FAE Exam

GUIDE 2022

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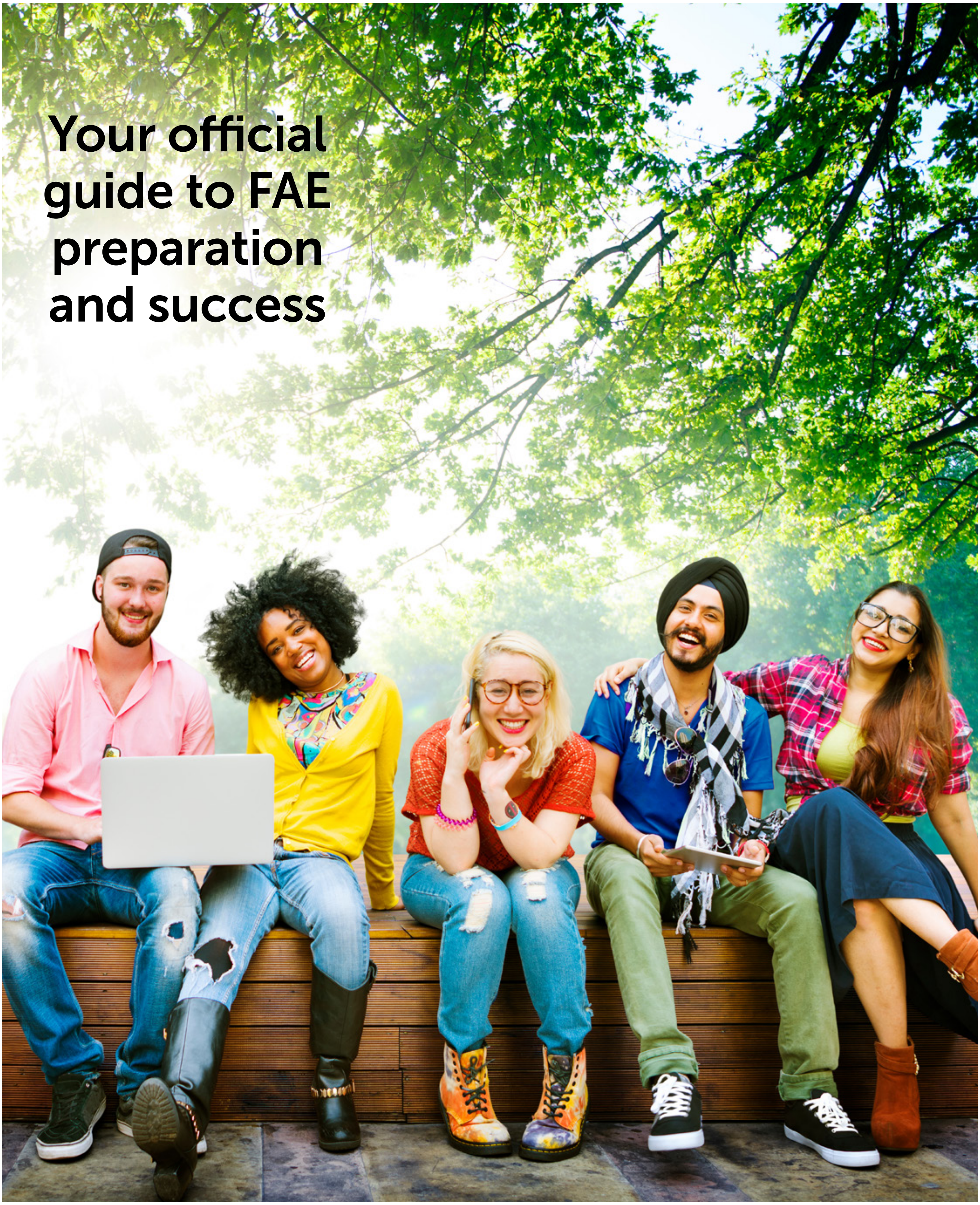

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Welcome

I am pleased to again introduce this very important and timely publication and to commend it to you on the final lap of your preparation for FAE Summer 2022.

This initiative, building on the success of the 2021 FAE Exam Guide, is a further demonstration of the shared commitment that the Education and Examinations departments have in making FAE as transparent and fair an examination process as possible.

The articles that follow contain valuable insights into the priorities and concerns of the examination teams and build on a series of interviews which were an important initiative in FAE Summer 2020 and FAE Summer 2021.

No doubt many of you will have heard from your predecessors how helpful that guidance was to them, as noted in the subsequent report of the Chartered Accountants Student Society of Ireland.

My advice is to ensure that you fully understand the points being made (which are designed to guide and help you) and relate them to cases, notes, and questions you are already familiar with.

Above all, I wish you every success in FAE Summer 2022.

Paul Monahan
FAE Academic Coordinator

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JULY/AUGUST 2022

In conversation with the FAE Core Examiner

Paul Monahan, FAE Academic Coordinator at Chartered Accountants Ireland, sat down with the FAE Core Examiner to talk through some important topics ahead of this year's Final Admitting Examination. Here's how it went.

The complexity of the external environment

Paul Monahan (PM): **Would it be fair to assume that, in framing this year's FAE Core exam paper, you recognise the complex and multi-factorial nature of the external environment we are operating in currently, as compared with the environment of the past two years, which was dominated by just one issue—the pandemic?**

FAE Core Examiner: Yes, I think this would be fair to say. FAE Core has always reflected the current external environment. While this has been dominated by the pandemic up until recently, macro events are evolving so rapidly that there are now many elements at play.

Take, for example, the war in Europe, and geopolitical tensions elsewhere globally. All are having an impact beyond their immediate domain.

If we look at what is happening to commodities, for example, and at supply chain disruption and inflation – all are very real global impacts we can tangibly understand, and whose effects we can see locally.

Naturally, these issues are going to influence how the exam is written in some way, and there is the opportunity for an informed student to introduce relevant examples.

New FAE Core Topic Area 3: DAAIET

PM: **The clarifications to the Competency Statement for Data Analytics, Artificial Intelligence, Emerging Technologies (DAAIET) — and, in particular, the inclusion of 3.1— could be seen as moving DAAIET more towards the core (no pun intended) of typical FAE case studies. Would you view this as a reasonable interpretation?**

FAE Core Examiner: Yes I would, and I have been very conscious of the desire to transform FAE Core Topic Area 2 Strategic

Management and Leadership, and also welcome the move of FAE Core Topic Area 2.5 to FAE Core Topic Area 3.

Information technology (IT) strategy is as important as company strategy, but it has a natural fit with the technology topic, and it is a great way to link technology with strategy.

I have been particularly impressed with Topic Area 3.1.1 and the important distinction made here between organisations before and after the "Cloud Era." DAAIET is a new subject and, in the FAE, new subjects tend to evolve—as with APM into Advisory, for example.

Professional competence

PM: We continue to emphasise the importance of Professional Competence, in both the FAE and in students' careers. We make the point that advice is judged partially on how it is communicated and how well it is provided in the context of the situation requested. Would you concur here, and do you have any insights to offer?

FAE Core Examiner: I absolutely agree, and this is reflected in the mark allocation for Professional Competence. The CIRRUS platform provides opportunity to improve communication skills.

In general, we have seen better and more focused answers since its introduction. Earning strong and consistent Professional Competence marks comes down to practice, and practice alone.

We do see students who clearly believe they can knock it out of the park on the first question, but then the rest of their paper is a mess. It is essential that students practice on the CIRRUS platform and use the practice papers to achieve consistent results.

This comes down to structure. Start by identifying what is being asked. Next, follow with an introduction to frame the answer, then get to the requirements. There will be plenty of hooks in the case on which to hang the answer. Knowing which hooks to use is paramount.

If a question asks for a recommendation, provide one. If you have done your analysis correctly, and selected the appropriate facts, then your analysis should make your recommendation easier.

It is worth mentioning that we often see a correlation between good technical marks and a strong result in Professional Competence, so there is a reinforcing effect.

> **We saw a great improvement in the quality of journals as a result of last year's article, and it would be remiss of us not to remind students to digest this article thoroughly.**

Topic Areas 2.3 and 2.4

PM: We would like to see Topic Areas 2.3 (The Characteristics Required for Entity Transformation) and 2.4 Integration (Considering the Wider Impact of Strategic Activity) being introduced in Strategic Management & Leadership as a further step towards integrating different subject areas. This would better reflect the reality of commercial life. Would you agree?

FAE Core Examiner: Yes, and this is definitely part of the logic behind Topic Areas 2.3 and 2.4. Exam questions requiring technical knowledge in more than one subject area better reflects commercial reality, and the blended approach has been employed regularly as an assessment tool in the FAE Core paper in recent years.

We have blended questions so that a costing or investment appraisal decision has been associated with a risk or technology question, for example.

These parts of the syllabus are aimed at arming students with the skills they need to understand business. Each is also an important topic in its own right.

Financial Reporting and journals

PM: Within Financial Reporting, we continue to place significant focus on journal entries in our case study teaching. Does this approach reflect the importance you attribute to this aspect of Financial Reporting?

FAE Core Examiner: Without getting into specific weighting—in general, yes. Journals remain essential to resolving Financial Reporting issues in a working environment, and FAE Core Financial Reporting questions reflect that.

You might recall that, in last year's FAE Exam Guide, a dedicated article was published on the topic of journals. We have often fed back through the various FAE Committee reports the varying quality in journals over the sittings, ranging from excellent to woeful.

We saw a great improvement in the quality of journals as a result of last year's article, and it would be remiss of us not to remind students to digest this article thoroughly. The number of marks available for good practice around journals cannot be overstated.

You can read last year's FAE Exam Guide on the Chartered Accountants Ireland's website.

Examiner Insights on Financial Reporting

The FAE examiner has been consistent in their messaging over the past five exam sittings, shedding light on key trends and common mistakes. **John Munnelly** explores how students can excel on the Financial Reporting front in this year's Core exam and avoid losing valuable marks.

Published this time last year, our 2021 FAE Exam Guide opened with an in-depth article offering insight into past FAE Committee Examination reports on exam performance in the area of Financial Reporting.

This article is worth revisiting again as a great place to get the conversation on this topic started — and we have reason to believe that a sizable number of students did read the article when it went live last year, because the FAE Committee noted that performance in the Financial Reporting part of last year's FAE Core exam had improved.

"There is significant improvement in the quality of journals in Financial Reporting questions in the Core suite, which is pleasing, as previous reports have consistently highlighted poor student performance leaving obtainable marks behind," the FAE Committee Report for the 2021

> **"Candidates should ensure that journals are balanced with clear reference to debits, credits and to where the journals should be posted. Strong candidates will also provide short narratives for each journal and offer commentary on disclosures as may be relevant."**

exams, published last September, stated.

It's clear here that the message landed with the student population sitting those exams. On reading the FAE Committee report from January 2022 (the repeat cycle), however, the message from the examiner was different.

"The first two questions were on Financial Reporting with Leases and Joint Ventures being addressed. Candidates identified the relevant standards, made a decent attempt at calculations and for the most part (but not always) provided journals," the examiner said.

"In some cases, journals were of a questionable standard, particularly when candidates chose to incorrectly debit bank instead of receivables, and in other isolated cases when journals did not balance. Almost all candidates failed to identify some key strategic points in these questions, notably that there was scope to acquire additional capital items because some purchases did not qualify for the grant.

"Another point missed was that there was a significant quantity of retail stock remaining at the end of the year that should be added to inventories."

Missed opportunities

These comments suggest some slippage in the quality of exam responses to the Financial Reporting element of this FAE Core sitting, and there is insight to be gained from the examiner's analysis.

Examiners will always pick up on an emerging practice or trend among the student population. Over the course of the previous five FAE Committee Examination reports, from January 2020 to January 2022, we can see a number of recurring comments from the examiner worth paying attention to, outlined below:

Journal presentation

The examiner expects a minimum standard when it comes to the presentation of journals, as noted by the FAE Committee Report in January 2020.

"The examiner stresses that whenever journals are required, they will generally form a key element of the question," the report read.

"Candidates should ensure that journals are balanced with clear reference to debits, credits and to where the journals should be posted. Strong candidates will also provide short narratives for each journal and offer commentary on disclosures as may be relevant."

Three key messages

There are three key messages in this quote from the FAE Core examiner. The first is that journals are a key feature of the exam question where they are required.

So, there will be marks for working towards the journal—i.e. the makeup of the calculations that go into the numbers for the journal—as well as the journal itself.

This is the equivalent of being rewarded for your hard work by producing a debit and credit at the end of it.

We know the focus put on this area in the Integrated Case Days. The Trafel case on the Finn ICD is one example of a journal that needed to be built up logically.

The second message illustrates the examiner's concern regarding the varying quality of journals presented. Candidates should be able to present their work in a clear and understandable format.

The examiner understands that some candidates have difficulty constructing a tabular approach on the exam platform and will accept either of the following:

Debit: Investment in associate (SOFP) €/£200
Credit: Share of profit of associate (P/L) €/£200
Reason: Being recognition of post-acquisition retained earnings of Z

or

	Debit	Credit
	€/£000	€/£000
Investment in associate (SOFP)	200	
Share of profit of associate (P/L)		200
Being recognition of post-acquisition retained earnings of Z		

**Note here how both approaches succinctly transmit the required details of the journal.*

The third message the examiner wishes to get across in respect of this overall comment is the need to provide a reason for the journal—i.e. the last line demonstrated above "being recognition of post-acquisition retained earnings of Z."

It is important that the candidate demonstrates their understanding of the journal produced for the examiner. This is not just a nice-to-have – there will be marks for it.

By labelling journals properly and succinctly, you will earn direct credit, and also contribute towards the Professional Competence marks that take into account the totality of your work.

This message from the examiner was again evident in the FAE Committee Examination report of October 2020 on page 21: "Journals were, for the most part, well presented."

On page six of the FAE Committee Examination report of January 2021, the same point popped up yet again: "Responses to this second Financial Reporting question were often disappointing...journals were sometimes missing, and relevant standards [were] not being referenced."

Parts of exam questions going unanswered

The Financial Reporting questions are usually the best-performing elements of the FAE Core paper. Yet, despite this, parts of these questions are being left unanswered by a sizable cohort of students.

As Paul Monahan, FAE Academic Coordinator at Chartered Accountants Ireland, puts it: "Not answering each part of a requirement is simply opening your hands and dropping marks onto the floor."

Here, the examiner had this to say in the FAE Committee Report January 2020: "Most candidates answered this question fairly well although many did not deal correctly with the prior period adjustments, and some did not deal with the Inventory valuation issue."

Highlighting to readers the issue as they encountered it in the January FAE Core 2020 repeat examination, the examiner states: "Whilst the core issues were reasonably answered overall and most identified that revenue had been incorrectly recorded in the period, several candidates did not note that likelihood that a prior period error may have also occurred. The vast majority of candidates identified that a provision should be made for the amounts owing by the customer that had gone into liquidation and provided calculations and journals accordingly. However, many did not suggest that the remaining trade debtor balances should also be investigated as customers may have fallen behind standard credit terms." (FAE Committee Report October 2020, page 23.)

An example of this can be found on page two of the August 2020 FAE Core Examination paper: "I would like your help in ensuring the correct revenue has been recognised in Z's company financial statements for the year ended 30 June 2020. Please ensure you provide explanations for your workings by reference to the appropriate accounting standard and include the relevant journals. I would like you to include any other implications for Z's year-end company financial statements that you think are necessary."

