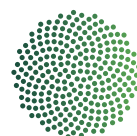


Financial Services in Ireland – Skills of the Future

JUNE 2022



L.C.G. Markets Solutions
Learning - Consulting - Governance



Financial Services Ireland
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Contents

Foreword	3
Recommendations	4
Extend the good work	4
Attract early talent	4
Attract international talent	5
Attract transition talent	5
Broaden recruitment filters	5
Focus on up-skilling and re-skilling as an opportunity	5
Executive summary	6
Research methodology	7
Introduction	8
Future skills requirements	10
Demand	10
The talent pipeline for financial services	12
Early talent	13
The importance of technical skills	13
Beyond traditional STEM programmes	13
Bridging the gap between technology and business	14
Leveraging work-integrated learning to build job skills	14
Students' perceptions of financial services careers	16
Spotlight on ESG/Sustainable Finance	17
International talent	19
International students	19
Newcomers	20
Considerations for expanding the pipeline of international talent for financial services	20
Transition talent	22
Recruiting from the technology sector	23
Continuing education: building data and job-ready skills	23
Spotlight on Fintech and Digital Finance	25
Broader ecosystem changes	26
The skills landscape is changing	26
Opportunities for financial services in Ireland	26
Industry wide skills needs	28
Spotlight on Ireland's Women in Finance Charter	30
Sub-sector skills needs	32
Training and education provision	44
Conclusion	50
Acknowledgements	52
Appendices	53
Appendix 1 Specialist education and training programmes in international financial services that will be developed an/or delivered in 2022	53
Appendix 2 Acronyms	56

Foreword

Talent and skills are the bedrock of any thriving and successful sector. As a growing sector, where exciting change and development is underway, it is crucial that the talent and skills needs of the financial services sector are assessed and understood.

This seminal report provides vital analyses, to allow the sector to plan the policy and educational initiatives essential to capturing the growth potential in financial services for the broader economy.

Financial Services Ireland (FSI) is delighted to have led the development of the report through our IFS Skillnet, with major support from Skillnet Ireland, alongside the report's steering group and our sister trade associations.

Making Ireland the preeminent location for talent and expertise in the financial services sector is one of the key strategic goals of FSI in delivering our objective that Ireland will be a top 20 global financial centre by 2025. This report will be central to achieving that outcome.

Finally, it is important to reflect on the past, to give us confidence for the future. In 1987, the IFSC employed fewer than 100 people in the Dublin docklands. Today, the IFS sector employs over 52,000 people across all regions of the country. Armed with this report, we can replicate such success once more.



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Recommendations

Ireland's financial institutions have been at the forefront in addressing talent shortages. Existing efforts include student engagement activities: partnerships with post-secondary institutions; upskilling initiatives for existing workforces and participation in immigration initiatives targeting key skills. This work is strong and foundational and should continue.

Additionally, the current economic landscape presents some new challenges and opportunities to expand on these existing strategies. When considered together, key recommendations emerge for financial services as they continue to redefine and reshape their workforces and their talent pipeline.

Extend the good work

There are opportunities to expand the talent pool by extending existing talent initiatives that increase access to in-demand skills such as:

- Increasing the number of high-quality work-integrated learning opportunities for students and expanding the types of roles available such as: work placements from as early as Transition Year in secondary schools; Applied Leaving Certificate placements; Post Leaving Certificate (PLC) course; Further Education course placements and expansion of third-level student placements
- Leveraging talent initiatives such as the IFS Skillnet and IFS, Insurance and Accounting Apprenticeships to help students and employees build work-ready skills

- Engaging in partnerships with government funded upskilling and reskilling initiatives to access mid-career professionals who are adding future-proof skills to their toolkit
- Expanding partnerships with incubators, accelerators, and innovation labs in universities and colleges to grow the potential pool of candidates
- Advocating for the retention and expansion of fast-track immigration initiatives including the continuous updating of skills covered to stay relevant to market needs

Attract early talent

Competition for new graduates with in-demand STEM-based skills is fierce, with financial institutions competing directly with each other, as well as with technology firms, fintech companies and other organisations for talent. Sector wider initiatives such as the establishment of the fintech corridor as a fintech cluster and centre of excellence build both capacity and capability and are based on best practice in other sectors well evidenced by the IDA in the pharma and cybersecurity sectors. Well thought out strategically planned early talent attraction processes can also serve to feed the talent funnel well in advance.

Attract transition talent

Today's talent may have outdated perceptions of financial institutions as large, formal, inflexible, slow-moving workplaces. Showcasing modern financial institutions as technology-centric, innovative, world-class employers will serve to attract talent that might otherwise gravitate towards the technology industry or others. As hard as COVID-19 has been on Ireland's economy, our financial institutions are uniquely positioned to pivot during this tough time to selectively grow their skilled workforces. Attraction initiatives might include:

- The creation of campaigns to highlight the sector's many partnerships and involvement in the national technology and innovation ecosystem
- The focus on the work/life balance sought by so many especially in an aspirational post pandemic world, and the mitigation of the perception, true or otherwise, that financial services is a sector where a long working week is typical
- The development of international promotional and repatriation strategies targeted at tech talent in hubs such as the Silicon Valley and other global tech hubs. Global turmoil and economic uncertainty make the stability of Ireland's financial institutions more appealing than ever

Broaden recruitment filters

The recruitment process typically involves the review of high volumes of data. Applying automation and filters has helped employers to manage this volume, but may inadvertently screen out many of the candidates who they are seeking to attract. To lessen this risk, financial institutions are encouraged to review and update their recruiting systems to ensure that they are responsive to the changing nature of skills and experience. For example:

- Promote the recognition of international qualifications and global experience, as a means of growing and leveraging the advantages of a diverse workforce
- Consider non-traditional learning experiences as valid upskilling and reskilling sources, such as continuing education, bootcamps, badges, micro-credentials and MOOCs (Massive Online Open Courses)

- Configure recruiting systems to flag these skill-building activities and to capture newly up and reskilled candidates
- Encourage a broader cross-section of candidates to apply for roles by decreasing the length and heavy detail often found in formal job postings, and by clarifying skills that applicants "must have" versus those they would be "willing to develop"
- Continued adoption of innovative assessment tools to gauge competency levels vis-à-vis future-proof and foundational skills. Formal learning and certifications do not tell the full story. Effective assessment tools can contribute valuable data to support a hiring decision
- A review of the culture of the sector especially with regard to accessibility to employment for non-graduates and atypical individuals from diverse backgrounds such as via the apprenticeship route

Focus on upskilling and reskilling as an opportunity

Mid-career workers are a source of opportunity for the financial services sector. Mid-career professionals working within a financial institution have good knowledge of the business and of internal processes, and "know how to get things done". Accordingly, financial institutions are encouraged to:

- Expand the learning and development opportunities offered to internal candidates to upgrade their skills and/or to develop new ones; which has the added benefit of increasing employee engagement and commitment
- Consider recruiting motivated external candidates who may have been laid off due to COVID-19 and re-skilled themselves, and/or those who have highly sought-after soft and transferable skills and may just need minor skill upgrades

Executive summary

The resilience of the Financial Services sector has served all stakeholders well in the past two years of turbulence, which started with a global pandemic and is currently witnessing war in the Ukraine, inflationary pressures and remaining uncertainty in relation to yet unknown societal and economic impacts of COVID-19.

As the numbers employed in the sector have increased in this period, as hybrid models of working are being trialled in various formats and as competition for talent increases, the future talent pipeline for the sector has never been of more critical importance. This report coincides with the midterm review of the *Ireland for Finance* strategy which has several overlapping actions in the areas of:

- 1) Sustainable Finance,
- 2) Fintech and Digital Finance, and
- 3) Talent and Diversity.

Based on insights gathered through one to one interviews, focus groups, a survey and desk research, this report aims to: understand the sources of talent for the sector (Early Talent, International Talent and Transition Talent); identify the sector wide and sub sector skills needs; consider the perception of the sector as a career destination for all levels of talent vis-à-vis competing sectors such as technology; explore the alignment of education and training provision offerings versus sectoral needs and make a number of tangible recommendations that will make a positive difference to talent and skills acquisition.

Three spotlights have been cast on topical issues that were discussed and highlighted in the research that took place in service of this report:

- 1) ESG
- 2) Fintech and Digital Finance
- 3) Women in Finance

The report aims to make sense of the impact of the rapidly changing world on the talent pipeline and uncovers opportunities for stakeholders to attract in-demand skills essential for the future of work in the financial services sector in Ireland.

Research methodology

The Ask

IFS Skillnet tendered for the provision of consultancy services for the design and delivery of a skills analysis report for the financial services sector (March 2021). In July 2021, L.C.G. Markets Solutions was appointed into this role and the skills analysis project commenced.

Steering Committee

The team worked closely with IFS Skillnet and a steering committee on this project. The process was mapped out and a timeline was set to have this report researched, agreed and published in 2022.

Analysis

The analysis took several routes to try to ensure a broad spectrum of inputs and opinions therefore inputs came not just from the top of the industry, but also from those actively involved in the development, implementation and participation in skills and training activities around financial services in Ireland. To this end, representatives from multiple industry associations and bodies were contacted and invited to participate in some form. The emphasis was on qualitative data as much as quantitative.

Project Inputs

The research was aimed at getting the voice of the industry heard when it comes to the skills needs required now and into the future.

Interviews

A primary driver in this research was to listen to and directly capture the current thinking from across the spectrum of people involved in, or around, the financial services industry. Interviews took place with over 100 financial services personnel. They ranged from CEOs to 'working students' in the Irish operations of banks, aircraft leasing and finance, insurance, reinsurance, securities services, corporate treasury and asset management firms in the world.

Industry sub-sectors

- Asset management
- Aircraft leasing and finance
- Corporate treasury
- Fintech
- Insurance and reinsurance
- International banking
- Investment funds and securities services
- Non-bank lending
- Retail banking

Online survey

Outputs from the interviews were used to form the basis of the questions asked in the survey. Responses to this survey can be seen in the graphics throughout this report.

Focus groups

Focus groups from across industry were conducted with the following groups, with participants coming from all levels of seniority and experience - outputs are included throughout the report:

- Chief executive officers (CEOs)
- Independent Non-Executive Directors (INEDs)
- Learning & Development (L&D) / Human Resources (HR)
- Women in Finance
- Working students
- Insurance / reinsurance

Desk Research

Desk research was also carried out referencing both national and international reports where relevant to emerging themes.

Introduction

Ireland is home to a vibrant and dynamic global financial services sector. Banking, insurance, asset management, funds industry, fintech and securities markets contribute to a robust, diversified financial services ecosystem. Generating €19.3 billion in GDP, contributing 23% of Ireland's total corporate income tax at €2.49 billion and employing over 52,000 people¹, the sector has a significant influence on the Irish economy.

