just been transferred to the investment team. Excited about the prospect of learning about a new area of work, you log on for a scheduled video meeting with your new boss, Emma Reid, who has recently joined the company as the director of investments.

“Hello Taylor,” says Emma with a smile as you unmute your microphone. “Welcome to Investments.”

“Thanks,” you say. “How are you enjoying working for QI?”

“So far, so good,” says Emma. “Our board chairperson, Iona, is so passionate about sustainable investment and I’m very much on the same wavelength. The only car journey I make these days is the two miles to the supermarket and back. And I haven’t been on a plane since January Year 21.”

Emma continues, “I’m still getting to grips with all of the procedural stuff. I used to have my own business before I joined QI and it’s going to take me a while to get used to how things are done around here. So many rules! And there’s a clear need to modernise some of our practices: I can’t believe we haven’t updated our core IT systems for years. We didn’t even have this video conferencing software when I joined. But there are lots of positives of course: Tom seems like a supportive chief executive, although he looks like he could be retiring soon.

“My background is sales and marketing and so I’m delighted to have you in the team; your accountancy training will be very useful. What do you know about our funds?”

Breathing a sigh of relief that you had spent the weekend researching the funds, you say, “I’ve got lots to learn, but I do know that QI invests via the AIM market in individual companies operating in the commodities sector in some less developed areas of the world.”

“That’s right,” says Emma, smiling, “I see that you have done your homework. QI has been growing organically for many years and it’s time to look at the performance of the funds as a whole. I told the board I could improve performance at my interview and so now it’s time to deliver! I’ve been invited to attend the board meeting later today and I’d like to reassure them that things are going to change for the better.

“What I would like you to do is look at the information our analysts have pulled together (Sections 1 to 3). Review the funds and give me your views about potential opportunities to improve performance and reduce risk exposure in a briefing note. Bear in mind our focus on sustainability. And think about company risk and geographic risk as a whole as well as for each fund.”

You nod and Emma continues, “I would also like you to look at a promising company called Blackstuff (Sections 4 and 5) that I’ve been keeping an eye on, to see whether we should add it to our portfolio as part of the Energy Fund and of course also our All Commodities Fund. Asian Energy has had a good run in the Energy Fund and we’ve decided to sell while the share price is attractive. We’re looking for a new home for the cash this will free up. I reckon Blackstuff can fill the gap – I can see quick returns there; it’s a well-run company. And of course, it would also become part of QI’s All Commodities Fund. (More details on all funds including Energy and All Commodities Fund are provided in Section 1).

“You will be aware that some commodities suffered a downturn during Year 21 due to the pandemic. Some share prices were temporarily lower as a result. Our analysts have been through the figures that you are being supplied with and have adjusted them to take out the effects of COVID-19. You can therefore use them to look at the trends and financial position without having to take the pandemic into account.

“Add your appraisal of Blackstuff to the briefing note using QI’s investment criteria (Section 2) and other information (Section 3). I’ll use some of your analysis in my discussion with the board later today. Blackstuff looks like an excellent prospect to me and I’m sure you will agree. Have you got all that?”

“Sounds interesting,” you say, looking up from your notepad. “When would you like to have the briefing note by?” Emma glances at her phone and says, “Give this top priority and so let me have the briefing note before lunch.”

Your heart sinks when you hear the deadline. You’d planned to do an online exercise class before starting work, but now you’ll be at your desk instead. Putting on your best smile, you say, “No problem, I’ll start straightaway.”

“Fabulous,” says Emma, “I knew we would get on well together. Do a good job on this and I’ll make sure that your performance is recognised. I’ve already emailed you the relevant information. It should be in your inbox already.”

You feel your jaw tighten as you say, “That’s fine, I’ll make a start now.” You say a quick goodbye and click the ‘end meeting’ button in case Emma adds anything else to your ‘to do’ list.

Required

- Prepare the briefing paper for Emma on the review of QI’s funds and the potential addition of Blackstuff to the All Commodities Fund and Energy Fund.