Revenue is the obvious and dominant standard here. However, the 'any other implications' reference in the last line indicates that there are multiple accounting standards to be considered, including likely disclosures.

"Most candidates answered this question fairly well although many did not deal correctly with the prior period adjustments, and some did not deal with the Inventory valuation issue."

Exam tips and techniques for top marks

Old-fashioned exam technique is an important part of the key to getting a good mark in your Financial Reporting questions, along with technical knowledge. Ensuring a comfortable knowledge across all examinable standards is a requisite.

It might be useful to create your own summary of each standard, laying out the standards where you can get to them quickly when needed.

When practising exam questions, it is also worth isolating each part of the question by sketching each part out on a notepad and crossing out the sub-requirements one by one as you attempt each one.

It is crucial that the planning phase of your Case Study approach identifies compound questions that have multiple requirements.

This will help ensure that you are accounting for all marks, and not leaving precious marks behind. The FAE Core Examining team has never awarded a mark for a blank space.

Finally, label those journals and take the extra time to practice your journal style, be it narrative or tabular. Ideally, this should include the practice cases on the CIRRUS platform. These are the 'gimme' marks and cannot be left behind.

Remember, all of this reflects on the Professional Competence mark awarded to the question. The more of these little elements you perfect in advance, the better your chance of getting a higher Professional Competence mark.

There are no shortcuts here. Success will come only when students have mastered the question by answering through repetition. These are the hard yards, but they can make all the difference when that 50 percent pass mark is in sight.

In an open book exam like FAE, you have the significant advantage of the list of standards as a checklist to help identify potential implications.

The examiner is more direct with their messaging as they encountered the same issue recurring in the January 2021 FAE Core Repeat Examination: "Responses to the initial part of the question requiring the production of a cashflow statement were generally of a reasonable standard, however many candidates did not produce the narrative that was specifically asked for and lost considerable marks as a result. The examiner advises that questions will usually have more than one 'ask', each of which need to be addressed" (FAE Committee Report January 2021, page 6).

This comes down to examination preparation. There will always be additional elements to Financial Reporting questions and each element contains marks to be earned.

Students must clearly identify each of the moving parts of the question and ensure that each can be addressed. Leaving a blank question for any reason is unacceptable as it reduces overall marks.

Students who have left these parts of Financial Reporting questions unanswered should remember that they represent as much as 30 percent of the technical marks available. This is then further compounded by limiting the Professional Competence mark that can be earned as the question is incomplete.

We know that a focus on sample marking schemes, such as those provided by educators in the later versions of the Integrated Case Days, will give you numerate examples of the marks that can be lost through the practice directly addressed by the examiner above.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Streamlined syllabus delivers strategic results

The updated Strategic Management & Leadership module of the FAE Core syllabus lays the foundations for a set of skills critical to a successful career as a Chartered Accountant, writes **John Munnelly**.

The Strategic Management & Leadership module (Topic 2) of the FAE Core Syllabus was redesigned ahead of the 2021/2022 academic year, reducing seven separate syllabus areas down to four.

The move was designed to give the modules a better, more logical, flow, which would ultimately help students to build a set of skills a Chartered Accountants will rely on throughout their career. The four topic areas in this newly streamlined module are:

- The Strategic Planning Cycle;
- Tools to Support the Strategic Planning Process;
- The Characteristics required for Entity Transformation, and;
- Integration – Considering the Wider Impact of Strategic Activity.

Being able to take an organisation's vision and purpose and translate it into executable, achievable, steps comes down to the strategic planning cycle. Its importance cannot be overstated.

Ultimately, its aim is to give students the skills they will need to decipher an organisation's mission and vision using tools and frameworks that take into account and examine both internal and external factors.

In doing so, they will be able to formulate a number of strategic avenues, from which objectives and measurements can be derived.

The Rational Model offers an excellent linear approach to understanding the order and sequence in which strategy can be considered and executed.

The tools to support strategy are rooted in management accounting and corporate finance. Here, the examiner favours tools like payback, discounted cashflow, relevant costing, etc., because of their flexible nature.

Once a student understands these techniques, they can then be deployed to support a proposed course of action, or to refute an assertion.

What is important to remember here is that there can be some crossover between exam questions that borrow elements from each other and meld together.

Students should note that these tools can also crop up in other questions, which is testament to their usefulness. Also grouped in this topic area are business planning, negotiation, and communication.

The characteristics required for entity transformation is the third topic area, developed in response to the dynamic and ever-changing nature of the business environment and its effects on an organisation.

Students will be familiar with the concept of change management, but, here, they will require a wider set of skills.

Diagnostic skills were introduced with the STRONG Model as a means of demonstrating to students that, with their wider appreciation of the topic, they play a role akin to that of a doctor attempting to diagnose a patient with the goal of administering treatment.

This is why the principles of leadership are cited here, along with very useful practical execution tools, such as project management principles.

Integration, the final topic area, attempts to puts forward the idea that strategic activity is linked to other parts of the syllabus in the same way that strategic activity affects all parts of a business.

Various models of thought – such as strategic, systems, and critical thinking, for example, or the way in which value creation sits atop problem-solving – will be invaluable to students throughout their career as Chartered Accountants.

Several important ideas are introduced in this topic area, which calls attention to the implications of strategy against risk, corporate social responsibility, financial reporting, data analytics, and artificial intelligence.

What is important to remember here is that there can be some crossover between exam questions that borrow elements from each other and meld together.

The examiner recognises that some aspects of this blended approach have been incorporated into the case teaching material provided to students. This is particularly evident in the five new mini-cases developed for the FAE 2021/2022 teaching cycle (i.e. Game Platter, Kelp Help, Makron, Steel Wheels, and Moyes Western Oil).

Approach for students

Students will be able to recognise the different elements of the questions in the FAE Core exam. They will be well sign-posted by the examiner. And, remember, the examiner likes to use conjunction words like 'and,' 'also' or 'in addition.'

Good preparation rooted in practice, taking the time to identify all of the requirements—and then answering those requirements—is the key to exam success.

Crucially, this practice needs to include the CIRRUS platform, because the practice papers provide valuable opportunity to address the presentation of both narrative and computational questions in a realistic exam setting.

Sustainable choices for the common good

Paul Monahan, FAE Academic Coordinator, and Marian Curry, FAE Educator for CSR, Sustainability and Integrated Reporting, talk to John Munnelly about the powerful role sustainable business can play in our shared future.

In economics, the "tragedy of the commons" describes a scenario in which individuals motivated by self-interest take actions that result in the depletion of shared and finite resources.

The concept has its roots in the 19th Century when William Forster Lloyd, a British economist, sought to establish how self-interest among cattle-herders using shared land for grazing, might impact the good of the group as a whole.

This land, called commonage, gave two or more cattle-herders shared access to grazing rights on land held in common ownership.

The idea was that this shared ownership would allow the cattle-herders to benefit from a shared resource — in this case, the land or 'commonage' — under an arrangement entitling each one to graze an agreed number of cows.

Lloyd postulated that, if one

herder put more than their allocated number of cows out to graze on the commonage, overgrazing could result.

In this scenario, while there may be immediate benefit for the cattle-herder grazing more cows, the group would ultimately suffer as a result of the depletion of the resource they share — the quality of the grazing land on the commonage, in this case.

If every single one of the herders made the same decision to over-graze — an economically rational decision if considered purely from the perspective of self-interest and the individual — the commonage would be severely depleted or even destroyed, to the detriment of all. The Tragedy of the Commons, in other words.

In densely populated urban areas, when large number of individuals make this choice at the same time, however, problems (aka traffic jams) will occur. When congestion develops, traffic destroys the function of the shared resource as an efficient pathway for daily transportation.

The modern-day tragedy

Today, we continue to see examples of the Tragedy of the Commons playing out around us. Back in 2020 at the onset of the global pandemic, concern about what might lay ahead and how it might impact global supply chains prompted some people to bulk-buy toilet paper and other common grocery items, leading to shortages on shop shelves.

Another, more enduring, present-day example is traffic congestion. Traffic jams are ultimately caused by individuals using their own vehicle on public roads (i.e shared or common infrastructure) to serve their own transportation needs (i.e self-interest).

This approach can work in locations with lower population density where there is limited or no access to public transport.

In densely populated urban areas, when large number of individuals make this choice at the same time, however, problems (aka traffic jams) will occur. When congestion develops, traffic destroys the function of the shared resource as an efficient pathway for daily transportation.

Furthermore, emissions from individual cars harm the atmosphere, contributing to large-scale societal problems. To minimise environmental harm and preserve the function of shared public roads, individuals cannot operate purely out of self-interest.

In business, organisations also contribute toward the Tragedy of the Commons in different ways — through water consumption and power usage, for example, or by influencing our habits as consumers by promoting irresponsible consumption, fuelling the artificial 'need' for consumption, and deliberately building obsolescence into products and services.

Why does sustainability matter?

The emergence of environmental, social and governance (ESG) considerations in business is having the effect of slowly changing corporate behaviour. Today, more organisations are actively seeking to limit the extent of the damage their activities have on the environment.

It is always worth remembering, however, that human economic activity has long resulted in damage to the wider ecological systems that sustain life on this planet.

The Tragedy of the Commons occurs every time an organisation acts in a manner that does not consider ESG in business.

Many leaders genuinely struggle to understand how to incorporate sustainability into the management of their organisation in a meaningful way. One option here might be to consider sustainability in the context of risk.

Sustainability gives rise to a

whole new range of potential risks for those organisations that choose to ignore their obligations in this area. Now, we look at the consequences any failure to address these risks might have on the organisation's reporting. Examples here include:

1 **Fines and penalties**
In the near future, fines and penalties will be imposed on corporate entities for infringement of regulations or non-compliance. We have already seen the motor industry fined for vehicle emissions claims. Investment vehicles have faced accusations of 'greenwashing' and making spurious claims about their eco-credentials.

2 **Losing to competitors**
Becoming a genuinely sustainable business is not just a 'nice-to-have' or an attractive addition to the annual report. It is a competitive proposition. Those companies that commit to getting it right will have a commercial advantage over competitors that are slower to do so.

3 **Losing customers**
Can you imagine being the CEO of an organisation that is losing market share because customers have become disillusioned with its lack or commitment to sustainable practice? Being sustainable is rapidly becoming part of the social license businesses need to operate successfully. Simply put, it is expected.

4 **Stranded assets**
Asset impairment because of over-reliance on finite resources will lead to write-downs that could eventually threaten the business model.

5 **Future financing**
The money markets always seek opportunity. Trillions of dollars have found their way into available capital for those who are financing sustainable projects.

6 **Attracting talent**
Organisations that do not demonstrate a commitment to sustainable practices are not going to retain or attract talent now or in the future. For younger candidates, tackling climate change is a heartfelt priority. Few will want to be part of a company that is not committed to ESG.

Patagonia: ESG in action

Patagonia, the US-headquartered outdoor clothing brand, is an interesting example of a global corporation that has woven sustainability into its brand purpose. The company announced a new mission statement in 2018: "We are in business to save our home planet." To back up these claims, here is what Patagonia has done since:

- Passed on the full 'Trump tax cut' – estimated to be $10 million – to environmental causes.
- Donated one percent of annual profits to environmental causes.
- Banned certain professions from purchasing its clothing — in 2020, Patagonia stopped selling co-branded fleeces into companies that did not share its purpose of saving the planet. This meant calling a halt to product sales on Wall Street and in Silicon Valley.
- In 2011, Patagonia posted an ad in the New York Times asking people not to purchase a new jacket it had just released during that year's Black Friday sales. The ad stated : "Everything Patagonia makes, takes something from the planet that they cannot give back. Each piece of Patagonia clothing, whether or not it is organic or uses recycled materials, emits several times its weight in greenhouse gases, generates at least another half garment's worth of scrap, and draws down copious amounts of freshwater now growing scarce everywhere on the planet." In placing this ad, Patagonia drew attention to the consumer frenzy purposely prompted by 'sales day' promotions like Black Friday — i.e. the encouragement of irresponsible consumption.

In taking these steps in support of its mission statement, Patagonia has incorporated ESG practices into its business model in an authentic and meaningful way.

Rebuilding our world

William Forster Lloyd's Tragedy of the Commons was a thought experiment aimed at demonstrating the negative impact of self-interest on the collective good.

In reality, many of the participants in the 19th Century commonage schemes felt a great sense of connection and responsibility to each other.

They often practiced transhumance – i.e. moving their animals to different parts of the commonage to rest the land – thus preserving the natural ecosystem to the benefit of all.

Transhumance required cooperation and connection. Over 200 years later, the same sense of connection and shared responsibility has fallen largely by the wayside in the self-interested pursuit of profit, leading to the inequality and inequity at the heart of the climate crisis we face today.

We are all global citizens – how can we rebuild this sense of connection to our environment?

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

AI evolution brings greater integration

Artificial Intelligence is evolving as the increasing integration of underlying technologies delivers better results

FAE Core Topic 3.3 – Artificial Intelligence (AI) is underpinned by three pillars, broken down as follows:

1. Natural Language Processing (NLP);
2. Machine Learning (ML); and
3. Robot Process Automation (RPA).

Each pillar has its own set of principles, but students need to be aware that, very often, the AI we experience in our daily lives uses a combination of all three.

As the three pillars of AI technology increasingly meld, it is no longer simply a case of one technology versus the other.

It is, therefore, important to consider how each one of the three can play its part in solving a problem or creating a better customer experience.

Think about about how each of the three pillars can work together to provide solutions that combine speed, efficiency, and cost-effectiveness.

Digital voice assistants

A good everyday example of an AI system that uses all three pillars are the digital voice assistants used in smartphones and smart speakers.

In order to respond to our requests and simulate conversation, digital voice assistants use a combination of Natural Language Processing, Machine Learning, and Robot Process Automation.

The digital voice assistant is driven predominantly by NLP, and we provide the "natural language" — i.e. voice commands — they can then process.

The NLP translates our voice commands into words based on Machine Learning programs that use knowledge graphs to convert verbal instructions into text.

The text is searched against language databases using automated routines in a process called Robotic Process Automation. The results are then returned and communicated back as a response to our questions or instructions.

Airline bookings

Airline booking websites provide another useful example of the three pillars of AI interacting effectively in one system.

When you visit one of these sites, you are 'pulled' through the booking process, and information is captured along the way through automated routines, ready to populate once your booking is complete.

This part of the process is a good example of RPA working quietly in the background.

The Machine Learning kicks in as soon as you visit the website — capturing information on the country you are located in and the airport you are most likely to depart from, for example, almost immediately.

ML routines respond to the information you input, bringing you through the system, narrowing your choices as you go, and knowing when to offer additional services — right up until your initial enquiry turns into a sale.

NLP, in the form of chatbots on the airline's website, offer automated help. Where they cannot help, they will attempt to refer you to a human customer service agent.

RPA routines then populate the forms required for air travel. This means that, when you arrive at the airport to check in for your flight, the airline's website will already have taken care of the legalities, allowing you a smoother transition through the terminal.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Negotiation – does it have to be win or lose?

Negotiation can be a high-stakes game carrying potential risk for both parties. By revisiting some of the principles of negotiation, however, a positive outcome can be achieved for all.