The proliferation of new technologies over the last decade has unleashed previously unimaginable insights into what the future may hold for businesses, customers and society. Digitally oriented companies are already proving to be the ones adding value in our current global landscape. Increasingly, global thought leaders point to DARQ (a combination of: Distributed Ledger Technology; Artificial Intelligence; Extended Reality; Quantum Computing) as having massive game-changing potential—initially coined by Accenture but now used widely—as they continue to transform many of the world's most important industries and businesses as well as drive major shifts in customer experiences, business models and labour-input capabilities. Financial Services Hubs in all jurisdictions are navigating towards a future where there will be waves of combinations of finance and technology configuring and re-configuring, to continually create competitive advantage.

As Ireland's financial institutions navigate towards this increasingly digital future, jobs are changing dramatically and new skills are needed to drive initiatives such as data analytics, artificial intelligence and distributed ledger technologies. The ability to attract, recruit and retain top talent is essential to the sector's continued success. To remain competitive, financial institutions require access to a strong and digitally fluent workforce who can effectively utilise new technologies and leverage the vast amounts of data now available.

Ireland boasts a workforce characterised by high levels of post-secondary education attainment, as well as robust immigration rates and a rapidly growing technology market. On the one hand this would appear to create a strong potential talent pipeline for financial services comprised of early talent, newcomers and talent transitioning from other sectors, however, industry associations and government projections point to skills shortages in some key occupations, and a lack of job readiness in the early talent pool.

Another factor to consider when examining the talent pipeline is overall industry demand. Ireland, and in particular Dublin, is a significant technology hub in Europe and is striving to become a global fintech hub. While this brings increased innovation to the financial services sector, it also places added pressure on its talent pipeline. Against this backdrop of a changing demand landscape, recent years have brought additional challenges to Ireland's economy and talent pipeline. COVID-19 has increased uncertainty in all sectors. COVID-19 is also having an impact on immigration, international students, inflation and the ongoing pre-pandemic issues of housing and transport infrastructure. Climate change also has a direct impact on the financial services sector and has the potential to impair price stability, for example by increasing macroeconomic volatility, affecting potential growth and the natural real interest rate, or by impairing monetary policy transmission due to stranded assets.

1. Ireland for Finance Action Plan 2022



The challenge of tackling climate change requires action on the part of the whole community, businesses, households, and policymakers. The war in Ukraine also increases global turbulence. It is within this environment that this report examines the current state of the financial services talent pipeline and uncovers opportunities for stakeholders to attract in-demand skills essential for the future of work in the financial services sector in Ireland. Sustainable finance has become increasingly popular in recent years – and none more so than in the uncertainty of these current times.

“The battle for advancing Sustainable Finance must be waged on the education and training front”

Sustainable Finance Skillnet Deep Dive Skills Report, 2019

Future skills requirements

A key requirement for the success of the Government's *Ireland for Finance* strategy is the continued availability of sufficient numbers of people with the skills needed – in quantity and quality – for the sector to continue growing and moving up the value chain. The reskilling and upskilling of staff are a key national priority for future economic prosperity, and ongoing learning and development must be encouraged.

IFS Skillnet has worked with employers to identify the key skills that financial services workforces will be required to have, to support the ongoing shift to a digital platform and leverage the four DARQ technologies critical to their organisations' and the sector's digital transformation. These "future-proof" skills are organised into four categories - Future Currency Skills, which focuses on technical skills; Human Experience; Reimagination and Pivoting Skills, which recognise the skills that are and will remain key to succeeding in the world of work (see Figure 1).

Demand

High levels of labour shortages are problematic across a number of industries in Ireland. When COVID-19 hit the economy in early 2020 the Irish unemployment rate began to rise significantly. While the easing of the pandemic may alter the magnitude of the labour shortage in the near term, it is unlikely to change the nature of in-demand roles or the perceived mismatch between available and in-demand skills. Along with "hard" technical skills, employers also seek professional skills such as creativity, emotional intelligence and

"Ireland is competing against multiple other locations for hosting financial services. It is also competing against other sectors. Trying to be the lowest cost provider is not an optimal choice given both the inherent cost base in Ireland and, more importantly, the growth in other areas with added value."

Research participant

Figure 1 / Key Future Skills Requirements





communication skills, as highlighted above, which are necessary in the modern workplace, but currently in short supply.

In general, a shortage of a well-rounded skill set that includes both role-specific hard skills (technical) and in-demand soft skills needed by today's organisations, represents a threat to the health of the talent pipeline for financial services. Adding to the complexity of the challenge is the fact that increasingly, financial services employers will be competing across industries and with other sectors for the same skills to build their future workforces. As the financial services and technology sectors converge with continued cross-sectoral innovations in fintech and insurtech capacity and capability building in these areas become even more important. Accordingly, employers are seeking to gain a more specific understanding of the types of skills that will be essential to acquire, develop and retain their talent base moving forward.

The talent pipeline for financial services

The talent pipeline for the financial services sector is comprised of three primary segments:

- 1) "Early Talent" or recent graduates,
- 2) "International Talent" comprised of skilled newcomers to Ireland and international students and
- 3) "Transition Talent" including individuals who are reskilling within financial services, as well as those from different sectors who possess skills and experience that are relevant and in-demand within financial services.

Each group has their own unique opportunities and challenges, and all are affected to some degree by the pandemic that has impacted the global economy. These segments are viewed in this report against the broader financial services sector and also as they relate to the three spotlights of:

- 1) ESG,
- 2) Fintech and Digital Finance, and
- 3) Women in Finance.

"Biggest challenge – ability to hire, attrition numbers are growing. Beg, borrow and steal talent. We need succession planning."

Research participant

Early talent

New college and university graduates (Early talent), will continue to act as the foundation upon which the future of Ireland's financial services talent pipeline is built, particularly the subset of graduates who possess the skills that are most important to the sector's digital future.

In this report we study the early talent pool from three perspectives: 1) TECHNICAL - those in-demand skills commonly developed in science, technology, engineering, and mathematics (STEM) programmes; 2) BUSINESS - the more traditional recruiting target for financial services and 3) INITIATIVES - other programmes or considerations that improve the quality and quantity of candidates in the early talent pool.

The importance of technical skills

Science, Technology, Engineering and Mathematics (STEM) graduates generally possess key technical skills needed for the future of work in financial services, such as mathematical reasoning, analysis, numeracy, computer science, digital and data literacy, and increasingly, AI. While the number of STEM graduates in Ireland is robust, certain graduates are particularly attractive to financial services organisations looking to fill roles in emerging fields.

The number of students enrolled in higher level education in Ireland has increased by almost 17.5% over the past six years. In terms of annual graduate numbers, business, administration and law courses produce more graduates than any other field of study group (over 20,200) annually. Ireland produces the highest proportion of STEM graduates in the EU which is significantly above the EU average.²

Given the pace of technological change and related opportunities in the financial services sector, these graduate numbers suggest that the sector needs to attract more of this early talent pool with a focus on a smaller subset of relevant STEM skills such as

mathematics, computer science and computer and software engineering, to in-demand roles such as data scientists, analysts, programmers and software engineers in the financial services sector.

Beyond traditional STEM programmes

Of interest to this discussion is the number of post-secondary programmes in Ireland that are evolving to include more multidisciplinary learning in order to build a broader skill set in their students. The sought-after skills that were identified in the research for this report were design thinking, developing an innovation mindset and entrepreneurial thinking. This multidisciplinary approach will help students to build creative thinking, business and entrepreneurial skills, with the goal of developing a global mindset and social consciousness. Other programmes embracing the multidisciplinary philosophy, teach students to think critically, creatively and collaboratively about complex problems.

There is growing awareness of the value of entrepreneurial and innovative thinking skills to the future of work. In addition to shifts in traditional degree programmes, further and higher education institutes are introducing entrepreneurship offerings through certificates, modules and electives of undergraduate and postgraduate programmes, innovation institutes and campus-linked incubators/accelerators. The development of campus-linked incubators and accelerators contributes to growing education in entrepreneurship, and financial institutions frequently partner with them to drive innovation. These programmes can help build key future-proof foundational or transversal skills including resiliency, creativity, and pivoting.

2. Higher Education Authority Key Facts and Figures 2020/21

Bridging the gap between technology and business

Business skills continue to be critical in financial services. These programmes are adapting to the digital future, with curriculum changes in several undergraduate business programmes across Ireland focusing on data analysis, IT management and entrepreneurship skills. Many higher education institutes, in collaboration with employers, have identified a need in the marketplace for employees who can bridge the gap between technology and business. Graduates of such bridging programmes may move into technical roles or go on to lead analytics, business intelligence, data science and artificial intelligence teams. Along with a more technical focus, foundational skills are an important part of the curriculum. This evolution in business programmes, at both the undergraduate and postgraduate levels, is another encouraging development for the financial services pipeline, as more graduates enter the workforce with a future-proof skill set grounded in business skills and supplemented with technical acumen.

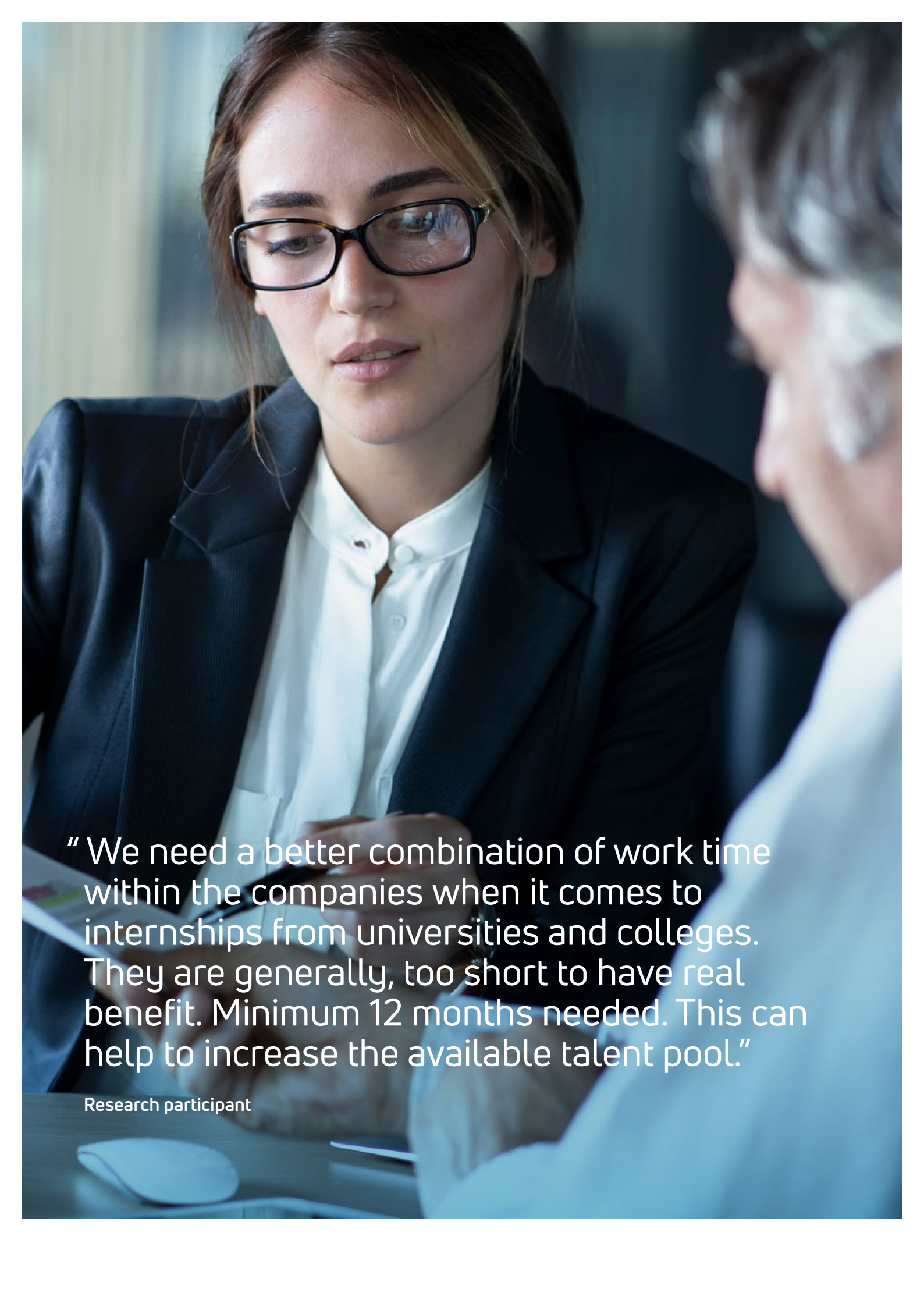
Leveraging work-integrated learning to build job skills