- Review all the information in preparation for the afternoon session.

Section 1

Information about QI and its funds

a) Background

QI was founded 21 years ago by Iona Campbell who saw a market niche in ethical investments. She has deeply held beliefs in the power of capital markets to drive positive changes in society. By investing in businesses that have strong corporate social responsibility goals, Iona believes that this will encourage them to do more to benefit society. She made the successful decision to focus on the commodities sector.

As awareness of social and environmental issues has increased, more investors care about where their money is going. Market research also shows that investor confidence in the QI 'brand' and its products is at an all-time high, given recent market-beating returns for investors.

QI is privately owned with minimal debt and healthy cash balances. Similar asset management companies would be valued in the market at around 15 times the most recent annual profit figure.

The board of six people comprises Iona (chair), the chief executive officer, the chief finance officer and three independent non-executives. Both executive directors have significant equity holdings in the company, but Iona is the majority and controlling shareholder. The board has not changed its business strategy materially since the company was founded and remains committed to sustainable investment in commodities. There is no formal strategic plan.

The senior management team is led by the chief executive officer, Tom Lawson. They have worked closely together over many years. Emma Reid is the first external appointment to the senior management team in ten years, caused by the sudden departure of the previous director of investments. There is no succession plan.

Although QI pays its staff at or slightly less than the industry average for their roles, staff turnover is low and engagement levels are high.

b) QI - summary information

QI manages an open-ended investment company (OEIC) comprising a range of commodity investment sub-funds. Investors can invest in these individual sub-funds if they choose or can invest in a fund covering all commodities. In its marketing literature, QI states that all of its funds aim to deliver a return on investment (RoI) to investors of at least 10% pa over a five year period, although this cannot be guaranteed. QI analysts have made adjustments to any results affected by the pandemic to take account of the effect of the pandemic.

Fees are comparable with other OEICs. Investors pay a fee to QI on their initial investment and an annual fee thereafter for management of their investments. Investor accounts can only be approved following an initial discussion with a QI manager. Additional investments in all funds can be made via QI's website (up to £10,000), in writing or by phone and are charged a further fee. QI's operational costs are funded by these fees. At any point in time, QI holds a small amount of cash in order to ensure liquidity in trading for each fund. **Fees can be ignored for the purposes of calculating fund performance etc.**

Table 1: Selected financial information for the year ending 31 December

	Yr17	Yr18	Yr19	Yr20	Yr21
Total funds under management (£m)	185	210	225	255	285
Income from fees (£m)	8.0	9.4	10.7	12.8	17.3
Fund management & IT costs (£m)	(2.2)	(2.6)	(2.8)	(3.4)	(3.8)
Other costs (£m)	(4.6)	(4.9)	(5.2)	(6.4)	(7.8)
Operating profit (£m)	1.2	1.9	2.7	3.0	5.7

c) Commodities funds

QI operates five managed funds (all are sub-funds of the OEIC) which invest in companies listed on the AIM market. These funds are: Energy Fund; Metals Fund; Livestock Fund; Agriculture Fund and All Commodities Fund. The All Commodities Fund consists of four equal parts (25% invested in each segment - energy, metals, livestock and agriculture). This fund appeals to investors who want a wider spread of investments across the commodity sector.

Each fund aims to deliver superior investment performance in a higher-risk sector at a low cost to investors whilst taking account of sustainability, ethics and environmental concerns in the selection of investments. There is no restriction on the geographic location of investments for any of the funds.

Table 2: Commodity funds summary information

Fund	Fund size (Yr 21) £m	AIM benchmark RoI (%)
All Commodities Fund	195	12
Energy	35	14
Metals	23	8
Livestock	14	8
Agriculture	18	18
Total	285	12

Management costs for Year 21 were 1.1% of total funds invested.

i) All Commodities Fund

The All Commodities Fund investment fund includes 25% by value of each of the four main classes of this sector: energy, metals, livestock and agriculture. All Commodities Fund invests in the same equity holdings held by each individual QI fund in the same proportions as held in each fund. However, it is a separate fund in its own right and not a consolidation of the other four funds.