In sport, we want to compete and test ourselves against the competition with the intention of winning, and we often see the same competitive principle — winning above all else — finding its way into business culture.

In some respects, this is understandable. Businesses have competitors, and competition is healthy. Business is far more complicated than simply winning, however.

While collaboration and partnership may not sound as exciting as winning, both are arguably just as important for businesses navigating an increasingly complex and interconnected world.

Consider some of the global events that have occurred recently: the global pandemic and the collaborative race to develop and distribute vaccines; the Russian invasion of Ukraine and ensuing war; and the high-profile celebrity

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disputes we have seen play out in court and the public arena.

Negotiation has played a part in all of these scenarios and you can learn from them and apply the relevant principles to your studies, as outlined below.

Different negotiation approaches

There are two types of negotiation that can be used:

Distributive negotiation – a type of negotiation where one party tries to maximise its share of finite resources at the expense of the other party. This is also known as win–lose.

Integrative negotiation – a type of negotiation whereby both parties try to work together so that both can gain from this collaboration. This is also known as win–win.

So, is one better than the other? When should you use distributive negotiation and when is the integrative approach the better option? Below are two scenarios that illustrate how both have played out in real-life scenarios.

Distributive approach

We like to believe that the leaders of organisations work together as a trained and skilful negotiating team, united in working towards achieving unified goals and objectives — and with the organisation's best interests at heart.

Unfortunately, however, some leaders put their own interests above others in their organisation, believing that they are integral to its success. When this behaviour takes root, it can manifest quickly into win–lose behaviours that can pervade the organisation – and to its detriment.

Lehman Brothers

We can see one example of this behaviour in Lehman Brothers, the now defunct US investment bank. Founded in 1847, Lehman Brothers grew to become an affluent trading house on Wall Street, but in 1983, the firm had to merge with American Express to avoid bankruptcy.

Part of the reason behind Lehman's failure at this time was the intense enmity that had developed between Peter Peterson, chairperson of the banking department, and Lewis Gluckman, head of the trading department, who was joint CEO.

There was an unspoken belief within the firm that the traders were considered subordinate to the bankers – but it was the traders who were generating the bigger income for Lehman Brothers.

As the rivalry intensified, both Gluckman and Peterson struggled for sole CEO supremacy within the company.

In 'win–lose' mode, each one was making decisions on a distributive basis and without regard for the symbiotic position they shared.

Eventually, Gluckman ousted Peterson to become the sole CEO. The trading department began to act unilaterally, refusing to negotiate decisions with Peterson and the banking department.

As a result, when market conditions deteriorated in 1983, Lehman Brothers had to seek a merger to avoid being placed into bankruptcy.

On a separate note, Lehman Brothers would once again suffer as a result of this internal 'win–lose' dynamic 25 years later when the firm was forced to file for bankruptcy on September 15, 2008.

Integrative approach

Adopting a competitive approach to negotiating can be restrictive, tampering down any flexibility or creativity. On the other hand, taking a versatile approach with creative thinking can generate more value from negotiations.

California energy producers

In the following example, two US energy producers – Southern California Edison Co. and Bonneville Power Administration – agreed a joint partnership through creative problem-solving that allowed both sides to meet individual objectives.

In 1991, the two companies met to address some environmental concerns levelled at them — namely, to improve air pollution in southern California and discuss dwindling salmon stocks on the Columbia River.

Their response was to enter into negotiation on a win–win basis — i.e. an integrative approach to solving problems.

During the summer months, Bonneville Power, which was situated upriver, would increase the flow of water into the Columbia River. This would automatically increase the amount of hydroelectric power generated by California Edison, which was situated downriver.

The increased flow of water allowed the young salmon to swim through the channels without being lost or eaten by predators, which in turn increased their survival rate. The salmon population increased and, with it, tourist activities associated with salmon angling on the river.

Later, in the autumn and winter months, California Edison returned the power it had borrowed during the summer months to Bonneville Power. As a result, Bonneville had little need to run its coal-fired and oil plants during the summer months, thereby reducing its carbon emissions – crucial at a time where smog-producing power was at its worst.

Not only did this negotiation preserve wildlife and decrease emissions, but both parties were able to agree a solution without the need to invest significant amounts of money.

How to frame integrative versus distributive negotiation

There are many ways to capture the differences between the two approaches to negotiation. A tabular approach can be particularly useful. Each of the traits listed below offer a useful way of describing the negotiation process:

Trait	Integrative negotiation	Distributive negotiation
Orientation	Win–win	Win–lose
Issues	Identify all issues that can be negotiated	Tight focus on a single issue at a time
Strategy	Collaborative and collegiate	Competitive – win at all costs
Communication climate	Open and constructive	Closed, controlled, and selective
Relationship	Relationship building a priority	Relationship unimportant

One simple negotiation framework is the Rapport, Analysis, Debate, Proposal, Agreement, and Close (RADPAC) model.

Understanding the RADPAC model

The purpose behind RADPAC is to bring both parties through the different stages of negotiation outlined, with the aim of reaching agreement.

The model is uniform in its approach, and applies equally to both parties, so that everyone understands where they are in the process – an important factor for trying to reach agreement.

RADPAC is useful once the parties understand the type of negotiation they are facing into. Parties that have the power in distributive negotiation may be unwilling to adjust their tactics under any circumstance.

It is important to recognise this, because it can frame whether the effort to engage is worth the investment. Equally though, through careful negotiation, the distributive negotiation can be turned into integrative.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Foreign exchange hedging – getting past the confusion

Building on the article on foreign exchange hedging published in last year's FAE Exam Guide, **John Munnelly** spoke to the Advisory examiner to offer further explanation and analysis of this tricky topic.

Why is it that students often find the various approaches to managing foreign exchange risk so difficult to define and execute?

First, I think we often see a fundamental confusion regarding the nature of foreign exchange risk and students' ability to clearly identify the specific risk in the exam question.

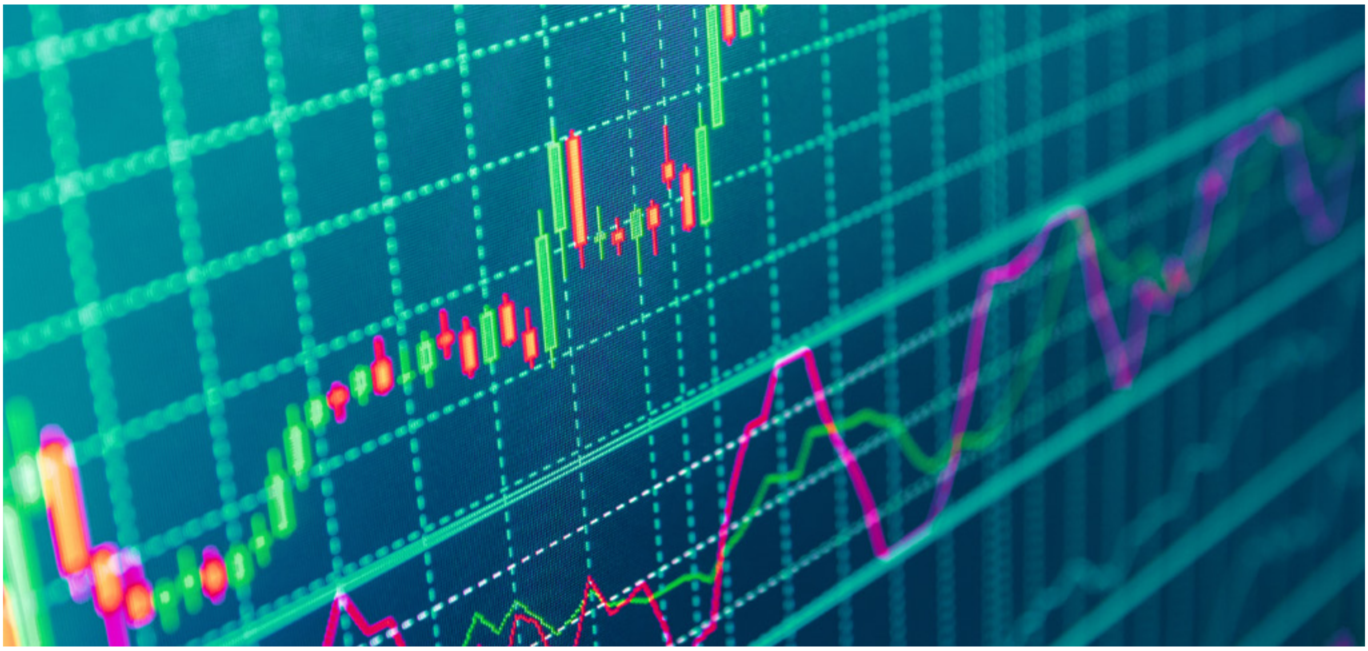
Secondly, students sometimes demonstrate poor technique in 'setting up the hedge' using various hedging strategies.

Real vs abstract risk

As a starting point to moving beyond these challenges, we must first consider the nature of foreign exchange risk. The source of the risk, and the necessity to manage this risk, is real. It is not abstract.

The risk here is the quantifiable exposure to an adverse market movement in a specific exchange rate — and, crucially, the company does not control the exchange rate.

The rate of exchange will be determined in the future over a period of time — a minute, month,



or year, for example — by the supply of, and demand for, the respective currencies.

Risk is embedded in all commercial decision-making and, unless you can see into the future, market risk is, by definition, uncontrollable.

If the risk is uncontrollable, the question is simply: 'to what degree is this something we should be worried about?' This is a risk-based judgement that should be based on the potential for adverse impact.

When it comes to risk management, we are not concerned with potentially favourable movements in the exchange rate. We are concerned only with the so-called 'downside' of unpredictable future exchange rates.

Once we quantify the scale of the risk, and how much of that risk we want to mitigate, reduce, or eliminate, the next question becomes: how do we do this?

Managing the risk

Here, we have choices. Based on past exams, however, we can see that there has been some confusion among students as to how best to go about formulating a risk management strategy.

Faced with seemingly simple questions – Which way is the exchange rate quoted? What is the basic hedge I need to construct? – some appear to struggle.

Here, I would advise that students first ask themselves this question: what do I not want to happen? It is equally important to read the question carefully to understand 'who' you are.

Let's say you are an Irish (euro-based) manufacturer expecting to receive payment in USD three months from now. In this scenario, your risk is that the dollar will weaken against the euro over the course of those three months.

If the USD is losing value against the euro, then you will want to sell the USDs for as many euros as you can get.

Determine the outcome

In my experience, asking yourself common-sense questions about the actual outcome you want, as you work through the questions, will help to both clarify the risk at hand, and the best approach to hedging that risk.

It is worth reminding yourself here that the risk is really about timing. If you sell product today and get paid in USD today, there is no risk, because you can immediately convert to your home currency – in this case euros — at the spot rate.

The majority of 'market jargon' we find in foreign exchange hedging is actually very simple, because market participants like it that way.

So, for example, the 'spot rate' simply means the rate right now, at this very moment. The rate a minute, one week, or three months from now, will be different, however — and this unknown is your risk.

So, if your risk is that USD will lose value over the next three months (earning you fewer euros when you sell the USDs), what can you do now to protect yourself from this unknown?

You might think the obvious answer is to sell your USDs now, right? Here we return to another basic concept worth reinforcing, however.

Foreign exchange transactions are different to buying a stock, bond, or even bitcoin, because they have two sides.

On one side, is the currency you are selling or converting. In the example outlined above, this is USD. On the other side, as an Irish manufacturer, the 'home' currency you use to record and report the value of your transactions, is euro.

So, you want to sell a known USD amount to buy an unknown (i.e. yet to be determined) euro amount.

The question is, therefore: how do you 'lock in' the amount of euros you will receive from selling your USDs given that you will not actually have the USDs for another three months? Herein lies the beauty of hedging.

Setting up the hedge

How you set up the hedge depends on your hedging 'weapon' of choice and the strategy you select using your bag of risk management tools.

You will need the appropriate information to construct the hedge, obviously, which will depend on the question on the day.

It could be a self-made money market hedge, for example, or a derivative-based (i.e. forward, future, option, or swap) hedge.

Put simply, in three months' time, the USD will convert into euro at a rate you want to lock in now. To reemphasise, however, this is not the spot (i.e right now) rate.

It is the rate derived from the choice of hedging strategy you make, so the natural next question becomes: how is this rate derived? Let's explore the choices; but first, back to some basics.

Foreign exchange basics

Questions should be set up whereby the home currency is the second currency quoted. The first currency should be 'x – a changing number.' The second should always equal one.

At present (using Bloomberg as the source) for example, I see USD-EUR @ 1.0622. In this case, therefore, it takes 1.0622 USD to buy 1 EUR.

In addition, markets (USD-EUR) trade at different rates compared to what you, the customer, can buy or sell to the bank or another market maker. So, for example, USD-EUR might be quoted by way of a spread, 1.0610 – 1.0630.

One simple rule always applies here — you, the customer, will always get the 'worst rate.' In other words, the bank, or market maker, will always win.

In the example we outlined, you are an Irish (euro-based) manufacturer expecting to receive payment in USD three months from now.

It is worth reminding yourself here that the risk is really about timing. If you sell product today and get paid in USD today. Hence, there is no risk, because you can immediately convert to your home currency – in this case euros — at the spot rate.

Therefore, you want to sell your USDs to lock in their euro value. Would you rather sell a million USDs @ 1.0610 or 1.0630? In other words, do you want more or fewer euros?

Take a minute to ask yourself this simple question and you are far more likely to choose the right rate if you are given a so-called spread (two prices). In this case, the two prices are:

- 1 million USDs / 1.0610 = Euro 942,507
- 1 million USDs / 1.0630 = Euro 940,734

Which of theses rate is 'worse' for you? Don't guess. Do the math. The answer is 1.0630. This is the rate the bank will give you if you want to sell your USDs.

This is because the bank is buying your USDs and will want as many as possible for the euro they are going to give you (the same would apply in the opposite scenario — i.e. if you were to buy USDs from the bank).

Now that you understand which rate to use, we can return to the big question: which hedging strategy (i.e. tool) should you use, and how?

Money market hedges & forwards

First, let's be clear, money market hedges and forwards are very similar — and both are very dependent on interest rates.

A money market hedge is a homemade version of a bespoke forward contract, and future contracts are basically exchange-traded forwards contracts. The point is that neither is some mystical market predication.

The forward (future) foreign exchange rate is simply the spot rate (i.e. right now) plus or minus the net interest rate differential over the time period of the forward.

This differential is expressed in the 'pips' of the exchange rate. So, in this article's USD-EUR example, it might be +/- .0010 dependent on the respective interest rates.

Remember, as stated earlier, no one has a crystal ball, but the bank or market 'knows' the spot rate (now) and the interest rates to borrow or lend in each currency for differing time periods (now).

Spreads, if you are borrowing or lending in different currencies, will vary — and please remember, as already stated, the bank always wins. The forward is derived from the spot rate and the current interest rates over the respective time period.

There is no mystery in all of this. Nobody knows where the foreign exchange rate for USD-EUR will be on a future date. The forward is simply the bank or market's best (so-called unbiased) guess right now. In the next article, I will revisit the question from the FAE Guide 2021.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Foreign exchange hedging – applying the concepts to the question

We have explored some of the core concepts in foreign exchange hedging, but how can you apply them to best effect in your FAE Advisory? **John Munnelly** asked the FAE examiner to offer step-by-step guidance on how to set up a hedge with a clear strategy.