Employers report that new graduates often lack important “work-ready” skills that are typically learned on-the-job. One way for students to address this gap is to enhance their academic education with practical experience. Financial institutions in Ireland have long been leaders in promoting work-integrated learning, and placements and internship positions are common in the sector. There is a strong feeling among organisational leaders that internships could be longer in duration to add more value to the intern and the employer.

In 2016 Financial Services Ireland, the Insurance Institute of Ireland and Accounting Technicians Ireland all launched new apprenticeships in response to the expansion of apprenticeships in Ireland beyond the traditional sectors. Such apprenticeships are an excellent example of learning in the working environment while studying, and are evidence of work-based learning at its very best.

“ The bridge between technology and business should start in the classroom, not just in the third-level classroom but at the very least in the secondary school classroom. When it comes to making CAO choices students should not have to choose between business and technology – why not be able to do both?”

Research participant



" We need a better combination of work time within the companies when it comes to internships from universities and colleges. They are generally, too short to have real benefit. Minimum 12 months needed. This can help to increase the available talent pool."

Research participant

“ The ‘new’ apprenticeships combine the best of academic and workplace learning with very positive outcomes for recruitment, retention, progression and mobility of employees. Employers are exposed to a new talent pipeline from a diverse range of sources and apprentice employees get the opportunity to earn and learn. Win Win!”

Research participant

Students perceptions of financial services careers

Our early talent pipeline overview concludes with an important consideration. As sectors across Ireland continue to vie for the same pool of in-demand skills, a sufficient supply of graduates is not enough to ensure a robust talent pipeline for financial services. Sought-after graduates need to consider financial services as a career destination. In several higher education surveys, business students predictably considered financial services

as a career destination with many naming 6 financial institutions in their top 25. However, no engineering and technology graduates ranked financial institutions in their top 25 employers. They did rank high future earnings, innovation and a creative and dynamic work environment as the top three attributes they value in an employer, which is data that can help to inform a student attraction strategy for financial services employers.

“ How do we attract talent particularly for digital and technology roles when we are competing against everyone. We need to ‘sell’ FS as an attractive market for talent. 99% of graduates do not see this. We need to understand what graduates value and build it in to our sectoral talent proposition.”

Research participant

Spotlight on ESG/ Sustainable Finance

With global commitments to net-zero greenhouse gas (GHG) emissions by 2050, environmental, social and governance (ESG) practices are gaining attention in organisations that are also committed to a more sustainable future. Inevitably, they need to prepare their current and future workforce to support what has been coined “sustainable finance”. There is a growing gap between the current availability of sustainable finance skills and what will be required to support growth in the field.

Ireland has the opportunity and the means to stand among global leaders as a decision-maker rather than just an implementer in the transition to a low-carbon economy. It has a world class financial sector and strong capacity for innovation. By harnessing these advantages, Ireland can become a trusted source of sustainable solutions, expertise, and investment. Realising this ambition, however, will require the thoughtful orchestration of several components: a committed alliance between business, government, and civil society; smart policy and regulation; and redirecting capital flows toward deploying low-carbon technologies and developing a circular economy. The latter task, of redirecting capital flows, requires more than investment resolve. A mission-critical aspect of the transition to a low-carbon economy is having sufficient access to sustainable finance skills and talent.

IDA Ireland’s strategy statement for 2021–2024 notes that the heightened focus on environmental sustainability will lead to increased prominence of green finance, and investment by multinational companies that is related to environment, governance and social factors which present opportunities for Ireland. In support of the Irish Government’s *Ireland for Finance* strategy and the Climate Action Plan (Actions 10 and 11), the vision has been articulated to establish Ireland as a world-class sustainable finance knowledge centre and facilitate the flow of information and best practice towards investment, competitiveness and employment underpinning future IFS competitiveness and in support of national decarbonisation efforts.

Developing sustainable finance skills and talent within organisations is important and materially impactful to clients, customers, people, and society at large. The risks and opportunities that ESG factors pose for portfolios and the need to improve asset allocation decisions that are central to clients’ success are accelerating the need for action. Greater emphasis should be placed on collaboration within the financial services ecosystem and across post-secondary education institutions and governmental/regulatory bodies to address the competency gaps in sustainable finance.

Additionally, addressing the sustainable finance skills gap requires an integrated, multidisciplinary approach. This means upskilling existing finance professionals, including corporate financiers, tax advisors, and risk and audit teams on ESG criteria, as well as introducing new skill sets from a varied set of disciplines to ensure Ireland’s talent pool is developed to meet the ambitions of future financial services stakeholders.

The Sustainable Finance Skillnet *Deep Dive Skills Report* (2019), commissioned by the Sustainable Finance Skillnet Ireland and Sustainable Nation Ireland, and researched by Deloitte, says this rapid shift in required skillsets will require integration of sustainability and ESG modules into all third-level finance degree and masters programmes and professional finance qualifications. The report finds that sustainable finance is quickly becoming mainstream and will fundamentally change the entire financial sector, with regulation acting as an accelerator in prioritising skills and training. It adds that sustainable finance is not a short-term trend, but a permanent shift from ‘niche’ to ‘mainstream’ representing an entirely new focus in finance. It recommends that, in addition to changes to third-level programmes, Sustainable Finance must be part of professional education and continuous professional development for finance and business professionals.



This report identifies the most important drivers of investment in Sustainable Finance skills and talent between 2019 and 2025 as improved long-term returns; brand image and reputation; decreased investment risk and/or underwriting risk; regulatory/disclosure demands; and external stakeholder requirement (e.g., clients, government, society at large). It notes that training in baseline knowledge is the key short-term skills priority, while the main challenges limiting the development of Sustainable Finance skills and talent in Ireland are competing internal priorities and lack of available talent, and there is significant demand for skills in data management and measurement.

A tangible education and training output is the new programme for compliance professionals on tackling key climate-related financial reporting and disclosure issues which will be launched in collaboration with IFS Skillnet, Sustainable Finance Skillnet and Compliance Ireland. Hundreds of Irish financial sector professionals are to be given specific training to help them deliver compliance around a raft of new laws and regulations related to

sustainable finance, helping to position Ireland as a global sustainable finance centre. The role of the compliance professional is becoming one of the most important positions in boardrooms as businesses seek to show investors, shareholders, and customers that they have sustainability practices in place to deliver on Sustainable Development Goals (SDGs). The programme is part of a collective effort to address the talent gap in sustainable finance with the development of educational programmes that encompass the regulatory impact of sustainable finance regulations, particularly at EU level. All financial market participants and financial advisers must abide by new rules on transparency around the integration of sustainability risks and impacts, with respect to financial products. Under the new EU Taxonomy, companies will need to invest more time and effort to be compliant. Having a base of educated professionals in Ireland will allow global companies to tap into that talent base, for example basing global compliance functions in Ireland, helping to establish Ireland as a global sustainable finance location and a hub for talent and skills in this vital area.

International talent

The Irish Government has recognised the importance of immigration to Ireland's success through several key initiatives targeting both early talent and skilled immigrants. Central to Ireland's Economic Migration Policy is a contingent employment permits system which focuses on key sectors and skills shortages, especially in economically strategic sectors with potential for jobs growth.

The objective of the policy is to ensure 'employment permit holders are making a positive net contribution to the Irish economy'.³ Therefore, a managed employment permits system is operated to maximise the benefits of migration while minimising the risk of disrupting Ireland's labour market. Current Government policy is to issue employment permits for the employment of non-EEA nationals for specific vacancies and in response to employer demand. Where the ease of use of the permit system is improving it is still viewed by employers, including financial services; as cumbersome and in need of significant improvement.

International students

Increasing the rate of employment of international graduates post completion of their studies is an area of opportunity for the financial services talent pipeline. International student mobility has grown significantly over the past two decades worldwide, increasing from two million to five million between 1999 and 2016.⁴ The EU is one of the main destinations for international students, with 1.6 million international students enrolled in the EU in 2016.⁵ The recent publication of the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) International Education Strategies⁶

and reform of the non-EEA student immigration framework reflect the importance now being attached to promoting the higher education of non-EEA students in Ireland. Immigration of students for the purposes of higher education in Ireland grew exponentially year on year reaching 44,000 international students in Ireland in 2019, either as undergraduates or postgraduates.

However only a small percentage of international students in Ireland become permanent residents, representing an outflow of early talent developed in Ireland. The Irish international student visa system allows graduates to remain in the workforce in Ireland for two years post-graduation (known as the 'stay back' by students). This internship/employment facility and a strong network of corporates interested in taking interns, makes studying in Ireland an attractive proposition. This presents an under-utilised opportunity for financial services employers.

COVID-19 has been especially hard on international students who in some instances could not travel home and struggled to find part-time jobs, and with the majority of classes having moved online, many students did not return to Ireland. The impact of this shift is not yet fully realised but nearly all third-level education providers are bracing for lower numbers of international students.

3. Review of Economic Migration Policy Report of the Inter-Departmental Group 2018

4. OECD 2018

5. OECD 2018

6. Department of Further and Higher Education, Research, Innovation and Science 2021

Newcomers

It also continues to be in the national interest to seek out and compete for highly skilled individuals and attract them to work in Ireland, whatever their nationality or country of residence. For this reason, efficient and effective migration procedures which ensure that Irish companies can compete successfully for the finite pool of highly mobile skilled labour available internationally, are essential. Most migrant groups of working age are more likely to hold a third-level qualification compared to people born in Ireland with around 40 per cent having a third-level qualification.⁷ Migrants born in EU countries have lower rates of unemployment than other migrants. However, among those who are working, EU migrants are less likely to work in high-skilled jobs. Part of this difference is likely to be due to variances in the entry routes from different countries of birth: non-EU migrants who enter Ireland via the work permit system come to work in high-skilled jobs; EU migrants have unrestricted access and do not need to be highly skilled. As expected, migrants with higher educational qualifications and better English language skills are less likely to be unemployed and more likely to be working in professional or managerial jobs.