In the last five years, the fund has grown and strong returns have been generated, exceeding expectations. This has been helped by appearing regularly in the ‘Recommended Funds’ section of the popular ‘Investors’ Ideas’ magazine.

Table 3: All Commodities Fund information

	Yr17	Yr18	Yr19	Yr20	Yr21
Fund size (£m)	130	150	155	180	195
RoI (%)	17	4	15	11	20
AIM commodities benchmark RoI (%)	10	6	10	12	12

ii) Energy Fund

The Energy Fund has consistently performed well despite high volatility in recent years.

Table 4: Energy Fund composition

Company	Type	Operational Area	% of fund	% RoI (Yr21)
Asian Energy	Gas	South East Asia	25	28
Guinea Group (Oil)	Oil	West Africa	25	6
Hydro Sun	Renewables	China	10	15
Nigeria Premium plc	Oil	West Africa	20	8
Turbo Turbine plc	Renewables	Europe	10	4
Western States Group (Oil)	Oil	North America	10	20
Total			100	14

iii) Metals Fund

The Metals Fund has consistently performed well, particularly in market downturn periods. It includes precious and base metals, often mined in developing countries with less sophisticated infrastructure.

Table 5: Metals Fund composition

Company	Type	Operational Area	% of fund	% RoI (Yr21)
Guinea Group (Gold)	Gold	West Africa	25	8
Electro-copper plc	Copper	South America	10	42
	Renewables			
Modern Tech Ideas	Platinum	North America	10	22
Rare Minerals	Various	China	15	80
Polymetal plc	Copper	South East Asia	20	46
Coastal Capital	Gold	West Africa	20	12
Total			100	32

iv) Livestock Fund

The Livestock Fund has performed reasonably well with low volatility historically. However, disease outbreaks in the largest livestock producers in North America have affected profits in the last two years.

Table 6: Livestock Fund composition

Company	**Type**	**Operational Area**	**% of fund**	**% RoI (Yr21)**
Western States Group (Beef)	Beef	North America	20	10
Premium Pork	Pig	North America	25	8
Yunnan Foods	Pig	China	10	31
Midwest Operations	Mixed	North America	25	(2)
Healthy Free Farms	Beef	Europe	10	29
Freedom Livestock	Oxen	South America	10	25
Total			100	12

v) Agriculture Fund

The Agriculture Fund has performed well in the last three years. Returns are highly correlated with global weather patterns. Stable weather produces more predictable crop yields.

Table 7: Agriculture Fund composition

Company	**Type**	**Operational Area**	**% of fund**	**% RoI (Yr21)**
Cocoa Co-operative	Cocoa	West Africa	10	42
Design Clothing	Cotton	South East Asia	10	25
Best Rice	Grains	China	15	48
Guinea Group (Coffee)	Coffee	West Africa	25	10
Animal Feeds	Grains	South America	15	24
Western States Group (Corn)	Grains	North America	25	8
Total			100	22

Section 2

QI Investment Criteria

1. Financial criteria
    a. return on capital employed over the last five years of at least 10% a year on average (excluding the distribution of dividends);
    b. return on capital employed over the last five years at least in line with their sector average;
    c. debt as a proportion of capital employed (latest year) does not exceed the sector average;
    d. current ratio (latest year) exceeds 1; and
    e. latest stock market valuation is considered by QI to be attractive.

2. Non-financial criteria
    a. offers the best potential durable growth opportunities for the future;
    b. resilient to change, particularly technological innovation;
    c. businesses are well run and not exposed to significant levels of commodity or country risk;
    d. governance practices are in line with leading companies in their sector;
    e. comply fully with local health and safety legislation and whose safety record for serious injuries and fatalities is below the industry average; and
    f. able to evidence continual improvement against environmental standards.