In our last article, we spoke to the Advisory examiner about some of the key concepts in foreign exchange hedging, but how can we go about applying these concepts to help us achieve the right outcome in this year's FAE Advisory?

Let's return to the Harvest Limited example we used in last year's FAE Advisory article on pages 23-27 of the FAE Exam

Guide 2021 to help illustrate again how these concepts can be applied in the exam.

As we've already discussed with the FAE Advisory examiner, a common mistake we see among students in the exam is that they do not set the hedge up correctly, or do not outline a clear strategy for handling the foreign exchange and interest rates provided in the question.

Using the Harvest Limited example, here we will outline a step-by-step process to defining your company's risk, understanding market quotes, and setting up the hedge.

Remember, if you are shown two interest rates (i.e. 'the spread'), you will be on the lower side of the spread (what you get for your money will always be less than what you will pay for your money).

Defining the risk

The first question you need to ask is: what type of risk are you dealing with? This is the most important thing to identify.

In this scenario, you are a €/£ based company that will require $480,000 in six months to pay a supplier.

Your risk here is, therefore, that the USD appreciates (gains in value) against the €/£ (loses values) over the next six months. Your concern is locking in the amount of €/£s you will need to buy the USDs.

Remember to take into consideration what your home currency is and how this impacts your financial performance when it comes to foreign conversion.

We know we must buy USD 480,000 in six months' time, so, ideally, we will 'lock in' today's foreign exchange rate value — i.e. the rate at which you convert €/£s into USDs.

Also think about the benefits to 'locking in' the amount of €/£s you will need to buy the USDs in six months from a planning/budgeting perspective. If you can remove uncertainty (risk) from the business's core operations for a relatively minor cost – it is always worth considering.

Outlined below are the steps needed to construct the money market hedge.

Step-by-step money market hedge

1 Buy the USDs by selling €/£s at the spot (now) rates – in this case, the spot rate given in the question is USD/(€/£) @ 1.20.

2 Consider how many USDs you need to buy now in order to equal the required amount of USD 480,000 in six months' time.

Bear in mind the basic concept of the time value of money here. In this case, if you buy USDs now, what do you do with them? The optimal strategy would be to lend the USDs (i.e. put them on deposit) so that you can earn some interest over the six months, but at what interest rate?

Remember, if you are shown two interest rates (i.e. 'the spread'), you will be on the lower side of the spread (what you get for your money will always be less than what you will pay for your money).

The next question is: how many USDs do you need to put on deposit today (right now) to equal USD 480,000 six months from now? By employing discounted cashflow (DCF), you should be able to work this out.

So, for example, if the deposit rate for six months is 2%, it will look something like this:

- USD 480,000/(1+(.02 × 6/12))
= USD 475,248

This can be inverted to provide proof in your calculation:

- USD 475,248 × ((1+(.02/2))
= USD 480,000

You now know how many USDs you need to buy now (at the 'spot rate') and put on deposit now so that in six months' time it will grow to the amount required to pay the supplier.

Understanding interest rates

Interest rates are always – unless very rarely and very explicitly stated otherwise – quoted as annual interest rates (%). If you are dealing in weeks or months – which is very common in hedging scenarios – you simply adjust the annual rate to reflect the time period you are dealing with.

For example, using the 2% rate:

- **One month =** USD 480,000/(1+(.02 × 1/12)) = USD 479,201
- **Three months =** USD 480,000/(1+ (.02 × 3/12)) = USD 477,612

**The above adjusts the calculation according to the required number of months.*

3 We know how many USDs need to be bought and we know the spot exchange rate. The next step is calculating the amount of €/£ we must sell (to convert into USDs), which is as follows:

USD 475,248 divided by €/£ 1.20 = **€/£ 396,040**

Again, remember foreign exchange transactions have two sides – buying and selling.

4 The final key concept is now: where do the €/£s we have just sold come from?

They must come from somewhere, right? You might say it is perfectly possible that the company had the €/£s on deposit and simply used existing €/£ funds to buy the USDs.

However, there would still be an 'opportunity cost' – from interest lost on the deposit, for example, to using the €/£'s to buy USDs today (right now).

To capture this opportunity cost, the money market hedge assumes the home currency – €/£s in this example – is 'borrowed' for the relevant time period (six months in this case).

Therefore, in this scenario, the company will borrow the €/£s required to buy USDs. The interest rate in the question (the rate to borrow €/£s for six months) is 3%.

Calculating the interest that will be owed after six months is straightforward, remembering the annualised interest rates rule from above:

= €/£ 396,040 x (1+(.03x6/12))
= €/£ 401,981

This is simply the inverse of the discounting of the future USD amount in Step 2. Hence, the cost of borrowing is:

€/£ 401,981 – €/£ 396,940
= €/£ 5,941

5 Finally, we can now calculate what we call the 'effective forward rate' derived from the 'money market hedge.'

We have effectively bought the USD 480,000 required (the spot conversion amount of USDs plus USD interest earned).

This 'cost' (or if you prefer 'sold') a total – the conversion amount of €/£ plus interest owed – €/£ 401,981.

The key takeaway? If we could have converted the €/£'s for USD's at the spot rate and paid the supplier now, it would have 'cost' €/£ 400,000 (USD 480,000 / 1.20).

We didn't need the USDs today (now), however. We require the USDs in six months' time. So, what was the effective forward rate?

= USD 480,000 / €/£ 401,981
= 1.1941 = not the 1.20 spot rate quoted.

Did it cost an extra €/£ 1,981 to 'hedge' the risk of the USD appreciating over the six months? The answer is yes.

Please remember, however, that this is purely a function of the respective interest rates and could theoretically work the other way – hedging with 'money market hedges (forward)' does not necessarily imply a 'cost.'

****Note:** Questions will always attempt to test student's understanding of the concepts and may not necessarily test students on all parts of a hedge. It is important to understand the interplay between exchange rates and interest rates.*

Was it worth it?

I would argue that yes, it was worth it, because it removed the risk, allowing the company to focus on its core business, which is not speculating on foreign exchange rates, and effectively 'cost' an additional 0.05% (€/£ 1,981 / €/£ 400,000).

To conclude this (hopefully helpful) breakdown of the steps involved in setting up a 'money market hedge,' remember everything we have worked though in terms of hedging the future purchase (i.e. buying) of a foreign currency is exactly the same as would be the case if we were hedging the future selling of a foreign currency. All you have to do is:

- flip the process around;
- start with how much you need to sell at a future date, and;
- ask what amount of the foreign currency you would need to sell today (now).

Follow these steps and you will know how much of the home currency you need to buy today.

****Note:** Students who like a visual representation of the money market hedge should refer to*

> **Questions will always attempt to test student's understanding of the concepts and may not necessarily test students on all parts of a hedge.**

Movement of Funds C Template on Page 26 of FAE Exam Guide 2021. This visually encapsulates the process described here.

Hedging with forwards

As demonstrated in our article on page 25-26 of last year's FAE Exam Guide 2021, it is relatively simple to calculate the forward rate once you have the spot rate and the interest rates for the respective currencies over a specific time period.

Remember, the forward rate is simply the spot rate +/- the interest differential over the time period.

One piece of helpful guidance in this example and all other forward rate equations is that the 'x currency' is always the numerator (i.e. on top) and the '= one currency' is always the denominator (i.e. on the bottom).

So, as previously outlined, if the spot is USD/€/£ 1.20, then the USD is the 'x currency', or the number that fluctuates. The €/£ is the 'one currency.' It always equals one.

In reality, forwards offer a bespoke and relatively easy way to hedge foreign exchange risk.

If a relationship is in place, banks will provide a forward rate on the currency pair — i.e. the two currencies that are involved in every foreign exchange transaction — for the exact amount and precise date you require.

The reality is that the bank will calculate the above, build in some profit margin, and will be more than happy to quote you rates to buy or sell foreign currencies on future dates.

You will receive a two-side quote for buying/selling the currency pair, no different to a spot market quote, adjusted for the interest rate differentials over the time period.

Always remember the rule when it comes to quotes: The bank always wins. Therefore, your rate will be the one that is least favourable to you.

It also worth noting something else here that might not always be obvious.

On the precise date, in six months' time in this scenario, you will need to pay your supplier USD 480,000. On this date, the bank will convert €/£s into USDs at the agreed forward rate.

This process is very similar to the 'money market hedge,' where the USD deposit amount is transferred to the supplier at the precise date.

However, the transparency and transactional convenience of this forwards option makes it a very popular choice for managing foreign exchange risk.

Conclusion

In this article, I have concentrated on demystifying the nature of foreign exchange risk, identifying your company's risk, understanding market quotes, and defining the steps involved in setting up the hedge.

I have only addressed money market hedges and forwards, their close relation. These are the hedges most commonly used by SMEs, however, and cover the fundamental concepts involved in foreign exchange hedging.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

The Barden Advantage

A tailored talent programme is transforming the recruitment experience for Ireland's newly qualified accountants, writes **Ed Heffernan**.

Barden was founded on the principle of doing recruitment differently. As part of our commitment to constantly evolving how we can support the country's top financial talent, we have created a new talent programme designed specifically to give newly qualified accountants the best possible start in their career.

Tailored to the unique professional needs of newly qualified accountants at this pivotal point in their working lives, the Barden Talent Programme is borne of our passion for positively impacting the lives of the people we work with.

Finishing a training contract can be a chaotic time for newly qualified accountants. Deciphering which employers, roles and opportunities best align with your professional goals and career ambitions can be a tricky task.

We have developed the Barden Talent Programme especially for you – the best and brightest newly qualified accountants in Ireland – to give you the tailored support and guidance you need to get the very best start in your career.

Without the right support, attempting to get a seat on one of Ireland's top finance teams can be an uphill battle – particularly when their recruitment schedules don't coincide with the end of your training contract.

In partnership with Ireland's leading companies, we are here to help you overcome this hurdle and get the best possible career start for your sought-after skills and top-tier training.

This programme has been specifically created to help the very best newly qualified accountants like you to successfully navigate your transition from practice into industry.

Our expertise and industry contacts will assist you in identifying which finance team is the best fit for you.

Furthermore, we will facilitate opportunities for you to meet with the hiring managers of these teams well before your training contract ends, and beyond the confines of the standard recruitment cycle.

Simply put, with the Barden Talent Programme, you won't have to wait for a role to be advertised to get the chance to meet the finance team you most want to work with. With our support, you will be ahead of the curve – and it couldn't be easier.

Don't just take our word for it though. Here are testimonials from some of the newly qualified Chartered Accountants who have benefited so far this year from the Barden Talent Programme.

"I found Ed and the team at Barden a delight to work with. Their leading industry knowledge and grasp of the market was coupled with a personal touch unparalleled by other recruiters. I was very impressed with the depth of their relationships with hiring managers/Directors from many of the leading finance teams in Ireland."
– Niall McGrath, PwC-trained Chartered Accountant

"I can't speak highly enough about Ed and the team at Barden who helped me through the talent program. Their professionalism and experience is second-to-none and they were always standing by to answer any queries or concerns I may have had. Being an engagement lead – be it audit, tax or others – can be stressful and quite demanding of your time. The last thing I wanted as I came out of contract was trying to juggle busy season with a job hunt and all that entails. Barden were brilliant at taking the stress out of the process. They sought out and brought potential roles to me based on conversations we had about my interests and preferences. Some of these weren't obvious from mere LinkedIn searches as their industry networks are second to none. They guided me through the process from choosing roles to interview for, providing info on the company, interview practice and debriefs. They took the time and stress out of the process at an already extremely busy time. I can't thank them enough."
– Callum Donnelly, KPMG-trained Chartered Accountant

"Barden helped me feel confident in my search for a new role. They showed a genuine interest in finding the right role for me based on my wants, needs and experience to date. I felt very well prepared and supported for interviews that came my way as a result."
– Jane O'Rourke, Deloitte-trained Chartered Accountant

"Working with Barden took the stress out of job hunting and was a great learning experience. The team of experts work with you to figure out what you want from a job and know how to best prepare you to get where you want to be. They also have access to amazing companies with great opportunities. I couldn't recommend them enough!"
— Katy Linden, EY-trained Chartered Accountant

"My experience with Barden was nothing short of fantastic. Around the time I was finishing up my training contract, I felt overwhelmed and stressed about what my next steps were. Barden made the whole process so much easier as they had access to companies and roles that no other firm had access to, which really suited my interests. In a short space of time, I built a great rapport with the team, during which they provided me with excellent advice and guidance for both job selection and interview prep."
— Clare Lynass, Grant Thornton-trained Chartered Accountant

All of these newly qualified Chartered Accountants benefited enormously from participating in the Barden Talent Programme recently.

Like them, you can remove the stress from the search, gain access to Ireland's top finance teams and get the support and advice you need to take your very best first steps as a qualified accountant. It's how the job search should be.

So, who's eligible to take part and enjoy the same benefits? The Barden Talent Programme is open to high-performing, ambitious newly qualified accountants who are serious about their future.

Participants are required to have first-time passes in their ACA exams and an excellent academic record. They must have been trained as part of a Big 4/Top 10 firm and consistently scored highly in performance ratings during their training contract.

In return, the Barden commitment to you is that you will get your own dedicated Talent Advisor who will work with you through the entire process, from crafting a bespoke CV and providing tailored interview preparation sessions, to shortlisting the companies you would like to work with.

From here, we will make the introductions, and arrange briefing calls all the way through to managing offers for you and beyond.

Your Barden Talent Advisor will be there for you every step of the way. Why? Because that's how it should be.

The top talent in Hollywood work with the top agents in Hollywood. The very best actors don't deal with 'every agent in town,' nor do they audition for every part and read every script going.

To get the best possible results for themselves, they partner exclusively with a top-tier agent. By joining the Barden Talent Programme, you will have the full benefit of the same exclusive commitment to managing your career from a dedicated partner with the right connections.

So, if you're curious, get in touch. Drop me a line at **ed.heffernan@barden.ie** and I will connect you with the right Talent Advisor for you here at Barden to help you get the very best start. Simple!

Ed Heffernan is Managing Partner at Barden.

Hiring managers praise the Barden Talent programme

"Barden not only provided top quality candidates who wanted to work for Flutter, but who would excel in Flutter's fast-paced environment. This saved time and effort for both candidates and hiring managers."
— Matt Coughlan, Director of Global Finance Services, Flutter Entertainment Plc

"Barden work closely with the Ardagh Group finance team to understand the role and job spec and present high quality and well-prepared newly qualified accountants for interview. This approach by the Barden team, led by Ed and Elaine, results in a high degree of candidates being successful in the interview process and receiving job offers from the Ardagh Group."
— Anthony Cunningham, Chief Accounting Officer, Ardagh Group

"We are delighted to have Barden as our partner for recruiting accounting talent. Barden take a genuine interest in both candidates and employers alike to ensure that their values, ambitions, and interests are best matched. Barden has successfully placed a number of high-achieving candidates with us over the years."
— Rachel Cafolla, Group Head of Financial Reporting and Treasury, Dalata Hotel Group

"Barden really understand our culture and values here at Applegreen and know that getting the right person is very important to us. When they bring a candidate to our attention, we can be sure that they are the right fit to help us on our exciting journey, and that we are the correct next step for the candidate."
— Kerri Hill, Senior Group Financial Reporting Manager, Applegreen

For more on Barden, log on to barden.ie

BARDEN
Recruitment. But different.