The Department of Justice and Equality supported research by the ESRI in 2020 resulting in *Origin and integration: a study of migrants in the 2016 Irish Census*, which makes an important contribution to the knowledge about how migrants to Ireland are doing on the key integration indicators of education, employment and English language proficiency. There is now greater clarity on how someone's integration is influenced by their country of origin and a greater understanding of the barriers to integration and how to support people in overcoming them. This represents an important source of information and talent for the financial services sector.

Considerations for expanding the pipeline of international talent for financial services

The ability to compete effectively and efficiently for in-demand international talent is an important consideration for the growth of the sectors talent pipeline. Especially following the relocation of an increasing number of firms European business functions as a result of Brexit and this has widely impacted the need for international talent. Ireland's Economic Emigrant Policy continues to add more eligible occupations, including engineering managers, mathematicians and statisticians. This represents a positive development for the financial services sector to access highly skilled technical talent and is an issue worth advocating for in partnership with financial services employers for the expansion of occupations/skill categories relevant to the sector.

The tangible benefits for the financial services sector from international talent are:

- building an international brand through unlocking local market insight
- providing access to a global talent pool
- enhancing employer reputation
- offering enriched workplace diversity
- improving workplace productivity

Another consideration for growing the pipeline of international talent in financial services relates to successful integration. Once newcomers have arrived, it is critical that their transition into the workforce is successful so that they can be productive contributors as soon as possible. Common transition issues with which financial services employers could perhaps assist include, language and transversal skills gaps, difficulty in gaining recognition for the value and relevance of international experience and uneven verification of home country education credentials.

“ As a sector crying out for talent, we need to seriously explore how we can encourage and motivate international students to see the value of an FS career in Ireland and work to ensure that the corresponding processes and infrastructure works well.”

Research participant

7. ESRI 2020



Transition talent

As reported widely, numerous 2022 employment surveys state that nearly three-quarters of respondents across multiple sectors are indicating that they are currently looking for a new job or would consider a new opportunity if the right one was presented to them. This finding is indicative of the risk/opportunity paradigm that all sectors face in a tight labour market for skilled workers.

Research indicates that a specific cohort of the workforce, mid-career professionals, have a minimum base of future-proof skills critical to the ongoing success of financial services organisations, combined with an interest in embracing new technologies and learning new skills. The *Ireland for Finance* action targeted at developing a *Women in Finance Charter* to address the issue of gender imbalance in financial services firms. Led by industry and supported by the Government of Ireland, the Charter underpins the industry's ambition to see increased participation of women at all levels, including junior, middle, and senior management, leadership and board roles within financial services organisations based in Ireland.

To grow a robust talent pool, employers should regard both external and internal talent, with either direct or indirect in-demand skills as potential "transition" talent; and consider investment in initiatives that focus on successfully attracting, re-skilling and retaining this talent to fill emerging roles within their digitally driven organisations; sign up to the *Women in Finance Charter*. This includes retention and re-skilling strategies that minimise the risk that current employees will leave, as well as effective attraction strategies that seize the opportunity to draw individuals with in-demand skills working in other industries and sectors, to their own. Financial institutions are already experiencing success with attraction strategies.

“Transitioning and/or pivoting in your career and the ability to adapt is a major theme. This is distinct from reskilling or upskilling. This is more a state of mind rather than subject matter or skills development. Ability to understand that careers change, and you need to be flexible enough to move into a different space.”

Research participant

“ A sustained ‘image campaign’ to highlight the significant contribution to the welfare of society by the financial and insurance sector should be undertaken. It should focus on the overall ESG benefits and especially the fulfilment of the relevant Sustainable Development Goals (SDG) which have captured the interest of the millennial workforce in particular.”

Research participant

Recruiting from the technology sector

The technology sector is an attractive source of transition talent for financial services employers seeking to address a growing demand for technical skills in their workforces. Technology solutions and digital innovations aimed towards enhancing and optimising banking, insurance, wealth management, or other financial services constitute the fintech industry. The last five years saw the industry make impressive strides pertaining to artificial intelligence, blockchain, and many other spheres giving way to modern and innovative ways of conducting different businesses in the industry of finance. Expectations of customers when it comes to funds-handling have shifted to digital experiences that are seamless and agile. Adoption of fintech is not a matter of being efficient anymore, but a matter of maintaining market position.

Technology sector workers represent a potential source of talent for financial services employers with targeted attraction and recruitment strategies that differentiate the advantages of working in the financial services sector, which is increasingly focused on innovation and driven by technology, and underpinned by the stability and opportunity afforded by Ireland’s successful financial services sector. The technology sector has been very successful in promoting itself as an aspirational career destination for individuals at all stages of their careers. As referenced above, the financial services sector needs to mobilise itself to attract candidates, especially from the technology sector.

Continuing education: building data and job-ready skills

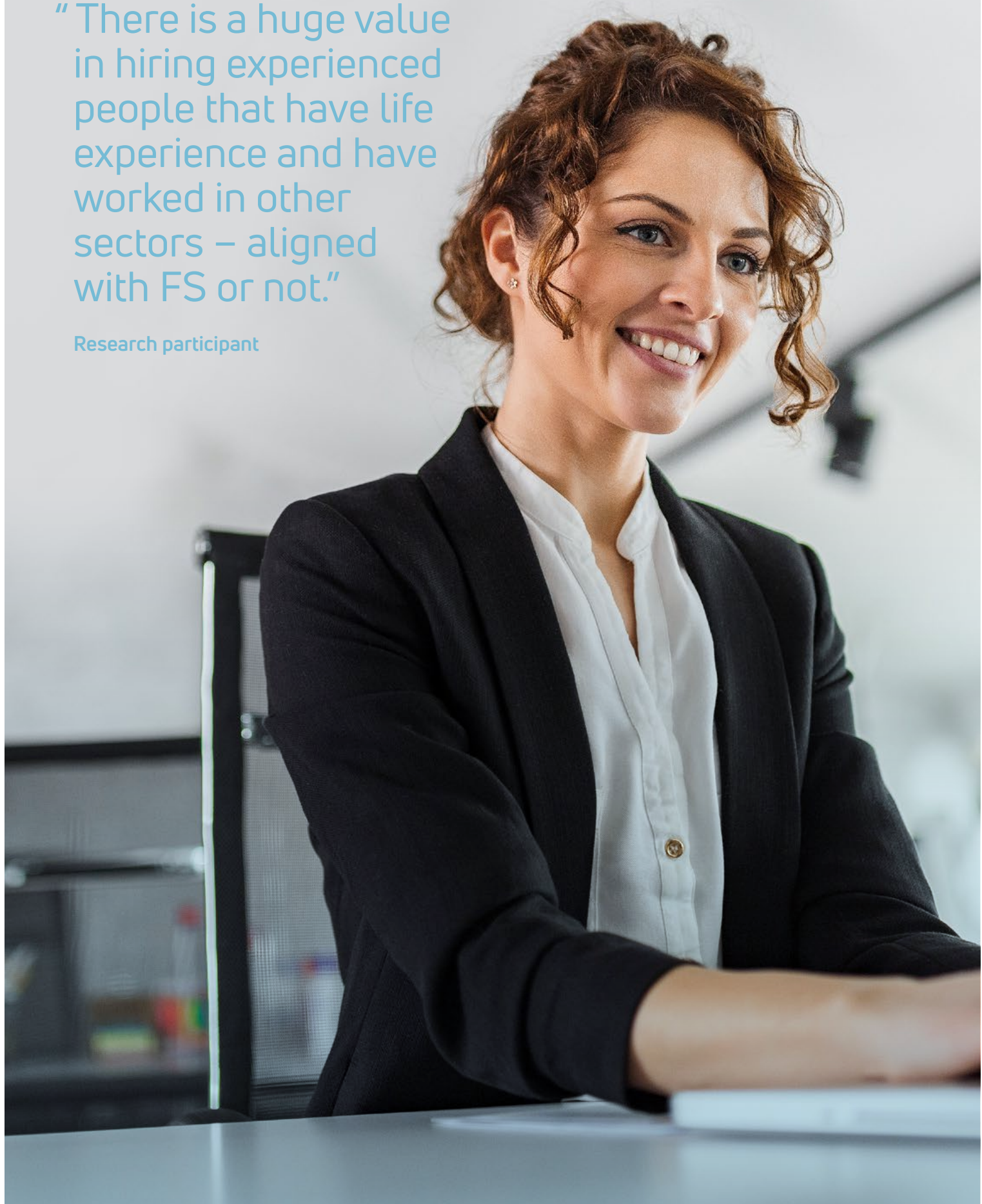
Another source of transition talent worthy of consideration is the government funded upskilling and reskilling

initiatives such as ‘Springboard+’ and ‘Skills to Advance’ that offer options for mid-career workers and individuals who are in vulnerable employment or have been displaced, to reskill or upskill for the digital economy. A new programme specific to the financial services sector is the ‘Skills Connect Programme for Financial Services’, which is a joint initiative between IFS Skillnet, IOB, retail banks and in collaboration with Skillnet Ireland, supported by significant funding from all parties. Continuing education programmes target individuals who are seeking to expand their skill set to be more effective in their current roles, or to pivot to new roles or careers. Typically, these programmes are built with industry consultation to ensure that the learning outcomes are aligned with market needs, so that the new skills and competencies developed match those sought by employers. Financial Services Ireland (FSI), the Banking and Payments Federation Ireland (BPF), Irish Funds (IF) and Insurance Ireland have been collaborating with financial services employers and education providers to design such programmes in response to the sector’s needs. See Appendix 1 a record of specialist educational and training programmes in international financial services that will be developed and/or delivered in 2022.

Given the industry and market-focused approach to skill-building and the additional work experience that continuing education students generally possess, these initiatives represent an important source of talent for financial services employers looking to expand their workforces with digital, data and other future-proof skills. Such initiatives have proved successful for those in career transition and for career returners who have substantial world of work and life experience, but who need updated skills and competencies especially in conversion to technology roles.

“ There is a huge value in hiring experienced people that have life experience and have worked in other sectors – aligned with FS or not.”

Research participant



Spotlight on Fintech and Digital Finance

At the national level, the new National Digital Strategy sets out Ireland's ambition as a digital leader at the heart of European and global digital developments. This high-level framework is structured around four core dimensions – Digital Transformation of Business, Digital Infrastructure, Skills, and Digitalisation of Public Services – and is rooted in a values-driven approach, placing a strong emphasis on balance, inclusiveness, security, and regulation. Responding to changes and opportunities is also relevant in light of Ireland's ambition to be the global hub for insurtech.