3. Each QI fund will invest in a diverse portfolio of equities on a global basis.

4. QI's All Commodities Fund will invest 25% of its investors' funds in each commodity sector (Energy, Metals, Livestock and Agriculture) using the same equity investments as used by each of these four funds. This provides an opportunity for investors who want to spread risk more widely across all commodity sectors.

Section 3

Extracts from ‘Money News Today’, 29 January Year 22

‘Industry experts BestGuess plc report on prospects for key commodity markets over the next decade’

In their analytical report for commodity markets, BestGuess plc conclude that commodity investments face mixed future prospects, with challenges emerging over the medium term. Overall returns, however, remain highly attractive for investors that select the right investments. 77% of millennial investors are influenced by environmental, social and governance factors when they consider investments.

Background

Commodity markets in general are volatile, generating wide swings in profitability. They are exposed to unexpected global shocks such as financial market crashes and pandemics. The ongoing Covid-19 pandemic resulted in significant falls in commodity markets last year including in oil, which recorded a negative value for the first time ever. Over recent months, however, commodity markets have recovered as economic growth has improved. Large scale events such as oil spillages and the spread of disease amongst livestock or crops can decimate short-term returns.

Companies across the commodity sector are not known for their compliance with environmental or governance standards. Health and safety standards are often minimal. Environmental restoration costs can be significant. These are high volume, low cost markets where sales volume is critical to success. Often high capital investment is required which can result in higher debt levels and cash flow problems.

Our base assumption is for global growth to continue at 2-4% pa over the next decade with stable inflation and foreign exchange rates.

Energy

Energy demand is expected to grow in line with global GDP. The effects of the pandemic are expected to be temporary and demand for oil is expected to remain stable over the next five years despite increasing taxation of this sector and taking into account increased demand in Year 22 following the pandemic. The second half of the next decade is expected to see growing pressure from environmental groups to replace oil and gas consumption with more climate-friendly fuel alternatives. Our analysts project a substantial reduction in shareholder value over the next decade due to changes in sentiment towards oil and gas. Average debt levels as a proportion of capital employed are high within the energy sector at 80%. However, healthy average returns on capital employed of 11.6% were achieved over the last 5 years. Diversifying into alternative energy sectors is seen as vital for the energy sector’s longer-term survival.

Metals

Despite some volatility in the market for metals in recent years, in particular in Year 21, the outlook is good. Climate-friendly energy alternatives are expected to benefit the metals sector, particularly in electric vehicles and grid infrastructure. Significant developments have been announced in battery technology (using copper and lithium).

Demand for capital to develop new mines is expected to grow. Companies with strong balance sheets are expected to benefit. Industrial relations issues are likely to remain a significant source of industry downtime in parts of Western Africa and South America.

Mining for platinum has reduced in the last five years due to a lack of cost-effective mining opportunities. Gold remains one of the best hedges against risk in uncertain times as was seen in Year 21 during the early stages of the pandemic. We see this pattern continuing. Gold extraction mainly occurs in areas with weaker corporate governance and regulatory controls.

Livestock

There is a strong link between grain prices in the agricultural sector and livestock prices. We anticipate increasing demand for livestock ahead of national GDP for developing countries. The opposite is the case in developed countries, with a small but significant gradual shift to vegetarian and vegan lifestyles. Antibiotic resistance and increasing animal welfare concerns for livestock, alongside a growing animal rights movement, is a threat to shareholder returns, particularly in beef production. In a similar fashion to other commodity markets, livestock prices dipped substantially at the outset of the pandemic in Year 21 before recovering later in the year.

Agriculture

Demand for coffee is growing globally ahead of national GDP and is being met largely by significant production growth in South America, which has the most efficient working practices in developing markets. Agriculture prices are generally ahead of pre-pandemic levels, having fared better than some other sectors of the economy.