Discerning the signal from the noise

Professional scepticism is a more important concept than we sometimes give it credit for and one that is critical to the ethical conduct of the Chartered Accountant, writes **John Munnelly**

'There's a feeling that takes over and it has no fear, when you're caught between the signal and the noise.' This line, from Simple Mind's 2018 song 'The Signal and the Noise', refers to the sense of information overload we all sometimes face — and the ability to be confident in discerning what is real, relevant, or important.

Being able to discern what is important over what is irrelevant is a learned ability – and one that Chartered Accountants students have in abundance. Our young professionals have a unique ability over their peers — the ability to apply professional scepticism.

What is professional scepticism?

Scepticism is derived from the Greek word 'σκέψις' (skepsis), meaning examination, inquiry into, hesitation or doubt.

Essentially, doubt stimulates informed challenge and inquiry. It is the challenge of conventional wisdom and augurs a better understanding of the nature of knowledge.

In everyday life, scepticism manifests in many forms, ranging from disbelief to rejection of any wisdom, knowledge, or opinion. 'Scepticism' is perhaps an inelegant phrase that belies the true power of what it actually is, however.

Scepticism has its roots in a much deeper concept — the concept of critical thinking. Using the opening working definition of critical thinking from your FAE Core studies, we define it as: "The process of skilfully reasoning, inferring, interpreting, analysing, synthesising; using metacognition in an attempt to limit the effects of our biases to reflectively evaluate information to reach an answer or conclusion."

The World Economic Forum cites critical thinking — i.e. the ability to reason logically — as the most important future skill an employee can have. Furthermore, the ability to bring this skill into our everyday thinking will benefit us, not only professionally, but also personally.

Professional scepticism & accounting

The International Ethics Standards Board for Accountants (IESBA) updated its Ethical Code recently to promote the role and mindset expected of all professional accountants.

The role of professional scepticism sits at the forefront of these changes. All professional accountants are required to apply professional scepticism as per the IESBA Ethical Code. It is no longer an innate skill required only of auditors.

On the FAE Core course, students are required to study the Chartered Accountants Ireland's Code of Ethics, which is based on the principles of the IESBA Ethical Code. Compliance with the fundamental principles (independence, objectivity, etc.) of the IESBA Ethical Code contributes greatly to the exercise of professional scepticism and, as such, it is essential reading for students preparing for the FAE, but also for the duration of your career thereafter.

The CAI Code of Ethics is based on the principles of the IESBA Code and is part of students' study of ethics at FAE.

Compliance with the fundamental principles of the CAI Code of Ethics (independence, objectivity etc.) contributes to the effective exercise of professional scepticism overall.

So, how is professional scepticism defined under professional standards? Prior to the IESBA revisions, this important concept was referred to only in the International Standard on Auditing (ISA).

The ISA defines professional scepticism as: "an attitude that includes a questioning mind, being alert to conditions which may indicate possible misstatement due to error or fraud, and a critical assessment of audit evidence."

Professional scepticism is fundamentally a mindset. A sceptical mindset drives auditors to ask questions when considering information and forming conclusions.

The ISA includes statements and requirements such as "the auditor must exercise professional scepticism" with very little guidance on how they might go about doing so, however.

Many in practice will tell you that this limitation is quite unhelpful when coupled with ongoing pressure and expectations from both audit regulators and the public.

Whilst the standard does little to guide actual required behaviours, audit regulators are continually taking steps to improve standards in order to assist in their practical implementation — and there are many examples of how the professional scepticism mindset works in practice.

In an audit context, searching for contradictory evidence — as opposed to purely corroborative audit evidence — is critically important. This was a very important feature of the revisions made to ISA (Ireland)/(UK) 540 in respect to auditing accounting estimates.

Also, bearing in mind that an auditor should always be independent, their focus should never be solely on setting out to prove that the actions of the directors of a company are correct.

They must instead form their own independent conclusion, which they can compare to the director's conclusion for reasonableness and to identify any potential management bias that may exist.

It is the challenge of conventional wisdom and augurs a better understanding of the nature of knowledge.

Outside of an audit context, acting with professional scepticism essentially means thinking outside the box. It means not taking information at face value and really recognising the possibility that things may not be as they appear.

Often, it can be described as that 'gut feeling' that triggers your professional judgement, and, because it is a mindset, professional scepticism is also a learned skill — one that will only improve with experience.

The revisions made to the ethical code are critically important. Complying with these fundamental ethical principles in your day-to-day work will contribute to your professional scepticism.

In the FAE examination papers, the cases attempt to test students' ability to bring together the skills taught about professional scepticism and apply them in the context of the case. This is why, when approaching examination cases, it is important to take the case as a whole.

As a mindset, professional scepticism is not just something you should be thinking about at exam-time, however. It is a critical skill whose value extends far beyond the FAE and one you should continue to develop and strengthen over the course of your entire career.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Straight talking with the audit elective examiner

John Munnelly met with the Audit examiner to probe comments made by the Audit Elective examining team in the most recent set of examiner reports.

The 2021 Audit Elective results were disappointing compared to previous sittings. To find out more about the reason for the downward trend in the exam results, I sat down with the audit examiner to delve into some of the comments made by the examining team in the FAE Committee (FAEC) Report for Summer 2021 and the January 2022 repeat cycle.

John Munnelly (JM): What stood out the most for you in the marking centre last year?
Examiner: The first thing that struck the marking team was how quickly we were moving through the exam corrections. There was a noticeable drop off in the quantity of content being written by students in their responses to the questions. It was not the fact that students had mastered the art of brevity. Instead, there appeared to be appreciable gaps in responses to questions that students should have been thriving on.

JM: The opening remarks of the FAEC Report for Summer 2021 referred to the overall performance of students in last year's Audit Elective as being behind that of students who sat the exam in 2020. Can you explain the reasoning behind this?
Examiner: From a high level, it was observed that students provided very limited and short responses that lacked substance and quality to some of the questions, for example many scripts only provided 5/6 review points on an audit working paper where there were multiple issues. The examiner was quick to double down on these comments. We saw a slight improvement in the January re-sit. However, these areas should be second nature to students. Students should be able to look at the most recent mock exam and see the variety of issues that can be built up in an answer. A practiced student should be able to comfortably cover most of the issues raised.

JM: A lot of students fell into the habit of transcribing textbook materials. How can this impact their marks?
Examiner: For the FAE Audit Elective exam, it is simply not good enough to transcribe the relevant section of the teaching materials into the script. While it may be the correct piece of text, the case facts will provide students with the opportunity to connect the text to the case. This is what scores the marks – not a simple transcription.

JM: The FAEC Report for Summer 2021 comments on a lack of business and commercial awareness in the answers provided by students in the FAE Audit Elective exam. Can you expand on this point?
Examiner: We are living through some extraordinary times. This FAE cohort would have started their qualification pre-pandemic – and you just have to look at the unprecedented nature of events that have occurred since. Students have shown tremendous resilience to manage their work and study balance in the face of this.

However, auditors must also take into consideration what is going on in the wider macro-environment as it relates to every client interaction. This means that auditors must be abreast of what is going on in the real world — audit does not happen in a bubble.

The case scenarios last year were very topical in relation to what was going on at the time. Topical issues will always feature in some way in the simulations because the simulations attempt to mirror real-life examples. Students who pay attention to these wider events will find a way to bring them into their answers. If they do this on top of the fundamentals, then they are going to score very well.

JM: Is there anything further you would like to add? What should future students look out for?
Examiner: Students must cover the course material. The examination is broad. It tends to cover the entirety of the syllabus. I would advise all students to read the FAEC Report Summer 2021. The comments made are still extremely relevant.

Students can read the full FAEC Report Summer 2021 on the Chartered Accountants Ireland website.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Devil in the details

Detailed early answers can trip up students sitting the Financial Services Elective if they fail to maintain momentum right to the finish line. **John Munnelly** explains why perfectionism can be a problem.

Among the students who failed the Financial Services Elective last year, a common mistake was the tendency to focus all their energies on 'set-piece' questions at the start of the exam to the detriment of later questions in the cases.

At their meeting with the Examinations Executive following the 2021 FAE, the examiner was unequivocal in their feedback, going so far as to say that ALL of the candidates who failed the exam had neglected to answer at least one exam question.

"For the unsuccessful students,

it is quite clear that they are spending disproportionate amounts of time on questions two and three of the first case. These questions tend to examine the numerical areas of credit risk assessment," the examiner said.

"Students prepare meticulous answers — really well laid out, calculations well explained — and whilst this is extremely welcome, and it is testament to the educator who clearly prepares students for these question types; it is always easy to spot this pattern of behaviour as the rest of the case questions are either rushed, badly laid out, or are full of generic answers that are of little scoring value."

This was a clear sign, the examiner told the Examinations Executive, that the students were focusing on their "set-piece answer to the detriment of their wider studies of the subject." The problem with this approach was manifold, they said.

"The examiner always has facets to the answer that these weaker students invariably miss, so the ability to score full marks is quite rare and does not happen very often. The clear and obvious knock-on is the time investment.

"The examining team often remarks that poor time management clearly resides with the failing students. The effects of this are seen later in the case when questions seven and eight of the second case are badly, or not, answered."

Balance is key

For students preparing this year's FAE Elective in Financial Services, a reasonable question might therefore be: What does 'good' look like in an exam script?

Balance is the answer here, according to the examiner, who commented that those students who make a reasonable attempt at the 'moving parts' in each question tended to be the successful ones.

"It comes down to mathematics.

"There are eight questions in the Financial Services Elective examination. Each question contains a number of sub-parts or facets. It is up to the student to identify each facet and ensure they have a plan for answering each facet."

Each part of a question that is unanswered means the student has to work harder to bring up their average grade in each of the other questions to compensate. This is where it pays to cover all of the teaching material in the study until the student is comfortable with it," the examiner said.

"There are eight questions in the Financial Services Elective examination. Each question contains a number of sub-parts or facets. It is up to the student to identify each facet and ensure they have a plan for answering each facet."

When deciphering the questions, it can be as simple as looking for the conjunction or linking words used in the case questions, the examiner continued.

"Examples of these conjunctions or linking words are: 'and,' 'also,' 'in addition'. The question names are well-flagged in the exam itself, so students should be able to understand which area of the syllabus is being examined," they said.

"Students ought to be familiar with the style of case from the sample and practice papers. These are representative of the style of questions that are developed for this paper. The examining team approves these sample and practice papers with the examination executive."

In the first edition of the FAE Exam Guide, published last year, we offered some excellent advice for students regarding the opening question in the Financial Services Elective paper, which tends to focus on the assessment of the principle characters seeking finance.

The examiner was disappointed to see that, despite the information provided in this article, the examining team continued to encounter short one- or two-word 'bullet-point' or imbalanced answers.

Applying real-world events

Another key point to consider here is that the macro-economic backdrop has made 2022 a dramatic year for funds.

Pandemic effects, compounded by troubling geo-political events – and the market response to these events – mean that it is a challenging time for funds. The students who are successful in this year's Financial Services Elective will, therefore, likely be those who can apply real-world events in their exam answers.

So, what do you need to do now? Start by downloading the 2021 FAE Exam Guide. Then, go through the mock examination de-brief and examine each of the Sample and Practice papers supplied. All of this preparation will hold you in good stead, helping you to achieve the result you want on the day of the exam.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Constant state of flux

Amid the ongoing uncertainty facing capital markets, **John Munnelly** caught up with the examining team for the Financial Services Elective to get their take on current events ahead of this year's FAE.

John Munnelly (JM): What is the latest assessment of the macro-economy in which financial services firms are operating in 2022?

Financial Services examining team (FSET): The health of the macro-economy is an incredibly important driver of the external environment for financial services firms.

The prevailing and forecast rates of economic growth, the likely direction of inflation rates, the level of policy interest rates, the position of the government finances, and the financial position of the household and corporate sectors, all matter.

Most importantly from a risk management perspective, there is always a degree of uncertainty about how these factors will evolve in the near term, as well as in the long term.

In its April assessment of global economic growth, the International Monetary Fund (IMF) revised down its growth forecasts for 2022.

The IMF assessment is a setback to the macro-economic recovery that had been expected to follow the pandemic. For most countries, the IMF is forecasting that employment and economic growth will remain below pre-pandemic trends through to 2026.

A final consideration is the macro-economic environment from 2022 onwards is a new phase in monetary policy.

At its simplest, this refers to the policy approach central banks are taking to setting interest rates. We appear to be moving at some

> **The digitalisation of firms' operating models and increasing competition from financial technology firms are two factors creating additional pressures on financial services firms to heighten the level of ambition in their strategy formulation.**

pace into a new phase here, in which the monetary policy approach will be different as interest rates are expected to rise.

From the point-of-view of risk management assessment, an interesting uncertainty to consider is how central banks will manage the trade-offs (bearing in mind that different banks have different legal frameworks) between containing inflationary pressures and safeguarding economic growth.

JM: What are the key risks arising within financial services firms, and are any particularly elevated at this time?

FSET: Our starting point is always to consider the key pillar risks for any financial services firm. These are the top category risks that are the starting point for our risk taxonomies: strategic; financial; operational; and conduct risks. Let's discuss some high-level considerations in respect of these categories:

Strategic risks

Strategic risk refers to the risk of events that could potentially prevent an organisation from achieving its goals. The consideration of this risk is linked in large part to the level of uncertainty in the external environment.

As we have already discussed, the assessment is that uncertainty in the external environment is elevated at this time. Also of relevance here are developments in business models at a broader level in the financial services sector.

The digitalisation of firms' operating models and increasing competition from financial technology firms are two factors creating additional pressures on financial services firms to heighten the level of ambition in their strategy formulation. Transformational change brings with it heightened risk.

Financial risks

We are referencing here risks such as credit, market, or funding risks for firms. The macro-economic assessment we discussed earlier is also a key factor to consider.

Credit risk would likely be assessed to be elevated as slower economic growth can heighten the risk of loss of income for households and corporates, for instance. At the same time, increasing policy interests can also feed through into higher repayment costs for variable interest rates products.

Similarly, for financial markets, the heightened volatility appearing at times can bring additional market and funding risks.

Operational risks

This is a family of many risks. Topical risks that are likely only to grow in importance in the years ahead include:

A. IT and cyber risks — in light of the rise in digitalisation of processes;

B. Outsourcing, risk as incumbent financial services firms seek to access new financial technologies and contain costs;

C. Data integrity risk in light of the move to have data-driven decision-making (including some of it by machines) where there is a foundational requirement for fit-for-purpose data;

D. Money laundering and financial crime risks, where there is a clear link to societal harm;

E. On the operational risk front, we can't forget the importance of maintaining a business continuity capability here in the event that the pandemic worsens once again.

Conduct risks

The risk of an adverse impact on consumers or wholesale markets in response to actions taken by financial services firms remains very relevant. While aggregated global estimates can be somewhat outdated, the numbers suggest that the monetary value of detriment prompted by the materialisation of conduct risks is increasing.

In addition to controls or rule-based approaches to treating these risks, the conversation for risk managers has shifted very firmly to the role of organisational culture and individual accountability.

JM: A very topical driver of uncertainty for risk managers right now is climate change. How can risk managers think about climate change?

FSET: There are different horizons to consider here as well as a risk methodology question to answer. Let's start with the latter.