Five priority action measures are set for 2022 in *Ireland for Finance* under the Fintech and Digital Finance theme:

- implementing the second phase of the Department of Finance's Fintech Steering Group,
- developing educational resources to support consumers to engage with fintech,
- developing the instech.ie insurtech hub,
- delivering a programme of activities to support Irish-owned fintech companies' growth in international markets
- developing a coordinated programme of activities to raise Ireland's global visibility as a hub for fintech.

While Fintech and Digital Finance skills development and acquisition are not explicitly referenced in the above action measures, they are implicit to the successful achievement of several of the above measures and require further consideration possibly by the Expert Group on Future Skills Needs (EGFSN). Within this report 47% of respondents to the survey recognised Fintech as the second greatest opportunity for the sector after Sustainable Finance (69%). The sub sector of Fintech and Digital Finance in this report has identified specific skills requirements and in demand roles and recognises the competition with the technology sector for such skills and roles due to the intensity of fintech activity in the payments arena.

The continuing growth and development of Ireland's burgeoning fintech sector is being supported by the cross-border Fintech Corridor. The InterTrade Ireland-backed

initiative brings together businesses, academic institutions and other organisations to provide economic growth opportunities for the financial and technology sectors in the region between Belfast and Dublin. Universities and colleges along the M1 are playing a lead role in supporting the Fintech Corridor and are contributing to the development of the corridor ecosystem in a number of ways (DCU, Maynooth University, Dundalk Institute of Technology, University of Ulster) in collaboration with a diverse range of companies and supported by the relevant state agencies. On the educational front, these include a BSc degree Higher-Level Apprenticeship (HLA) in Financial Technology for people wishing to work in the sector, and a part-time BSc (Hons) in Financial Technology for financial sector practitioners.

Among the primary objectives of the corridor is to build a cluster with the critical mass to attract other leading fintech players to invest in the region. The aspiration is that the growth will attract further investments. Northern Ireland does not have the same critical mass as Dublin, but the sensible rationale is to combine forces. The existing infrastructure in the Republic of Ireland is very much dominated by technology companies that want to get into finance. Although the sector is smaller in Northern Ireland, it has several financial companies wanting to cross over into technology. There is both symmetry and synergy in the idea of the corridor. There is considerable scope for collaboration between third-level institutions on both sides of the Border with the benefit of EU funds available to do joint collaborative research between EU and UK institutions. There is a desire to collaborate on AI and machine learning and other relevant technologies between academia and industry. Such collaboration proved to be successful in the introduction of open banking in Europe with data sharing being written into the most recent EU financial services directive. Open banking is perceived to be the forerunner of fintech and the payment services industry.

As part of the *Ireland for Finance* action plans significant work has also been done on fintech talent development by the Technology Ireland Skillnet Business Networks including the MSc in Fintech Innovation, MSc in Blockchain, MSc in Artificial intelligence and other fintech programmes.⁸

8. <https://www.ictskillnet.ie/training/msc-in-fintech-innovation/>

Broader ecosystem trends

Developing strategies to expand the financial services talent pipeline requires an understanding of the overall talent and economic landscape. Ecosystem trends such as continuous changes in required skill sets, brain drain threats and increased competition for skills, place pressure on organisations in the financial services sector and across sectors, searching for talent. At the same time, catastrophic events such as the global response to COVID-19 and political unrest in parts of the world can disrupt the best planning.

According to the Central Bank of Ireland, the economic outlook was softening even before the pandemic took hold in Ireland, and while it is too early to understand the complete effect of the pandemic on the Irish labour market, we can make some reasonable assumptions going forward. A recent Chartered Institute of Personnel and Development (CIPD) Labour Market Survey found that 83% of Irish organisations face skills shortages, particularly in technology roles across all sectors. The aim of the *Women in Finance Charter* is to foster and harness the talent and experience of all women in financial services and is crucial in developing a strong pipeline of talent. This will lead to greater diversity of thought, experience, and leadership styles in decision-making processes, for the economic benefit of the business and the wider community as a whole.

Financial services organisations, similar to other sectors, are particularly affected by skills shortages in light of the fact that they must compete with large multinational technology companies investing and expanding in Ireland.

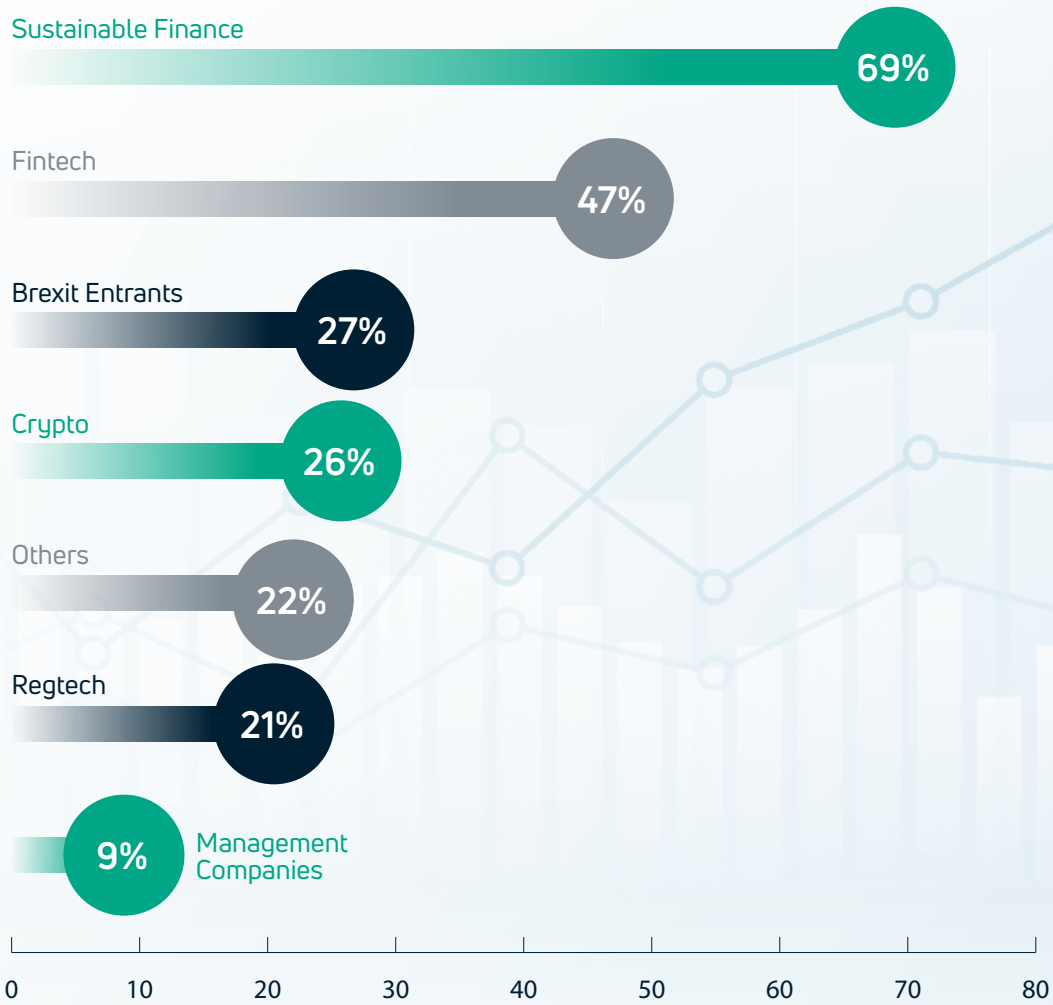
The skills landscape is changing

In its 2018 *Future of Jobs* report, the World Economic Forum proposes that in the wake of the Fourth Industrial Revolution, technological change and shifts in roles and occupations across industries and regions of the world, are transforming the demand for skills at a faster rate than ever before. Talent attraction and recruitment strategies of financial services employers are heavily impacted by the scarcity of skilled talent, and should be counteracted by the upskilling of current employees with the introduction of a continuous learning culture in their organisations, in order to future-proof their workforce.

Greatest opportunities for financial services in Ireland

Throughout the research for this report the view was consistently and optimistically articulated that Ireland was very well placed to take advantage of the changes occurring in the financial services industry in the areas outlined in Figure 2, while still acknowledging the challenges in relation to skills and talent.

Figure 2 / Greatest Opportunities for Irish Financial Services Sector



“ Corporate culture is very important in real support for learning or not. Focus often appears to be on performance management rather than performance development.”

Research participant

Industry wide skills

As a result of the interviews, survey and focus groups carried out, current and future skills needs within financial services in Ireland were identified. The optimum method of filling such skills gaps in a fashion that reflects the future aspirations and ambitions of the sector will also be explored.

There are robust structures, innovative skills initiatives and several collaborative partnerships in place within the sector, but there was a strong sense that these could be further synchronised and leveraged to deliver for the sector as it competes in the main with the technology sector for skilled talent. Skills development is as much a retention issue as it is a recognition of operational and strategic skills needed for financial services companies to deliver on their objectives.

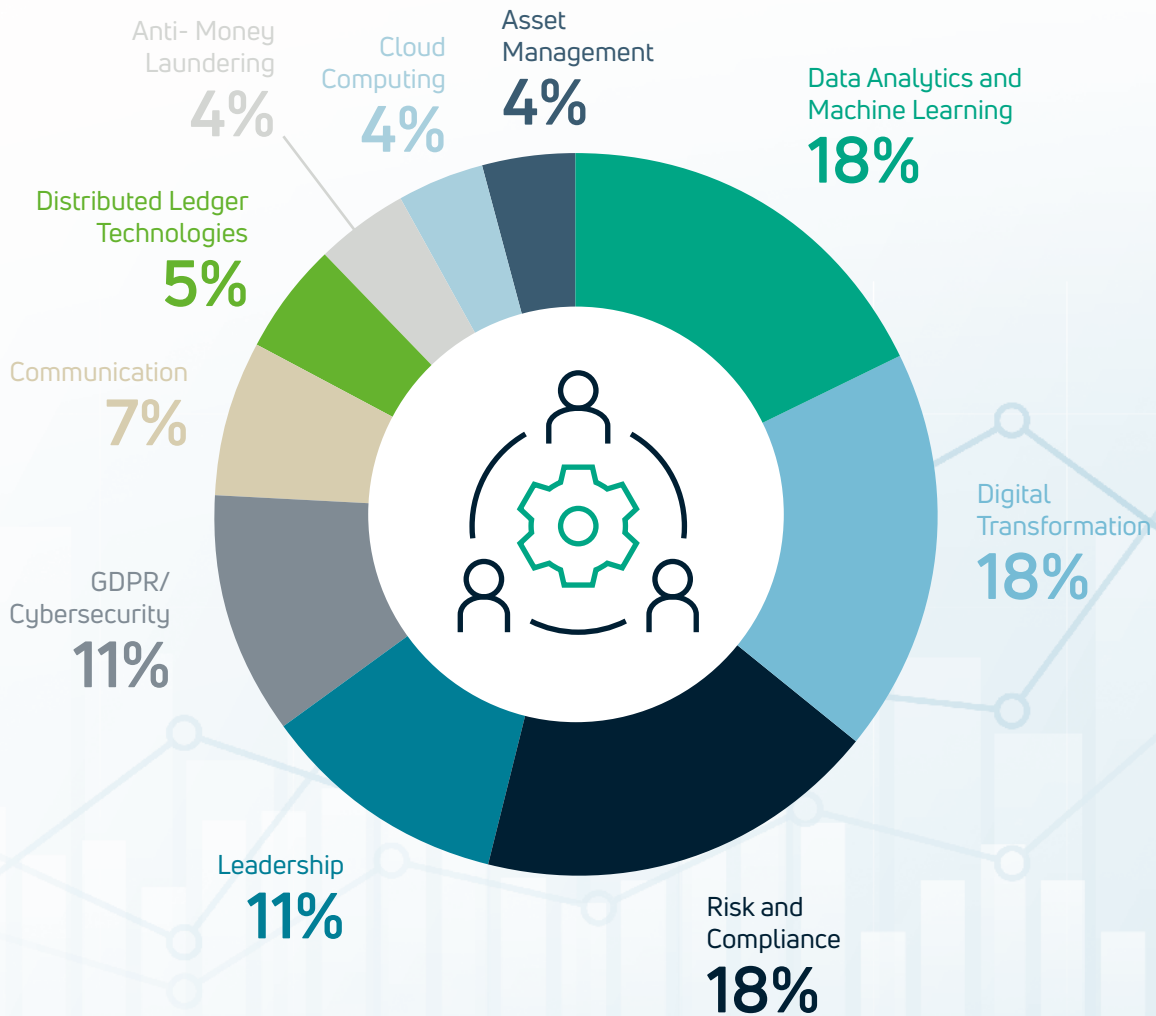
Survey respondents were asked to identify three of the greatest skills gaps. The industry wide skills gaps identified are outlined in Figure 3.