Many agricultural products are grown in developing countries affected by the increasing risks of pest infestation, climate-change and adverse weather-related events. Conversely, high crop yields can lead to periods of excess supply in grain and cocoa markets leading to sudden drops in shareholder value.

Section 4

Extracts from Blackstuff PLC's latest annual report for the year ended 31 December Yr 21

QI analysts have already adjusted the Year 21 figures to take account of the COVID-19 pandemic. All figures provided can be used for decision making purposes.

i) Annual report narrative

Background

Blackstuff plc is a small company operating in the energy sector, currently valued at around £50m on the AIM market. Operations are spread across various locations onshore and offshore in West Africa. The company has grown in recent years and now employs in excess of 200 staff. In Year 21, it won the prestigious 'Super Staff Relations' award.

Objectives

Our low carbon strategy is designed to produce energy more efficiently and in new ways, helping to meet an expected rise in demand for energy. Our strategy allows us to be competitive and embrace the energy transition in a way that enhances our investor returns.

We are committed to progressing the Clean Africa Gas Project, using natural gas to generate power and then capture and transport CO_2 by pipeline for storage under the Gulf of Guinea off the coast of West Africa. Sustainability is a growing focus for our company.

Performance and risk overview

It was a successful year for Blackstuff plc as turnover grew, mainly due to new oil wells coming online and productivity improvements. The opportunity was taken to pay down long-term debt levels, in line with the company's aspiration to be debt-free within ten years. Success rates for finding oil from new drilling projects reached 75%, the best in sector. With interest rates likely to rise over the next few years, paying off debt remains a priority. The company was delighted to announce its largest dividend payment to date and intends to pay out at least 40% of future net profits each year in dividends. The share price remains attractive for prospective investors based on the level of 'Probable Reserves' shown in the 'Statement of Oil Reserves'.

The company welcomed four new members to its executive leadership team of five in the last six months of the year, joining the chief executive officer who has been in post for seven years. The market-leading skills these executives bring are expected to help grow the business more quickly.

Operational review

One of our main KPI metrics 'operating profit per barrel (revenue less costs of generating revenue divided by number of barrels sold)' is expected to increase by at least 2% p.a. for the next five years due to reductions in operating costs. Combined with stable operations and predictable future demand, future revenue levels are expected to grow.

Capital equipment in the drilling sector is expensive and the company is delighted to advise shareholders that, over the last 10 years, capital replacement costs have been less than 60% of the industry average. Whilst drill rig downtime has increased from 21 days per year five years ago to 40 days last year, reduced capital and depreciation costs have boosted profit levels.

Key indicators include (last year in brackets):

• Operating profit per barrel	£20 (£18)	(industry average - £15)
• Number of serious injuries or fatalities	11 (13)	(industry average - 3)
• Maintenance costs (as a % of operating costs)	24% (22%)	(industry average - 14%)

Corporate governance

Key indicators include (last year in brackets):

• Executive compensation (% annual increase)	+2% (+1%)
• % of female directors	20% (60%)
• % audit committee attendance	70% (80%)

Our sustainability vision

Our goal is to understand and sustain the health of the environments in which we operate and respect the resource needs of communities which depend on them. We aim to lower carbon emissions, increase our presence in the solar energy market, enhance employee safety, promote human rights, increase our contribution to society and manage environmental impacts such as water use.

Health and safety issues

Our focus remains keeping people safe, managing our operations safely, using industry-leading operating management systems, preventing incidents and being prepared for all contingencies and emergencies.