Do we need different risk categories or taxonomies for climate change, or can we use or amend existing frameworks for strategic, financial, or operational risks?

In one sense, a simple approach might be to work through the risk assessment and treatment in existing frameworks. For example, in the short term, climate change will drive increased threats to physical infrastructure through adverse natural weather events. This risk can be assessed through existing operational and business continuity frameworks.

Looking further ahead to the evolving landscape for climate change and associated risks is to maintain a sense that there are different possible scenarios.

The world moves quickly to implement measures, and this could heighten volatility in financial markets and impact business models somewhat abruptly. This is what we refer to as transition risk.

The upside is that physical risks from adverse natural weather events is hopefully reduced. There are different scenarios depending on the speed of successful adjustment to address climate change. The risks will be different.

JM: There are some risks that are far-off or novel, and it's not clear what the optimal risk management approach to those risks are. What's your take here?

FSET: These are risks that are on the horizon, but not well revealed. It is inevitable that there are risks out there of this kind. One structured approach here is strategic foresight.

Organisations are systematically gathering trends or signals and thinking about possible future scenarios.

This is not forecasting. It is thinking of possible scenarios and how that might impact their long-term risk profile. The key here is that these firms are taking action now to move to a preferred lower-risk scenario on the basis of this assessment.

As risk managers, it is really important that we take a systematic, long-term approach. The research shows that, without systematically thinking about risks using frameworks and other methodologies, we can have a tendency not to identify how adverse our risk exposures may be in the future.

Public sector elective – examiner insights

John Munnelly spoke with the examiner for the FAE Public Sector Elective to find out what students sittings this year's exam can learn from past papers.

The examiner for the FAE Public Sector Elective is always looking for ways to share insights and guidance with students.

Above all, their recommendation is that students read past FAE Committee reports, which contain a wealth of information about the examination.

Consistency and detail

Students who demonstrate consistency across all eight questions in the examination are most likely to be successful.

Those keen to demonstrate their knowledge about a favoured topic must be careful to ensure that it is not at the detriment of other questions.

This concern has been raised repeatedly in FAE Committee reports. The Public Sector Elective is demanding insofar as each question facet requires quite a detailed response and students need to be prepared for this.

> **The examiner advises a balanced approach to the responses to questions requiring an analysis of both advantages and disadvantages.**

The examiner notes, however, that a poor exam technique evident among some students has been to answer with lists of facts without demonstrating how each applies to the case at hand. Such an approach will always result in a minimal score.

It is also important for students to remember that — once the facts have been explained — a recommendation must also be included.

This is essential because the purpose of the question is to show that you have the ability to advise both public sector organisations and the organisations that interact with them.

Balance your answers

The examiner advises a balanced approach to the responses to questions requiring an analysis of both advantages and disadvantages.

Instead of showing a marked preference here, the examiner is looking for a balanced approach, such as a discussion containing four or five well-made arguments on both sides.

The conclusion is the part of their response in which the student can justify their decision and preference with additional points. This approach will yield a stronger answer and score well on professional marks.

Real world examples

The examiner will always reward a student who is able to further develop their arguments with a supporting, relevant real-world example.

The last two years have been a boon for students who have, for example, been able to describe situations in which demand for public services far exceeds the capacity to deliver them.

Finally, the examiner wishes to remind students to make sure they are familiar with the CIRRUS platform and that they engage with the practice materials ahead of the exam.

It is only when a student attempts to answer a Public Sector Elective paper on the platform that they will get a true sense of just how much ground they will need to be able to cover in the actual exam.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Innovation activity in a multinational group

John Munnelly talks to Leontia Doran, Lead FAE Advanced Taxation NI educator, and the FAE Advanced Taxation NI examiner, about some of the recurring difficulties facing students at exam time.

The Tax NI examiner noted that in past exam sittings, FAE students have found it challenging to identify and advise on tax reliefs for intangible assets and innovation activity, and related tax risks, particularly in the context of the Patent Box regime.

In the current economic environment, tax relief for innovation activity remains very topical as businesses seek to differentiate themselves from competitors.

The 2021/22 FAE competency statement requires students to attain a comprehensive understanding of core concepts and principles.

They must be able to apply this comprehension to the innovation activities of a business, including considerations around the reliefs available for R&D expenditure (both capital and revenue expenditure), expenditure on intangible assets, and the Patent Box regime.

Transfer pricing may also be relevant where intangible assets are owned by one company but licensed for use to another company. In addition, sound professional and commercial judgement must be clearly demonstrated.

The generous reliefs available in the UK for innovation activity in a group of companies require careful planning to ensure that each relief is maximised overall, and each relevant tax and commercial factor and associated risk is considered from the outset when beginning a research and development (R&D) project.

This article is intended as an overview of the different tax considerations that arise in a scenario where a multinational group of companies is considering locating innovation activity in the UK.

This article does not touch in any detail on the specific calculations required to arrive at the level of revenue expenditure qualifying for R&D tax relief.

Information on this is available in your FAE Taxation 3 (NI) 2021/22 textbook and Session 12 of the course.

Candidates are also reminded that the calculation of R&D tax relief and any payable credit is important cumulative knowledge from the CA Proficiency 2 course.

At a high level, this article simply seeks to highlight the practical situations in which innovation activity in the UK can offer various tax reliefs whilst at the same time presenting potential tax risks, depending on how the activity is structured and where it is located. Below, we have outlined a potential innovation activity scenario involving a multinational group.

A multinational group of companies with two wholly-owned UK tax resident subsidiaries is considering undertaking an entirely "in-house" project in the UK.

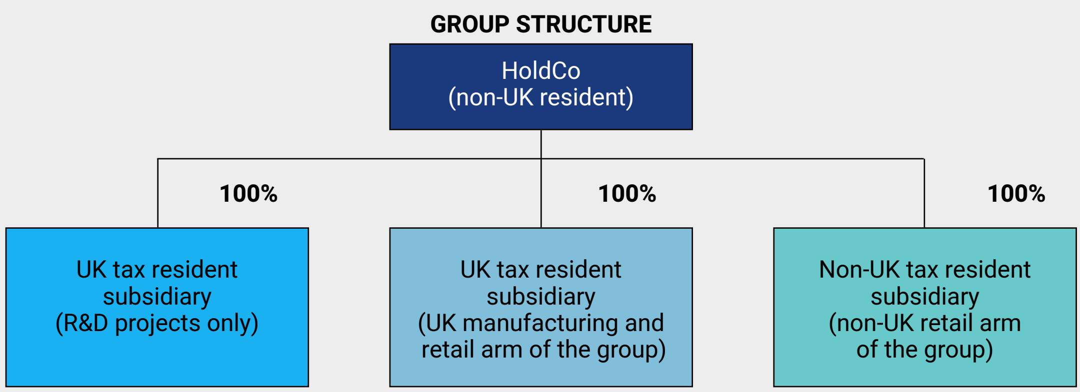
The project, if successful, aims to research and develop a new product line which will incorporate an innovative new ingredient the group plans to patent.

This will be the first new patent the group has created since its only other patent lapsed over 10 years ago. The group has not conducted any R&D projects since the last patent project. HMRC has already provided advance assurance that the new R&D project is qualifying R&D activity for tax purposes.

To facilitate this and future R&D projects, one of two newly established UK tax resident subsidiaries in the group is being designated as purely an R&D subsidiary, which will be its only activity. It will also carry out all R&D projects going forward.

This company recently acquired a purpose-built R&D facility in Belfast from which all R&D projects will be undertaken. It has also bought a site costing £90,000 and spent £850,000 building the new facility. Expenditure on new plant and machinery for the facility totalled £250,000 in the accounting period ended 31 March 2023.

Potential Innovation Activity Scenario – Multinational Group



Market research indicates that sales of the new product line (incorporating the patented ingredient) are projected to account for taxable profits of £4 million minimum per annum beginning in the accounting period ending 31 March 2024.

Market research indicates that sales of the new product line (incorporating the patented ingredient) are projected to account for taxable profits of £4 million minimum per annum beginning in the accounting period ending 31 March 2024.

Once the R&D project has been completed, the Board of Directors (the Board) plans to locate ownership of the patent, which will be registered worldwide, in the other UK tax resident company in the group, which is the group's UK manufacturing and retail arm.

Alternatively, the Board is willing to consider locating ownership of the patent in the UK R&D subsidiary that developed the patent. This would charge a license fee for use of the patent to the other companies in the group (UK and non-UK), if there was a specific tax advantage in doing so.

The Board is keen for advice on any tax reliefs that may be relevant to this project and the patent, including any relevant planning recommendations to maximise relief and minimise tax risk in the UK.

Below are the key steps needed to formulate a comprehensive summary to the Board:

Step 1.

Consider which of the Tax Super Six are relevant to this scenario, as you would with any indicator.

The reliefs you should consider are for corporation tax as the Board is seeking advice on tax reliefs. It will also be important to highlight any relevant potential tax risks.

Note that the VAT rules for the supply of services should be considered where licensing fee income is charged by a UK company to other companies in the group, including the cross-border supply of services rules.

Candidates are reminded that the UK is treated as being outside the European Union (EU) in respect of the supply of services because of the UK's departure from the EU.

Please refer to Session 17 of your course materials and Chapter 14, Section 14.3 of your textbook for a detailed analysis of the cross-border supplies of services rules.

Step 2.

Identify potential tax reliefs available for the revenue and capital R&D expenditure of the UK resident R&D subsidiary while it is conducting the R&D project.

This will require examining the potential R&D tax relief available for both revenue and capital expenditure, including determining which regime to claim under (either the SME regime, the 'large' company regime or — in the case of capital expenditure — the UK's capital allowances regime).

Step 3.

Consider the potential for tax relief under the Patient Box regime and identity other relevant tax considerations and risks, including transfer pricing.

As part of this, consider the two options presented in the scenario for ownership of the patent:

- **Option 1** – locate the patent in the UK tax resident company in the group's manufacturing and retail arm. This company would charge a license fee for use of the patent by the other companies in the group.
- **Option 2** – keep ownership of the patent in the UK R&D subsidiary that developed the patent. This company would then charge a license fee for use of the patent to the other companies in the group.

The conditions for relief under the Patent Box regime should be checked carefully to ensure relief is maximised, where possible, and any tax risks under each option are identified.

Under Option 2, as each of the companies will be classed as being under the common control of the holding company, transfer pricing will need to be considered in respect of the licence fee charged by the R&D subsidiary.

This will also be a consideration under Option 1 as the UK manufacturing and retail arm plans to charge the other companies in the group a license fee for use of the patent.

Step 4.

Conclude your analysis. Use your prior analysis to make an initial recommendation based on which option will maximise relief, while also taking into consideration any commercial implications or other potential workable options.

See key tax considerations on the next page for more information on steps 2-4 and the application of the rules to the above scenario

The information in this article is relevant as at the date of publication.

	Key tax considerations
Key tax considerations*	**Innovation expenditure – tax reliefs and related considerations**
Step 2	The definition of R&D for tax purposes follows its definition under UK GAAP. Relief is available for capital research and development ("R&D") expenditure incurred by a company via the capital allowances regime and for revenue R&D expenditure through the various R&D tax relief regimes. **Revenue expenditure** Enhanced tax relief for revenue R&D can only be claimed on "relevant" R&D, i.e., R&D related to the trade carried on by the company or from which it is intended that a trade be carried on. There is no minimum level of qualifying expenditure in order for relief to be available. In respect of qualifying revenue expenditure on R&D activities, it is first important to consider if the company is carrying out qualifying activities for R&D tax relief purposes. While the definition of R&D follows that under UK GAAP (and specifically IAS 38 Intangible Assets), HMRC requires that the Department for Business, Energy & Industrial Strategy guidance tests must also be met. In essence, a project will qualify as an R&D project if it is carried on in the field of science or technology and is undertaken to extend knowledge and to address scientific or technological uncertainties. Qualifying revenue expenditure is similar (but not identical) under the UK's SME and "large" companies R&D tax relief regimes. However, under both regimes, the expenditure must meet the following conditions: · it must not be capital in nature (capital expenditure may qualify for capital allowances as set out later); · it must be attributable to relevant R&D that is either directly undertaken by the company or on its behalf; and · it must be incurred on qualifying revenue costs – recap on the categories of qualifying costs from your CA Proficiency 2 or other studies. **Qualifying company** Tax relief for qualifying expenditure on R&D may be claimed by companies of all sizes, though the level of tax relief is more generous for small and medium-sized entities ('SMEs') than it is under the 'large' company regime, hence, there are two 'regimes' for the relief. **SME regime** The SME R&D tax relief regime provides an additional 130% deduction on qualifying R&D revenue expenditure. Companies which are claiming SME R&D tax relief and incur a trading loss can claim a payable tax credit. Should the company choose to claim the payable tax credit instead of relief for the trading loss in the usual way, the surrenderable loss is the lower of: · the unrelieved trading loss; or · 230% of the qualifying R&D expenditure. The payable tax credit is calculated as 14.5% of the surrenderable loss for the period but is capped at a maximum of £20,000 plus three times the company's "relevant expenditure on workers" (broadly this is the company's total PAYE and NIC liabilities in the accounting period). An SME for these purposes is defined as being a company/group of companies which has fewer than 500 employees and either: · Aggregate turnover < €100 million; or · Aggregate net assets < €86 million, **'Large' regime** Under the 'large' company regime (which may be available to companies which are not SMEs, or SMEs in receipt of certain grant funding, or SMEs where the SME R&D project spend excess €7.5 million), qualifying revenue R&D expenditure attracts a taxable R&D expenditure credit ("RDEC") of 13% which first increases the company's taxable profits but later reduces its corporation tax liability. If the company's corporation tax liability is lower than the RDEC or, if the company claiming the RDEC incurs a trading loss in the period, the company is entitled to claim a payable credit (subject to a number of adjustments, which you should be aware of). **Qualifying R&D capital expenditure** In respect of capital expenditure on a new R&D facility and plant and equipment, enhanced R&D tax relief is not available. Whilst the expenditure clearly relates to the R&D activities of the company, capital expenditure does not qualify for R&D tax relief under either the SME or 'large' regime in the UK. Normally, building expenditure does not qualify for capital allowances unless relief is available under the Structures and Buildings Allowance regime which only provides relief on a straight-line basis at 3% per annum for qualifying expenditure on or after 29 October 2018. R&D allowances ("RDA") are available, under section 438 of the Capital Allowances Act 2001, on building expenditure and plant and machinery expenditure incurred for providing facilities for carrying out R&D. RDA qualifying expenditure is capital expenditure that a trader incurs on R&D directly undertaken by the trader where the research and development is related to a trade that the trader carries on.