The interviews and focus groups further highlighted other skills gaps that included:

- **Technical understanding of products**
- **Environmental Social and Governance (ESG)**
- **Sustainable Finance**
- **The impact of Artificial Intelligence and Digitalisation**
- **Digitalisation of assets**
- **Blockchain and Fintech**
- **Cybersecurity**
- **Futurisation**



Figure 3 / Main Skills Gaps for Irish Financial Services Sector



“ Retention of staff who have upskilled is an issue and an appreciation that there are many skilled people who are unable to re-enter the workforce because of family constraints and outmoded personnel practices.”

Research participant

Spotlight on Ireland's Women in Finance Charter

The Government's *Ireland for Finance* strategy is a strategic framework to support the further development of the international financial services sector in Ireland. It includes an action targeted at developing a Women in Finance Charter to address the issue of gender imbalance in financial services firms. Led by industry and supported by the Government of Ireland, this Charter underpins the industry's ambition to see increased participation of women at all levels, including junior, middle, and senior management, leadership and board roles within financial services organisations based in Ireland.

Why the need for a Women in Finance Charter?

Gender equality, diversity and inclusion are at the heart of progressive societies and there is much research available which documents the benefits. While significant progress has been made, the reality is that gender gaps remain, including in financial services.

While female representation in the general population of financial services firms tends to be equally balanced, significant differences emerge in the progression to more senior levels. A Central Bank of Ireland demographic analysis on Pre-Approval Controlled Function (PCF) roles within Regulated Firms published in March 2022 reports that from a low base, female applicants for PCF roles accounted for 31% of the total applicants in 2021 (up from 16% in 2012). Across the financial services sector the pronounced gender imbalance for board level applications is showing progress, with female applications for these positions increasing from 22% in 2020 to 28% in 2021. Females continue to be underrepresented in revenue generating roles such as CEOs and head of business lines, of which 84% of roles were held by men as of December 2021 (no change on 2020).

Ireland's Women in Finance Charter is a commitment by signatory firms to achieve greater gender balance and inclusivity at all levels across the financial services sector in Ireland. Fostering and harnessing the talent and experience of all women in financial services is crucial in developing a strong pipeline of talent. This will lead to greater diversity of thought, experience, and leadership styles in decision-making processes, for the economic benefit of the business and the wider community as a whole. Signatories to Ireland's Women in Finance Charter commit to:

1. Taking Action

- a) Making a visible commitment to the advancement of women through the various management and board levels to achieve a greater gender balanced and inclusive working environment.
- b) Setting and communicating stretch targets for the short and long term, recognising that each firm varies significantly in terms of business model and starting point on gender balance.
- c) Underpinning these commitments via a clearly documented action plan for gender balance and inclusivity.

2. Leadership & Accountability

Leadership and accountability for progress against this charter resides with each company's CEO and senior leadership team or a designated member of the team. Targets and action plans will be integrated into each organisation's goals and business priorities, which will also take account of any gender diversity legislation.

3. Measuring & Communicating Progress

Measuring, monitoring and publicly communicating on an annual basis on progress against the targets set, so that transparency and accountability on progress in driving change is evident.

How will progress on gender balance be measured?

- On signing up to the Charter, firms will be expected to complete the industry standard baseline reporting template, based on the previous calendar year end.
- The baseline template will record the gender equality baseline for each firm. Recognising that all firms are at different stages, each firm is required to set short term and long-term targets appropriate to their business for the coming year.
- Firms will be required to report annually on progress against the targets set. Signatories to the Charter will be required to complete an annual reporting template which will be collated to produce anonymised data which will be used to produce an annual report.
- Firms will be given clear deadlines to submit the required data and if, following contact, the deadlines are not adhered to, after a certain period of time they may be removed as signatories to the Charter.
- Firms who are interested may opt in to provide insights, case studies and initiatives for publication, in the interests of sharing best practices which would be attributable to the firm.
- The purpose of an annual report will be to provide public information on industry progress against aggregated targets, to share best practices, to promote the Charter and attract new signatories.
- ESRI as data partner will have appropriate data protection protocols in place to ensure the security and confidentiality of the data provided, data use and data storage process.
- The Charter commits firms to publicly communicate on progress against targets set. Examples could include publishing an update on the firm's website, a press release, include in Annual Report or any other form of public communication.
- The format of the public communication is not prescriptive given the wide diversity of firms, but it is expected that it would provide an update on progress against targets, progress on initiatives, perhaps highlight particular successes etc.

Sub-sector skills needs

Domestic Retail Banking

Overview

The domestic retail banking sector is undergoing a period of unprecedented transformation, with accelerated digitalisation, changing customer trends and increasing competition from fintech and non-bank competitors all contributing to the disruption of the traditional retail banking model.

Changing customer trends are also bringing about major changes. The Irish retail banking sector employs over 22,000 people. Retail banks hold €270 billion in deposits for Irish households and businesses and provide loans totalling €152 billion, including over 822,500 mortgages to homeowners in Ireland.

Skills needs

- Digital Technology and Data Knowledge
- Data Analytics
- Project Management Skills
- Compliance and Regulation
- Sustainable Finance
- Customer Service Skills
- Managing in a Hybrid Environment
- ESG Awareness

In-demand roles

- Software Developers
- Digital Engineers
- Technical Architects
- Specialised Project Managers
- Data Analysts
- Artificial Intelligence Specialists
- Technologists
- Relationship Management
- Marketing



“ Digital technology will drive business developments in the years ahead, but it will be important to have the ability to identify the specific technologies which have relevance to the core business.”

Research participant

Credit Unions

Overview

The reduction of the number of banks in the retail market has presented the credit union sector with an opportunity to expand its offering among the local communities and industrial sectors it serves.

As credit unions are owned by their members and are not-for-profit, there is a high level of trust from their members and the public. The face-to-face service provided contrasts with the business model of the retail banks. Credit unions have been rated as “best customer experience” by CX Ireland for the last six years. As at 31 December 2021, there were 212 active credit unions with assets of approximately €20 billion and membership of around 3.5 million. 66 credit unions have assets greater than €100 million and collectively account for 68% of sector assets. Credit unions are very liquid with an average liquidity ratio of 37% and average regulatory reserves of 16%. Average arrears are now 3%. As with most financial institutions in the current low interest rate environment, credit unions need to increase lending having an average loan to asset ratio of 27%.

Skills needs

- Central Bank Approved Minimum Competence Qualifications
- Customer Relationship Management
- Digital Transformation Leadership Skills
- Change Management
- Risk, Compliance and Regulation

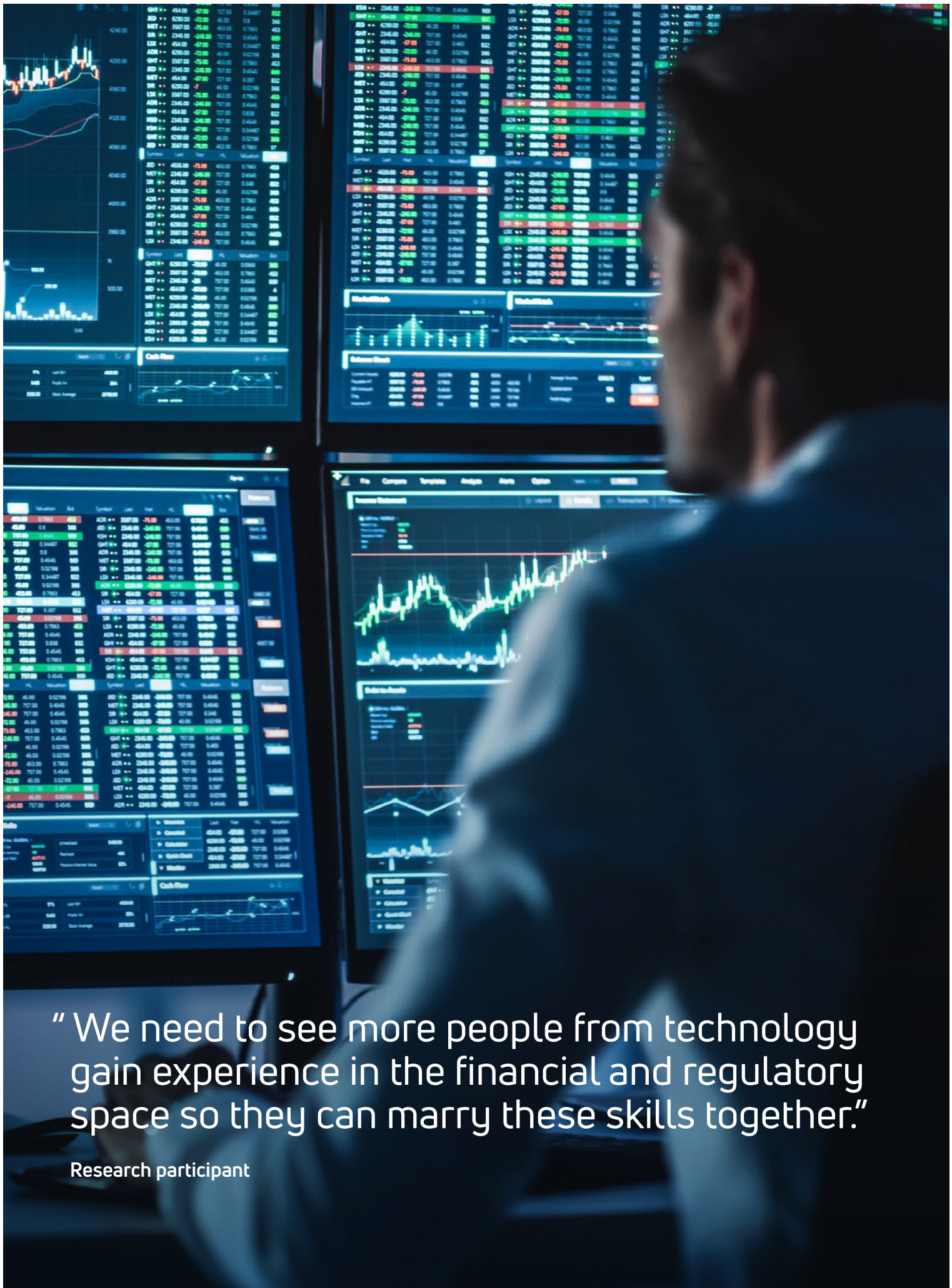
In-demand roles

- Lending Officers
- Member Services Advisers
- IT Specialists
- Operations Managers
- Relationship Management
- Marketing



“ There is an ongoing need for function-based courses covering lending (mortgage and business), operational (cyber security and outsourcing), leadership and compliance (AML) topics. As a movement we have always partnered with third level providers to collaboratively design these programmes for credit union staff.”