Licensing arrangements

We are working with regulators in the Gulf of Guinea to renew our major drilling operating licences. An anticipated delay to the renewal of nine months due to minor maintenance matters and poor weather is not expected to affect returns for shareholders.

ii) Financial information

Blackstuff plc	***Yr17 £'000***	***Yr18 £'000***	***Yr19 £'000***	***Yr20 £'000***	***Yr21 £'000***
Income Statement					
Revenue	*67,000*	*87,000*	*61,000*	*71,000*	*95,500*
Cost of generating revenue	*(42,000)*	*(50,500)*	*(44,500)*	*(45,000)*	*(50,500)*
EBITDA	*25,000*	*36,500*	*16,500*	*26,000*	*45,000*
Interest paid	*(12,000)*	*(13,000)*	*(11,000)*	*(9,900)*	*(9,500)*
Depreciation	*(2,500)*	*(3,500)*	*(2,500)*	*(4,600)*	*(3,500)*
Taxation	*(4,200)*	*(8,000)*	*(1,200)*	*(4,600)*	*(12,800)*
Net profit	*6,300*	*12,000*	*1,800*	*6,900*	*19,200*
Statement of Financial Position					
Non-current assets	*165,000*	*192,500*	*176,000*	*158,700*	*166,900*
Non-current liabilities	*(131,000)*	*(145,500)*	*(124,000)*	*(106,000)*	*(104,700)*
Current assets	*8,500*	*7,000*	*3,500*	*6,200*	*9,100*
Current liabilities	*(9,500)*	*(12,500)*	*(12,200)*	*(10,100)*	*(8,900)*
Net assets	*33,000*	*41,500*	*43,300*	*48,800*	*62,400*
Equity information					
Average share price (pence)	*75*	*100*	*50*	*60*	*75*
Number of shares in issue	*50m*	*50m*	*70m*	*70m*	*70m*
Other information					
Cash and bank balance (year-end) (£'000)	*2,750*	*1,250*	*-500*	*750*	*1,500*
Dividends paid (pence)	*4*	*7*	*0*	*2*	*8*
Dividends paid (total) (£'000)	*2,000*	*3,500*	*0*	*1,400*	*5,600*

iii) Extract from Notes to the accounts

Statement of oil reserves as at 31 December Yr21

Discovered reserves	2 million barrels (asset value = £14/barrel)
Probable reserves	21 million barrels (asset value = £6/barrel)
Exploration reserves	5 million barrels (asset value = £1/barrel)

The above oil reserve levels have been independently assessed by Erskine Surveyors plc, an established company providing analytical services to the oil and gas industry.

Definitions

'Discovered reserves' have been found through prior exploration. There is a 95% degree of certainty that the values reported can be extracted through drilling.

'Probable reserves' are indicated as likely to be available for extraction, based on extensive research or adjacent discoveries which increase the likelihood of oil being found. There is a 50% degree of certainty that the values reported can be extracted through drilling.

'Exploration reserves' are speculative and based on analysts' experience of similar oil findings elsewhere. They are not based on any identified reserves. There is a 10% degree of certainty that the values reported can be extracted through drilling.

iv) Extract from the external auditor's report

Opinion

In our opinion:

- the Financial Statements of Blackstuff plc ('the Parent Company') and its subsidiaries ('the Group') give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December Yr21 and of the Group's profit for the year then ended.

Key audit matters

Carrying value of statement of oil reserves

Key audit matter description

The carrying value of statement of oil reserves assets as at 31 December Yr21 is £159 million (Yr20: £151 million). The assessment of the carrying value of oil reserves assets requires management to exercise judgement. Management's assessment requires consideration of a number of factors including, but not limited to, the Group's intention to proceed with a future work programme for a prospect or licence, the likelihood of licence renewal and the success of drilling and geological analysis to date. We have pinpointed the key audit matter in this area to those assets in the Group's portfolio which are at higher risk of impairment, specifically those in West Africa.

Section 5

Key ratios based on Blackstuff PLC's latest annual report for the year ended 31 December Yr21

	Yr17	Yr18	Yr19	Yr20	Yr21
EBITDA £'000	25,000	36,500	16,500	26,000	45,000
Net profit £'000	6,300	12,000	1,800	6,900	19,200
Capital employed £'000	164,000	187,000	167,300	154,800	167,100
ROCE %	15	20	10	17	27
Gearing %	80	78	74	68	63
Market value of company £'000	37,500	50,000	35,000	42,000	52,500

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