Key tax considerations *(Continued)*	
	Relief is not available for any land element as this constitutes the acquisition of rights in or over land which is excluded expenditure. RDA qualifying expenditure is capital expenditure that a trader incurs on R&D directly undertaken by the trader where the research and development is related to a trade that the trader carries on. Relief is not available for any land element as this constitutes the acquisition of rights in or over land which is excluded expenditure. Relief may also be available for any plant and machinery expenditure however, if the expenditure is incurred expenditure incurred between 1 April 2021-31 March 2023, it should be considered if the 130% Super Deduction on new plant and machinery expenditure would provide more relief. Remember that such expenditure in an accounting period straddling 31 March 2023 only attracts 130% on a pro-rata basis i.e., in respect of the number of months in the accounting period falling before this date. In these scenarios, it is important to compare the 100% RDA available to the level of pro-rat'ed Super Deduction. **STEP 2 Application to Scenario** In the above scenario, as the project has already been determined as being qualifying R&D by HMRC, it will next be important to consider by examining the group's employee numbers, turnover and net assets in aggregate (and not just for the UK R&D subsidiary) meet the definition for the company to qualify for SME R&D tax relief. If that is the case, the next process is to calculate the 130% enhanced deduction by gathering the qualifying R&D revenue expenditure. As the R&D subsidiary company purely carries on R&D activity and does not have any income sources (option 1), it is likely that the next consideration will be to address if the company should claim the 14.5% payable tax credit (capped if appropriate) or claim relief for the loss in the usual way — including considering the potential to group relieve any trading loss which arises to the other UK tax resident group member if this would provide a higher rate of R&D tax relief. In respect of the capital expenditure, 100% RDA will be available for the building costs of £850,000 but not the site costs of £90,000. Instead of claiming 100% RDA on the £250,000 plant and machinery, the company should claim the 130% Super Deduction meaning capital allowances totalling £1,175,000 (£850,000 + £325,000 (£250,000 x 130%)) will be available to further increase the trading loss incurred by the company. As set out earlier, the company may therefore claim relief for the trading loss in the usual way or surrender any trading loss incurred via group relief to the other UK tax resident subsidiary. Alternatively, the R&D payable tax credit may be claimed instead.
STEP 3	**The Patent Box regime** Once an R&D project is completed, if a company owns a patent from which income is generated, the company may be able to claim further tax relief under the UK patent box regime. The patent box regime was introduced with effect from 1 April 2013 and works by taxing qualifying intellectual property ("IP") profits at an effective rate of 10% instead of the main rate of UK corporation tax of 19%, which is due to increase to 25% from 1 April 2023 for companies with taxable profits in excess of £250,000. The regime was phased in between 2013 and 2017. From 1 April 2017, 100% of qualifying IP profits may qualify for the 10% rate of corporation tax for qualifying companies. An election is required within two years of the end of the accounting period to which the claim relates. In order to benefit, the company must either own the patent or hold an exclusive licence to exploit the patent. The patent must be granted by the UK Intellectual Patent Office (IPO), the European Patent Office or other relevant bodies. Even if a patent only comprises a small component of an overall product, the 10% rate should apply to the total sales from the product that incorporates the patented component. Income earned from a patented product qualifies for the 10% rate from the date that the application is made, provided that the patent is subsequently granted. It should also be noted that there are particular rules governing the calculation of the qualifying patent box profits. For example, a routine return on costs and a notional marketing return must be deducted, to recognise that the business would be expected to make some element of profit even in the absence of benefitting from a patent. The resulting notional profit is referred to as Relevant IP Profits. Income and expenses also need to be streamed on a patent by patent or product by product basis. Broadly, the relief is given by allowing a deduction to be made in calculating the trade profits for the period as follows: • Relevant IP Profits x • Main Rate of CT – IP Rate of CT • Main Rate of CT It should also be noted that the eligibility of the patent box was challenged several years ago meaning that changes were made to the legislation which now applies to all patents granted after 1 July 2021. In effect, there must be a link (referred to as the modified nexus approach) between the patent on which the relief is claimed and the company carrying on the relevant R&D. Where the R&D is subcontracted to connected third parties or the R&D was carried out by a different company, even if it is in the same group, the benefits of the patent box claim are reduced accordingly. The amended rules are generally more onerous in respect of record keeping and administration and can result in a reduced amount of tax relief available to the claimant company.

Key tax considerations *(Continued)*

Transfer pricing

The basic principle of the transfer pricing legislation is that, for tax purposes, all transac-tions between connected persons must use arm's length prices.

The transfer pricing rules apply to all transactions between connected persons including the sale of goods, management charges, royalties/licensing income and the charging of interest on inter-company loans.

Where a non-arm's length price is used, an adjustment may be required in the advantaged party's corporation tax return.

The legislation applies to transactions between "connected" entities. Broadly two entities are connected where:

- one party is in a position to control directly or indirectly the other; or
- the same person directly or indirectly controls each party.

Control refers to the power to secure that the affairs of the company are dealt with in accordance with a person's wishes by virtue of shareholdings, voting power etc.

Two parties to a joint venture are therefore 'connected' if the 40% test is met. The regulations apply equally to transactions between two UK entities and between a UK resident and a non-UK resident entity.

Small and medium-sized enterprises (SMEs) and dormant enterprises can avail of exemptions from trans¬fer pricing requirements. SMEs are exempt from the transfer pricing rules in respect of trans¬actions with other entities in the UK or in any country with which the UK has a double taxation treaty with a suitable non-discrimination provision.

An SME for these purposes is defined as a business with less than 250 employees and either:

- an annual turnover not exceeding €50 million, or
- a balance sheet assets total not exceeding €43 million.

These thresholds are applied on an annualised basis to the worldwide consolidated group.

Notwithstanding this, HMRC has the power to issue a transfer pricing notice to a medium-sized business in exceptional cases where the tax involved is "significant."

A transfer pricing adjustment is required where a UK tax advantage (either a smaller amount is taken into account in calculating the chargeable profits or a larger amount is taken into account in calculating any losses) is conferred as a result of a transac¬tion between connected parties occurring at a price other than an arm's length price.

An adjustment is required in the tax computation of the party with the UK tax advantage.

When considering if a transaction has occurred at an arm's length price, taxpayers are required to consider the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations.

These guidelines set out a number of acceptable methods that can be used to determine an "arm's length" price and state a preference for "transactional methods" i.e., methods which refer to prices at which actual transactions between unconnected parties have taken place.

If the other party to the transaction is UK resident and subject to UK corpora¬tion tax, they can make a "cor¬responding adjustment" in their tax return, equal and opposite to the adjustment in the advantaged party's tax return.

There is no requirement for the disadvan¬taged party to make an adjustment in their tax return, however, where they wish to do so, the claim must be made within two years of the date the return containing the transfer pricing adjustment is made by the advantaged person.

Taxpayers are required to maintain documentation to demonstrate that carefully considered arm's length transfer pricing policies were adopted and applied. The form of documentation depends on the complexity of the transactions involved. Penalties may be charged if inadequate documentation is kept.

The OECD has produced revised transfer pricing guidelines as part of the Base Erosion and Profit Shifting initiative to improve the tax transparency of multinational enterprises (MNEs). These guidelines recommend three layers of transfer pricing documentation should be prepared by MNEs.

A company is responsible for making any necessary transfer pricing adjustments within its corporation tax return. Penalties may be charged if the necessary adjustments are not made.

An entity can apply to HMRC for an Advance Pricing Agreement (APA) to gain comfort with regard to their transfer pricing policies. An APA enables the company to agree its approach to transfer pricing in advance with HMRC. A company can choose whether or not to apply for an APA, but once entered into they are binding. HMRC will generally only consider APAs in relation to complex transfer pricing issues, in particular in relation to transactions between UK and overseas entities.

STEP 3 Application to Scenario

In this scenario, under each option, once the product range moves beyond its R&D phase to commercial launch, relief may also be available under the UK patent box regime.

100% of qualifying IP profits potentially qualify for the 10% rate of corporation tax saving corporation tax of 15%. Where the patent box regime is not available, this income will be subject to corporation tax, as normal. Assuming sales of commence as planned in the accounting period ending 31 March 2024, the deadline for electing into the patent box regime will thus be 31 March 2026.

It would also appear that this is the first time the patent box regime is potentially applicable to the group as the only other patent owned lapsed in 2012 hence a claim in respect of the patent box regime would appear to be precluded in respect of previous accounting periods. However, the Group should consider if it has any other products in respect of which a patent application could potentially be made.

Key tax considerations *(Continued)*	
	On the basis that the patent will be owned by the relevant company and it will be granted by recognised bodies, under each option, each company will own qualifying IP on which qualifying IP profits arise. Although projected taxable profits of £4,000,000 are attributable to patented products, under each option, the benefit of electing into the patent box regime will be less than 15% or £300,000 per annum due to the specific calculation required, as set out earlier. From a transfer pricing perspective, under each option it will first need to be considered if the SME transfer pricing exemption is available. If it is not, the licensing fee charged under each option must be the arm's length price otherwise a transfer pricing adjustment will be required in the relevant company owning the patent with a corresponding adjustment potentially available if the company paying the license fee is UK resident. Under each option, the licensing fee payable by any UK company will qualify for a corporation tax deduction of potentially 25%, depending on its taxable profits and there is no requirement to deduct 20% basic rate tax as the payment will be made between UK companies. However, tax advice should be taken to check the position in respect of payment of licensing fees from other jurisdictions. Any license fee income received by the UK resident subsidiaries will be subject to corporation tax in the UK at 25% if taxable profits exceed £250,000 in a 12-month accounting period. The VAT supply of services rules will also need to be considered in respect of the licensing fees charged. Should the ownership of the patent initially be held in the R&D subsidiary and then be transferred to the UK resident manufacturing and retail arm of the group, this transfer will fall within the corporate intangibles regime and be on a tax neutral basis hence no corporation tax will be payable on this deemed disposal at market value. The R&D subsidiary will be exposed to a de-grouping charge should the UK manufacturing and retail arm leave the group within six years however if the substantial shareholdings exemption is available on the share disposal, the de-grouping charge will also be exempt. **Option 1 –** locate the patent in the UK tax resident company in the group which is the group's manufacturing and retail arm. This company would charge a license fee for use of the patent by the other companies in the group. In this scenario, the UK resident manufacturing retail arm will own the patent and receive the qualifying IP income. However, as the development of the patent will have been carried out wholly in the R&D subsidiary, the patent box regime modified nexus rule means that relief will, unfortunately, be reduced to nil and this company will not be able to claim the benefit of the patent box regime on its qualifying IP profits. Hence corporation tax at the main rate of 25% which applies in 2024 will arise of approximately £1,000,000 on the projected taxable profits of £4,000,000. **Option 2 -** keep ownership of the patent in the UK R&D subsidiary which developed the patent. This company would then charge a license fee for use of the patent to the other companies in the group. In this scenario, the UK resident R&D subsidiary will be able to benefit from the patent box regime on its licensing income as it conducted 100% of the qualifying development in house. However, as this company will not be manufacturing the products nor generating sales of the product line containing the patent, the benefit of the 10% rate will be significantly less than if it had sold those products instead of the manufacturing and retail arm.
STEP 4	It is now time to conclude and bring the strands of your analysis to make an overall recommendation/conclusion in respect of the patent box regime in particular. **STEP 4 Application to scenario** To ensure maximum access and benefit is obtained from the patent box regime, manufacturing and sales of the products could take place entirely within the UK resident R&D subsidiary who would register and own the relevant patent. Going forward, the R&D subsidiary could instead be designated as the group's innovation trading hub. Alternatively, option 2 as set out earlier could be used, though as set out earlier it should be noted that the resulting qualifying profits for the 10% rate will be much less than if the R&D subsidiary had manufactured and sold the product itself. Under these two options 100% of the qualifying development will have been carried out by the R&D subsidiary and thus there will be no restriction as a result of the modified nexus fraction. 100% of qualifying IP profits, as calculated, will therefore qualify for the 10% rate. Option 2 may be more commercially feasible as it does not disturb the intended commercial arrangements within the group whereby one company is the manufacturing and retail arm and the other is the R&D subsidiary, however the benefit of the patent box is likely to much lower. Therefore, a full and complete review of each potential option should be undertaken in advance of the launch of these products.

**Students should tailor their answer according to the scenario presented and reference and other taxes that may be relevant as signposted in the case.*

Innovation activity in a multinational group

John Munnelly speaks to Seán Arthur, Lead FAE Advanced Taxation ROI educator, and the FAE Advanced Taxation ROI examiner, to find out about some of the biggest challenges facing students ahead of this year's FAE.

In past exam sittings, FAE students have found it challenging to identify and advise on reliefs for specified intangible assets and innovation activity, and related tax risks, particularly in the context of the Knowledge Development Box.

In the current economic environment, tax relief for innovation activity remains very topical as businesses seek to differentiate themselves from competitors. The 2021/22 FAE competency statement requires students to attain a comprehensive understanding of core concepts and principles.

They must be able to apply this comprehension to the innovation activities of a business, including considerations around the reliefs available for expenditure on Research and Development (R&D) and intangible assets, and the Knowledge Development Box.

Transfer pricing may also be relevant where intangible assets are owned by one company but licensed for use to another company. In addition, a sound professional and commercial judgement must be clearly demonstrated.

The generous reliefs available for innovation activity in a group of companies require careful planning to ensure that each relief is maximised overall, and each relevant tax and commercial factor and associated risk is considered from the outset when beginning a R&D project.

This article is intended as an overview of the different tax considerations which arise in a scenario where a multinational group of companies is considering locating its innovation activity in Ireland.

This article does not touch in any detail on the specific calculations required to arrive at the level of expenditure qualifying for R&D tax relief. Information on this is available in your FAE Taxation 3 (RoI) 2021-22 textbook and Session 4 of the course.

Students are also reminded that the calculation of the R&D tax credit and how it can be used is important cumulative knowledge from the CA Proficiency 2 course.

At a high level, this article simply seeks to highlight the practical situations in which innovation activity in Ireland can offer various tax reliefs, whilst at the same time presenting potential tax risks, depending on how the activity is structured and where it is located.

Below, we have outlined a potential innovation activity scenario involving a multinational group.

A multinational group of companies with two wholly-owned Irish tax resident subsidiaries is undertaking an entirely "in-house" R&D project in Ireland, which commenced in 2021.

The project, if successful, aims to research and develop a new product line incorporating a new and innovative ingredient the group plans to patent.

This will be the first new patent created by the group (and its first R&D project). Revenue has already confirmed that the R&D project is qualifying R&D activity for Irish tax purposes.

To facilitate this and future R&D projects, one of the two Irish tax resident subsidiaries in the group, newly established in 2021, has been designated as a purely R&D subsidiary. R&D will be its only activity.

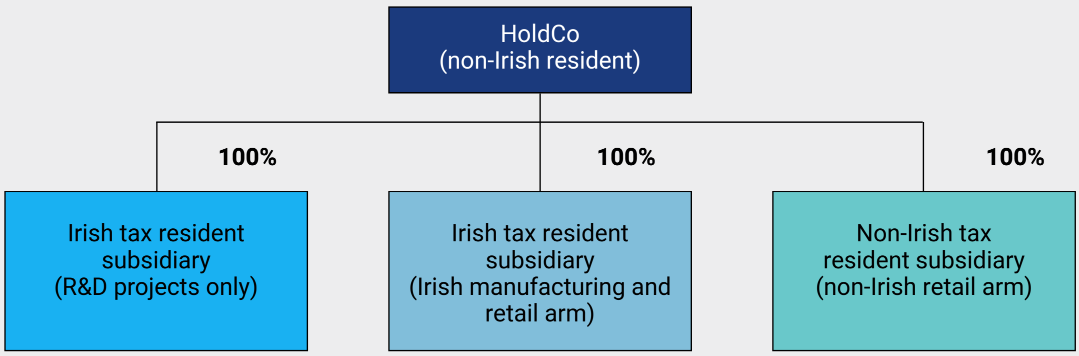
It will also carry out all R&D projects going forward, but only in Ireland. In its accounting period ended 31 December 2021, the company bought a site costing €90,000 and spent €850,000 building a new purpose-built R&D facility in Dublin at which all R&D projects will be undertaken.