Research participant



“ We need to see more people from technology gain experience in the financial and regulatory space so they can marry these skills together.”

Research participant

International Banking

Overview

Ireland has a strong cohort of international banks. 17 of the top 20 global banks are based here, with either Irish registered banks, subsidiaries or full branch operations. Some have been upgraded, post-Brexit, to be the primary European office.

Skills needs

- Regulatory and conduct
- Compliance
- Business Analysis
- Project Management
- Cybercrime and cybersecurity expertise
- Understanding of cloud, data analytics and data risk
- Operational technical skills such as high-level Microsoft Excel
- Networking and relationship management
- Managing in a Hybrid Environment
- ESG Awareness

In-demand roles

- Credit Operations
- Lending
- Accounts & Payments
- Agency Operations



“ ESG and sustainable finance present the greatest threats and opportunities for the financial services arena, particularly for international banks moving capital.”

Research participant



Insurance and Reinsurance

Overview

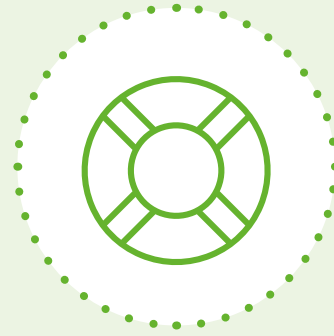
Ireland is a global centre for servicing the insurance industry with local expertise across the full range of sub-sectors including Life, Non-Life, Specialty Insurance, Reinsurance and Captive Insurance. Alongside traditional activities, increasingly insurers are leveraging Ireland's leading technology ecosystem, to implement the latest technologies into insurance activities. Responding to changes and opportunities is also relevant in light of Ireland's ambition to be the global hub for insurtech. Insurance Ireland brought together 11 firms in the insurance sector to establish instech.ie, a not-for-profit organisation, to support the development of a strong insurtech sector in Ireland. Another initiative is the Insurance Practitioner Apprenticeship the BA (Hons) in Insurance Practice which was designed in collaboration with the Insurance industry.

Skills needs

- Central Bank Approved Minimum Competence Qualifications
- Data Analytics
- Data Scientists
- Data Mining
- Software Development
- Machine Learning
- Robotic Process Automation (RPA)
- Cybersecurity
- Compliance and Regulation including Solvency II and GDPR
- Reporting, monitoring, controls and risk management
- Leadership and Change Management
- Managing in a Hybrid Environment
- ESG Awareness

In-demand roles

- Underwriters
- Actuaries
- Claims Handlers
- Audit Operations Analysts
- Data Analysts
- Digital Process Engineers
- Ecosystem Engineers
- Legal and Regulatory Roles



“ Climate change, as well as other emerging risks, are having direct and indirect impacts on the frequency and severity of claims.”

Research participant

Fintech and Digital Finance

Overview

Although much of the media discussion of fintech focuses on new firms, the *Ireland for Finance* strategy is more comprehensive and recognises that the fintech sector includes many long-established financial firms that develop and deploy leading edge technologies, and do so across the full range of subsectors in financial services: banking, funds and asset management, insurance, market infrastructure, aviation leasing etc. At the national level, the new *National Digital Strategy Harnessing Digital – The Digital Ireland Framework*⁹ sets out Ireland's ambition as a digital leader at the heart of European and global digital developments. The Central Bank of Ireland has commented that fintech activity in Ireland is at its most intense in the payments sector. This is reflected in an increased number of authorised payment institutions and electronic money institutions in Ireland in recent years. Bigtech firms have also been established in this space, and it is likely that payment services will continue to be an area of focus in Ireland.

Skills needs

- Programming Skills
- Blockchain Technology
- Cybersecurity Skills
- Artificial Intelligence and Machine Learning Knowledge
- Test Automation Skills
- Data Science
- Financial Knowledge
- Cybersecurity
- Public Cloud Technologies

In-demand roles

- Blockchain Developer
- Quantitative Analyst
- Machine Learning Engineers
- Data Scientists
- Cybersecurity Specialists
- Software Developers
- Risk and Compliance Specialists



“ To advance the growth of the fintech sector, senior managers – not just executive level – should ideally be qualified in some form of financial services. There should be an expectation of requirement to have a good degree of financial services knowledge”.

Research participant

9. Department of An Taoiseach 2022

Asset Management

Overview

Ireland is the domicile for 5.7% of worldwide investment funds assets with over €3 trillion worth of assets domiciled locally. Ireland is the third largest funds domicile in the world, and the second largest in Europe. Over 14,000 funds are administered from Ireland, representing a total value of over €5.2 trillion in Assets Under Administration (AUA). Ireland is the leading European domicile for exchange traded funds (ETFs), with 50% of the total European ETF market. Front and middle office activity is on the rise in Ireland with a number of companies now engaging in Multilateral Trading Facilities, Portfolio Management and Oversight, Investment Advisory and Oversight, Investment Analysts, and Risk and Compliance. Green Finance is a growing area of focus in Ireland and there is an existing cluster of renewable energy infrastructure fund managers with €7 billion in AUM.

Skills needs

- Front-line Asset Management Skills
- Digital Skills - Crypto & Blockchain
- Risk and Compliance
- Green Finance

In-demand roles

- Investment Analyst
- Information Management
- Investment Manager
- Asset Manager
- Portfolio Management
- General Ledger Accountant



“ Sustainable Finance is the only one to look for. Almost the entire focus for Asset Management and Admins – across all the teams.”

Research participant





Investment Funds and Securities Services

Overview

Over 1,000 fund managers from over 50 countries have assets administered in Ireland. The majority of the top 20 global asset managers have Irish domiciled funds. Ireland offers managers access to the EU-wide marketing passport for UCITS and AIFs. Ireland is a committed member of the European Union and will remain so, providing full market access to the EU. Ireland is an English-speaking member of the EU and Eurozone and is known for its clear and practical regulatory framework and support for the funds industry.

Skills needs

- Financial accounting and reporting
- Fund Accounting
- Customer service skills
- Data competency
- Compliance
- Fund Operations
- Business Development
- Client Engagement
- Sustainable Finance Skills
- Digital assets in terms of bonds and equities
- Brexit and EU Regulations
- Cybersecurity

In-demand roles

- Trust Officers
- Investor Services Specialists
- Custody Associates
- Transfer Agents
- Sustainable Wealth Managers
- Fund Accounting and Administration Managers



“ Risk and Compliance in an ever changing landscape is the biggest skills gap by far.”

Research participant



Aircraft Leasing and Finance

Overview

Alongside the US, Ireland is one of the two major centres in the world for aircraft leasing multinationals, with a significant number of the largest global entities operating here. Irish lessors manage more than €100 billion in assets. This equates to approx. 22% of the global fleet of aircraft and over 40% of the world's fleet of leased aircraft. Ireland has 14 of the top 15 lessors by fleet size.

Skills needs

- Technical - analytical from both a financial and engineering perspective
- Legal - aviation specialisation
- Marketing - communication and promotion of the sector
- Financial modelling
- Integrated Risk Management
- Contract Management Skills
- Tax Expertise

In-demand roles

- Accountants
- Aviation Finance Solicitors
- Auditors
- Financial Analysts Aircraft Leasing
- Leasing Marketing and Business Development
- Pricing Specialists
- Risk and Compliance Managers



“ There is a severe lack of financial training opportunities for experienced mechanics and maintenance personnel to support their progression to become lessors.”

Research participant





Corporate Treasury

Overview

Ireland has been very successful over the years as a centre for corporate treasury units for some of the largest global companies, Irish multinationals and semi-state bodies. More than 350 treasury entities have been approved to operate in Ireland. The activities carried out here include: inter-group lending/financing; cash pooling; netting; cash management; exchange and interest rate risk management; debt factoring; active management of group liquidity; cross-border leasing; and bond and commercial paper issuance. Many of the personnel involved in corporate treasury at a senior level have come through the banking system and appreciate the issues being faced with regards to competition for talent and skills as they face the same problems in this sub-sector.

Skills needs

- Corporate / banking trading
- Cyber-risk
- Data Analytics
- Project Management
- Bank Relationship Management

In-demand roles

- Treasury Managers
- Credit Operations Managers
- Collateral Managers
- Payments Implementation Managers
- Treasury Analysts
- Risk and Compliance Managers



“ There is a need for a one-year post-grad course as opposed to a two-year Masters programme. Modules to include: cash management, payment flows, accounts payable/receivable, application of derivatives, database interrogation skills as an upskill from excel.”

Research participant

Training and education provision

With regard to the financial services sector's 'Talent & Skills' agenda, Financial Services Ireland promotes:

- The development of skills in relevant, cutting-edge technology fields such as fintech, machine learning, artificial intelligence, distributed ledger technology, data analytics and cyber security
- The cultivation of talent and skills to tackle the emerging and future skills the industry will face
- Increasing the talent pipeline to meet industry's current and future needs
- Continuous training and upskilling, particularly through third-level institutions and the IFS Skillnet
- New avenues into the sector, such as the IFS Apprenticeship Programme
- Work permit and visa reform and initiatives to attract mobile talent to/back to Ireland
- Improving quality of life and associated infrastructure to attract and retain talent
- Ireland as the premier location for sourcing leaders focused on the future challenges of the sector
- Ireland as a world leader in establishing gender balance in the financial services sector
- Activities within *Ireland for Finance* that support diversity and a positive culture across the sector
- A diverse workforce and culture where talent can flourish in a vibrant financial services ecosystem
- Leading public and private sector initiatives promoting diversity and positive culture

The above are in full support and delivery of Theme 3: Diversity and Talent 'of the *Ireland for Finance* strategy. In fulfilment of FSI's 'Talent & Skills' remit it promotes two initiatives of significance for the sector:

- IFS Skillnet
- IFS Apprenticeships

IFS Skillnet

IFS Skillnet is co-funded by Skillnet Ireland and member companies. Its aim is to support the FS sector in maintaining Ireland's position as a top international financial services centre, through ongoing investment in the development of the skills and expertise of this workforce. The network is led by a steering group which includes member companies and the leading financial services industry associations. It comprises of Financial Services Ireland (FSI), the Federation of International Banks in Ireland (FIBI), Irish Funds (IF), Insurance Ireland and the Irish Association of Investment Managers (IAIM).