Expenditure on new plant and machinery for the facility totalled €250,000 in the accounting period ended 31 December 2021.

Market research indicates

Potential Innovation Activity Scenario – Multinational Group

GROUP STRUCTURE



that sales of the new product line (incorporating the patented ingredient) are projected to account for taxable profits of €4 million minimum per annum in the accounting period ending 31 December 2022.

Once the R&D project has been completed, the Board of Directors (the Board) plans to locate ownership of the patent, which will be registered worldwide, in the other Irish tax resident company in the group. This is the group's Irish manufacturing and retail arm.

Alternatively, the Board are willing to consider locating ownership of the patent in the Irish R&D subsidiary that developed the patent, which would charge a license fee for use of the patent to the other companies in the group (Irish and non-Irish), if there was a specific tax advantage in doing so.

The Board is keen for advice on any tax reliefs that may be relevant in respect of this project, and the patent, including any relevant planning recommendations to maximise relief in the group and minimise tax risk in Ireland.

Below are the key steps needed to formulate a comprehensive summary to the Board:

Market research indicates that sales of the new product line (incorporating the patented ingredient) are projected to account for taxable profits of €4 million minimum per annum in the accounting period ending 31 December 2022.

Step 1.

Consider which of the Tax HIT List are relevant to this scenario, as you would with any indicator.

The reliefs you should consider are for corporation tax, as the Board is seeking advice on tax reliefs. It will also be important to highlight any relevant potential tax risks.

Note that the VAT rules for the supply of services should be considered where licensing fee income is charged by an Irish company to other companies in the group, including the cross-border supply of services rules.

Please refer to Session 15 of your course materials and Chapter 14, Section 14.8.2 of your textbook for an analysis of the cross-border supplies of services rules.

Step 2.

Identify the potential tax reliefs available for the revenue and capital R&D expenditure of the Irish resident R&D subsidiary while it is conducting the R&D project.

This will require examining the potential R&D tax credit available for both revenue and capital expenditure.

Step 3.

Consider the potential for tax relief under the Knowledge Development Box regime and identify other relevant tax considerations and risks, including transfer pricing.

As part of this, consider the two options presented in the scenario for ownership of the patent:

- **Option 1** – locate the patent in the Irish tax resident company in the group's manufacturing and retail arm. In 2022, this company would charge a license fee for use of the patent by the other companies in the group.

- **Option 2** – keep ownership of the patent in the Irish R&D subsidiary which developed the patent. In 2022, this company would then charge a license fee for use of the patent to the other companies in the group.

The conditions for relief for the Knowledge Development Box should be carefully checked to ensure relief is maximised, where possible, and any tax risks under each option are identified.

Under Option 2, as each of the companies will be classed as being associated companies under the common control of the holding company, transfer pricing will need to be considered in respect of the licence fee charged by the R&D subsidiary.

This will also be a consideration under Option 1 as the Irish manufacturing and retail arm plans to charge the other companies in the group a license fee for use of the patent.

Step 4.

Conclude your analysis. Use your prior analysis to make an initial recommendation based on which option will maximise relief, while also taking into consideration any commercial implications or other potential workable options.

See the key tax considerations on the next page for more information on steps 2-4 and the application of the rules to the above scenario.

The information in this article is relevant as at the date of publication.

Key tax considerations

Key tax considerations*	Innovation expenditure – tax reliefs and related considerations
STEP 2	**See Chapter 3 Section 3.7 of text for the technical detail of R&D tax credits in Ireland.** **Application to scenario** In the above scenario, as the project has already been determined as being qualifying R&D activity by Revenue, it will next be important to calculate the 25% R&D tax credit available to the R&D subsidiary by gathering the qualifying revenue R&D expenditure of the company in 2021. The capital expenditure on the building (€850,000) and the R&D plant and machinery (€250,000) will also qualify for the 25% R&D tax credit but not the purchase of the site (€90,000). On this expenditure the company will be able to claim a tax credit of €275,000 (25% x €1,100,000) in addition to the 25% credit available on the qualifying R&D revenue expenditure. As the R&D subsidiary company purely carries on R&D activity in 2021 and does not have any income sources (option 1), the next consideration will be to address how the company can use the R&D tax credit. As the group has made clear that it wishes to maximise relief within the group, the potential to surrender all or part of the R&D tax credit to key employees who have been or are central to the R&D activity has not been considered here. The R&D tax credit can normally be used first against the company's corporation tax liability for the y/e 31 December 2021 (under section 766(2) TCA 1997). This is not relevant in 2021 as the company does not have any income sources and is purely conducting R&D activity. Any unused excess can normally be carried back to offset corporation tax of the preceding accounting period of equal length (under section 766(4A) TCA 1997). Again, this is not relevant as the R&D subsidiary was not in operation in 2020. As the full 25% credit for 2021 will be unused, the company may make a claim to have the amount of that excess paid to them by Revenue in three instalments. The three instalments will be paid over a period of 33 months from the end of the 2021 accounting period. The first instalment to be paid will amount to 33% of the excess and may be payable by the filing date for the accounting period in which the expenditure was incurred i.e., 23 September 2022. The remaining balance will then be used to first reduce the corporation tax of the next accounting period, 2022, and, if any excess still remains, a second instalment amounting to 50% of that remaining excess will be paid to the company 12 months after the due date of the filing of the corporation tax return that gave rise to the original claim i.e., by 23 September 2023. Any further excess may then be used to reduce the corporation tax of the following accounting period and, if an excess still remains, under section 766(4B) TCA 1997, that amount will be paid to the com¬pany as the third instalment, 24 months after the filing of the corporation tax return that gave rise to the original R&D credit i.e., by 23 September 2024. The maximum cash refund payable to the company is limited to the greater of: • the corporation tax payable by the company for accounting periods ending in the 10 years prior to the relevant period, or • the payroll taxes remitted by the company to Revenue in the relevant period and the previous period. Payroll liabilities include the Universal Social Charge, along with income tax and PRSI payable by the company. As the R&D subsidiary was established in 2021, it will not have any corporation tax in prior periods hence the maximum cash refund will be capped based on the payroll taxes limit set out above. Whether or not any payment will be received in 2023 and 2024 will depend on the precise corporation tax position of the company in 2022 and 2023. If option 1 is proceeded with the R&D subsidiary is unlikely to have any corporation tax liability in 2022 and 2023. However, under option 2, the R&D subsidiary may have a corporation tax liability as a result of the licensing income received.
STEP 3	**The Knowledge Development Box** See Chapter 3 Section 3.8 of text for the technical detail of the Knowledge Development Box in Ireland. **Transfer pricing** See Chapter 13 Section 13.6.4 of text for the technical detail of the Transfer Pricing Rules in Ireland. Application to scenario **The Knowledge Development Box** In this scenario, under each option, once the product range moves beyond its R&D phase to commercial launch, relief may also be available in 2022 under the Knowledge Development Box ("KDB"). It should be noted that at present the KDB is due to end on 1 January 2023. The KDB is provided for under sections 769G–769R TCA 1997 and is designed to supplement the R&D credit by providing a special tax rate on profits generated from related R&D or intellectual property activities. The KDB rate is effectively a tax rate of 6.25%, which applies to accounting periods that begin before 1 January 2023. While the legislation does not provide for a 6.25% corporation rate, an additional tax deduction is granted that, when factored into the calculation of taxable profits and the 12.5% rate is applied, results in an effective rate of 6.25%.

Key tax considerations *(Continued)*	
Key tax considerations*	**Innovation expenditure – tax reliefs and related considerations**
	The KDB applies the 'Modified Nexus Approach' which calculates tax relief using the proportion of qualifying R&D expenditure expended by the Irish company in comparison with the entity's overall R&D spend worldwide. **Option 1 –** locate the patent in the Irish tax resident company in the group which is the group's manufacturing and retail arm. In 2022, this company would charge a license fee for use of the patent by the other companies in the group. Under option 1, although the Irish manufacturing and retail arm would be carrying on a specified trade with qualifying assets for the purposes of the KDB, it will not have any qualifying expenditure in 2022 as it will not have incurred any expenditure wholly and exclusively in the carrying on of R&D activities in an EU Member State, the consequences of which lead to the devel¬opment, improvement or creation of the qualifying asset. R&D by members of the same corporate group, along with the cost of acquiring intellectual property is not treated as qualifying expenditure. Hence corporation tax of 12.5% being €500,000 will be payable on the projected taxable profits of €4,000,000. **Option 2 -** keep ownership of the patent in the Irish R&D subsidiary which developed the patent. In 2022, this company would then charge a license fee for use of the patent to the other companies in the group. Under option 2, the R&D subsidiary may be able to benefit from the KDB as it will be conducting a specified trade with qualifying assets, and it will have qualifying expenditure. In the case of KDB qualifying profit from the specified trade includes licence fee income (and the portion of income from sale of a product or service that relates to the intellectual property) calculated on a just and reasonable basis. Detailed calculations will need to be undertaken to quantify if the R&D subsidiary will have a qualifying profit in respect of the license fee income. Although projected taxable profits of €4,000,000 are attributable to patented products, under option 2, the benefit of electing into the KDB regime will be much less than 6.25% or €250,000 (€4,000,000 x 6.25%) in 2022 due to the specific calculation required and because this company will not be manufacturing the products nor generating sales of the product line containing the patent. Hence the benefit of the KDB will be significantly less than if it had carried out the R&D and also manufactured and sold those products instead of the manufacturing and retail arm. **Transfer pricing** From a transfer pricing perspective, under each option it will first need to be considered if the SME transfer pricing exemption is available, if this is extended beyond 2021 which is unclear at present. If the SME exemption is not available in 2022, the licensing fee charged under each option must be the arm's length price otherwise, if Revenue finds that the transfer prices applied by associated companies differ from arm's-length prices, the profits/losses of the Irish associated companies must be recomputed and an adjustment to profits is necessary for one or both associated companies. **License fees** Under each option, the licensing fee payable by the relevant Irish company will be treated as a trade charge on income and may qualify for a corporation tax deduction in the accounting period of payment or relief may be available as excess charges on income either in the company itself or in the other Irish resident member of the group. Relief from withholding tax obligations on these payments between the Irish group members is likely to be available. Tax advice should be taken to check the position in respect of payment of licensing fees from other jurisdictions. Any license fee income received by the Irish resident subsidiaries will be subject to corporation tax in Ireland at 25%. **VAT** The VAT supply of services rules will also need to be considered in respect of the licensing fees charged.
STEP 4	It is now time to conclude and bring the strands of your analysis to make an overall recommendation/conclusion in respect of the patent box regime in particular. **Application to scenario** To ensure maximum access and benefit is obtained from the KDB before it is due to cease on 1 January 2023, manufacturing and sales of the products could take place entirely within the Irish resident R&D subsidiary who would register and own the relevant patent. Going forward, the R&D subsidiary could instead be designated as the group's innovation trading hub. Alternatively, option 2 could be used, though as set out earlier it should be noted that the resulting qualifying profits for the KDB relief will be much less than if the R&D subsidiary had manufactured and sold the product itself. Under these two options 100% of the qualifying expenditure (and development) will have been carried out by the R&D subsidiary and thus there will be no restriction to KDB relief as a result of the modified nexus rule. Option 2 may be more commercially feasible as it does not disturb the intended commercial arrangements within the group whereby one company is the Irish manufacturing and retail arm and the other is the R&D subsidiary, however the benefit of the KDB is likely to much lower as explained earlier. Therefore, a full and complete review of each potential option should be undertaken in advance of the launch of these products in 2022. In addition, should the KDB be continued beyond its current planned end date of 1 January 2023, the group should carefully consider the location of future R&D activity to ensure relief under the KDB is maximised.

**Students should tailor their answer accordingly to the scenario presented and reference any other relevant taxes which may be relevant as signposted in the case.*

A final word

Doing well in any exam comes down to thorough preparation, but a healthy and balanced approach is just as important. **John Munnelly** offers his advice on cultivating the right mindset in the run-up to the big day.

Resilient is a word used to describe the qualities demonstrated by the current FAE students to get this far: one last push will see you to the finish line.

Here is what you do not need: A reminder that when you are reading this, your exams are approximately four weeks away.

Here is what you do not need: A lecture on the lack of engagement with the mock exams; everyone is focused at this point.

Here is what you do not need: Yet another lecture regarding the lack of engagement with the practice papers on CIRRUS.

Here is what you do need: A reminder that this FAE Exam Guide, along with last year's guide, contains insights and knowledge that can actively work to your advantage if you take the advice offered.

Here is what you do need: Exam technique is just as important as your technical content at this stage of your preparations. You must be be proficient at navigating the exam platform at this point.

Here is what you do need: A reminder that a healthy diet and plenty of exercise are both incredibly important anyway, but especially so in the weeks leading up to your exams. If you were to do nothing else for the next four weeks apart from getting out of bed an hour earlier and heading out for a walk first thing in the morning, you would still benefit from a cumulative energy spike.

Here is what you do know: You know what you need to cover in terms of your study. Make your plan now and

get your head down for the next four weeks.

Here is what you do know: Filter out the white noise. Well-intentioned peers or third parties becoming 'clairvoyant,' and trying to predict how your exam experience will go is only going to add to your stress levels.

Here is what you do know: You are a resilient student who, despite the pandemic, the disruption, and the isolation, has remained on point, and now, you are just weeks away from a couple of big performances. Don't leave the exams wishing you could have done more. All the great athletes talk about performance. Get the performance right and the winning will take care of itself.

I never formally wish any student good luck in their exams. I firmly believe that the FAEs are a place where success occurs when opportunity meets preparation. In a few weeks' time, you will have an opportunity to demonstrate that preparation to the maximum. Best of luck.

John Munnelly is FAE Paper Development Executive at Chartered Accountants Ireland.

Preparing for your e-assessment

There are a wide range of videos and guides on the Chartered Accountants Ireland website to help students get ready for the e-assessment. Here are some of useful steps you can take to help you prepare:

- Make sure you have the most up-to-date version of your web browser installed and download the ProctorU Chrome extension.
- Test your equipment in advance. Make sure your camera and microphone are both working.
- Check your internet speed. If you are testing in your workplace or home office, make sure your network does not contain firewalls.
- Turn off your laptop each evening before your exam and start fresh every morning.
- Prepare a quiet environment for the exam where you will not be disturbed.
- If you plan to use a Mac, engage with the chat link for more advice.
- Always access your exam through your student portal, both at the beginning of the exam and in the event that you need to log on again should you disconnect.
- If you encounter issues on exam day, contact support using the link you will receive by email on each day of the exams.
- We recommend that all students attend the practice on-boarding session on Wednesday 27 July from 11am–1pm. Students will be sent a timeslot and link in advance.
- Students are also advised to complete your Equipment Test before the exam. You will receive either a pass or fail status once your Equipment Test is complete. If the test indicates an equipment fail status, please reach out immediately to **FAEexam@charteredaccountants.ie.** Please do not keep this result to yourself, as it will impact your ability to connect to the exam on examination day.
- Finally, students should read all emails sent to them carefully and familiarise themselves with the exam rules that will be emailed to them and available on the website.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