The overall aim of IFS Skillnet is to:

- Enable companies across the sector to pool skills needs and collaborate to create new learning and development opportunities for a range of employee groups in the sector
- Provide a forum for companies within the international financial services sector to work with providers to develop industry relevant education and training programmes
- Provide a strategic lead and focus for the development of skills in the sector, ensuring that the Irish operations remain globally best-in-class, are competitive internationally and continue to create employment
- Provide a strategic rapid response platform for industry leaders and education and training providers to create new solutions to skills required in the market
- Support the transfer of knowledge and competence, both within and across companies in the sector and to raise the overall pool of competence within the sector in Ireland

Figure 4 / IFS Skillnet Statistics 2021



Since 2009 IFS Skillnet has been the facilitator and connector between industry and education and training providers to deliver on the skills needs of the sector. On a bi-annual basis it carries out an industry wide training needs analysis and identifies, procures, and where relevant, designs education and training solutions to deliver on sectoral skills needs. In 2021 111 programmes were delivered over 10,911 training days to 1,234 employees working for 138 companies.

IFS Apprenticeships

In 2016 a new model of apprenticeships was introduced nationally, which is a collaboration between educators, employers and the apprentices through the vehicle of an industry led consortium. FSI in partnership with National College of Ireland and in collaboration with its members, designed two higher education International Financial Services Apprenticeships. The IFS Apprenticeships are 'earn while you learn' higher certificate and higher

diploma programmes that combine paid on the job training (4 days a week) with academic study (1 day a week). The IFS Apprenticeships lead to a Level 6 Higher Certificate in International Financial Services and a Level 8 Higher Diploma in Financial Services Analytics.

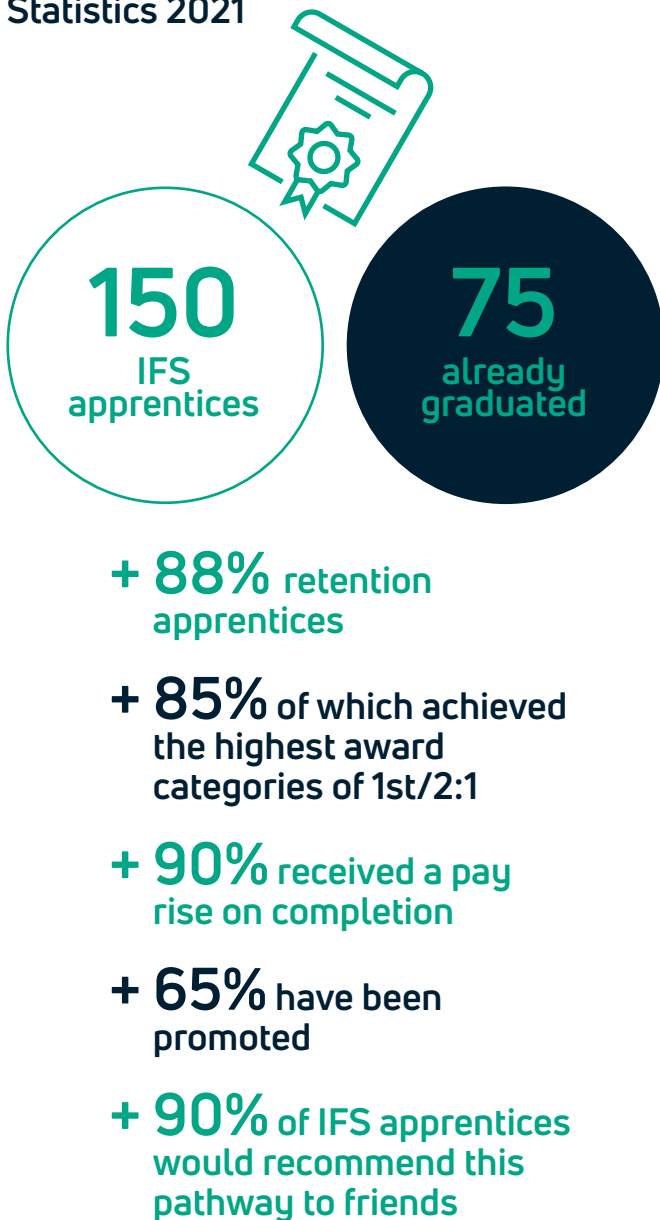
From an employer benefit perspective these apprenticeships address early and transition talent needs as outlined earlier in this report. They deliver on the needs of the industry to diversify their talent by providing access to the industry to a new pipeline of candidates who would never have previously thought of seeking a career in the sector. They also provide the opportunity to upskill/reskill existing employees to pivot towards emerging skills needs especially as the sector undergoes a digital transformation.

A forward-thinking core group of financial services employers recognised the solution the apprenticeships would provide, and have reported very positive experiences of the calibre of the apprentices.

Over 150 IFS apprentices have been/are going through the two-year programmes with 75 already graduated. There has been an average of 88% retention rate of apprentices, 85% of which achieved the highest award categories of 1st/2:1. 90% received a pay rise on completion, 65% have been promoted and 90% of IFS apprentices would recommend this pathway to their friends.

More financial services employers would benefit from considering this recruitment, retention and knowledge and skills acquisition vehicle of IFS Apprenticeships. The content of both apprenticeships is in the process of being reviewed as part of the prescribed academic cycle, in consultation with the IFS Apprenticeships Steering Group and the wider industry, to ensure that they continue to deliver on the emerging and future needs of the sector.

Figure 5 / IFS Apprenticeships Statistics 2021



Provision of education and training to the financial services sector

The financial services sector, like other sectors, benefits from a range of government supported national education and training initiatives such as:

- Skillnet Ireland funding via IFS Skillnet, Aviation Skillnet, Sustainable Finance Skillnet and Technology Ireland Skillnet
- Springboard+
- Apprenticeships
- Traineeships
- Human Capital Initiative
- Skills to Advance

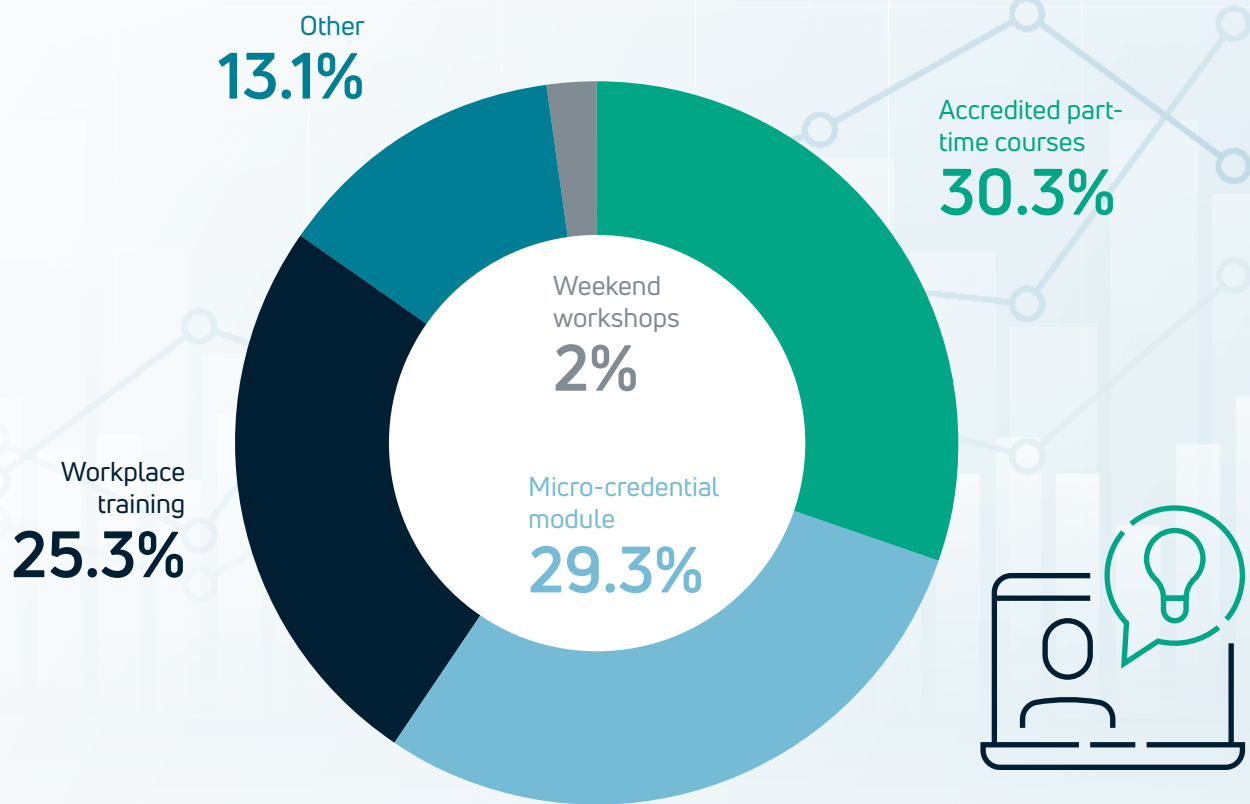
Such initiatives are very welcome to the sector but some such as the IFS Skillnet and IFS Apprenticeships are better known than others. Close engagement by the sector with mechanisms such as the Regional Skills Fora (of which there are nine), would bring it closer to being able to leverage existing funded initiatives that could assist further in delivering on the talent and skills agenda. Such engagement could also result in a wider selection of specific initiatives being co-designed with the sector for the sector.

Survey respondents, focus groups and interview participants were asked for their views on the requirements and contributions to future education and training available within the industry from universities, colleges, professional third- party vendors, industry institutes or associations and in-house Learning & Development initiatives. The response called for greater strategic collaboration and ‘joined up thinking’ amongst all these providers, to meet industry needs in a more cohesive manner in order to support ongoing training and development from entry-level employees all the way through to senior executives.

Education providers proactively seek the involvement of industry in the design of programmes, so there is a need for stronger communication and closer collaboration between the sector and the educators. There is a tangible benefit in education providers and industry working together and there also appears to be several opportunities where that could happen, building on the successful collaborative approach already taking place with regard to IFS Skillnet and IFS Apprenticeships.

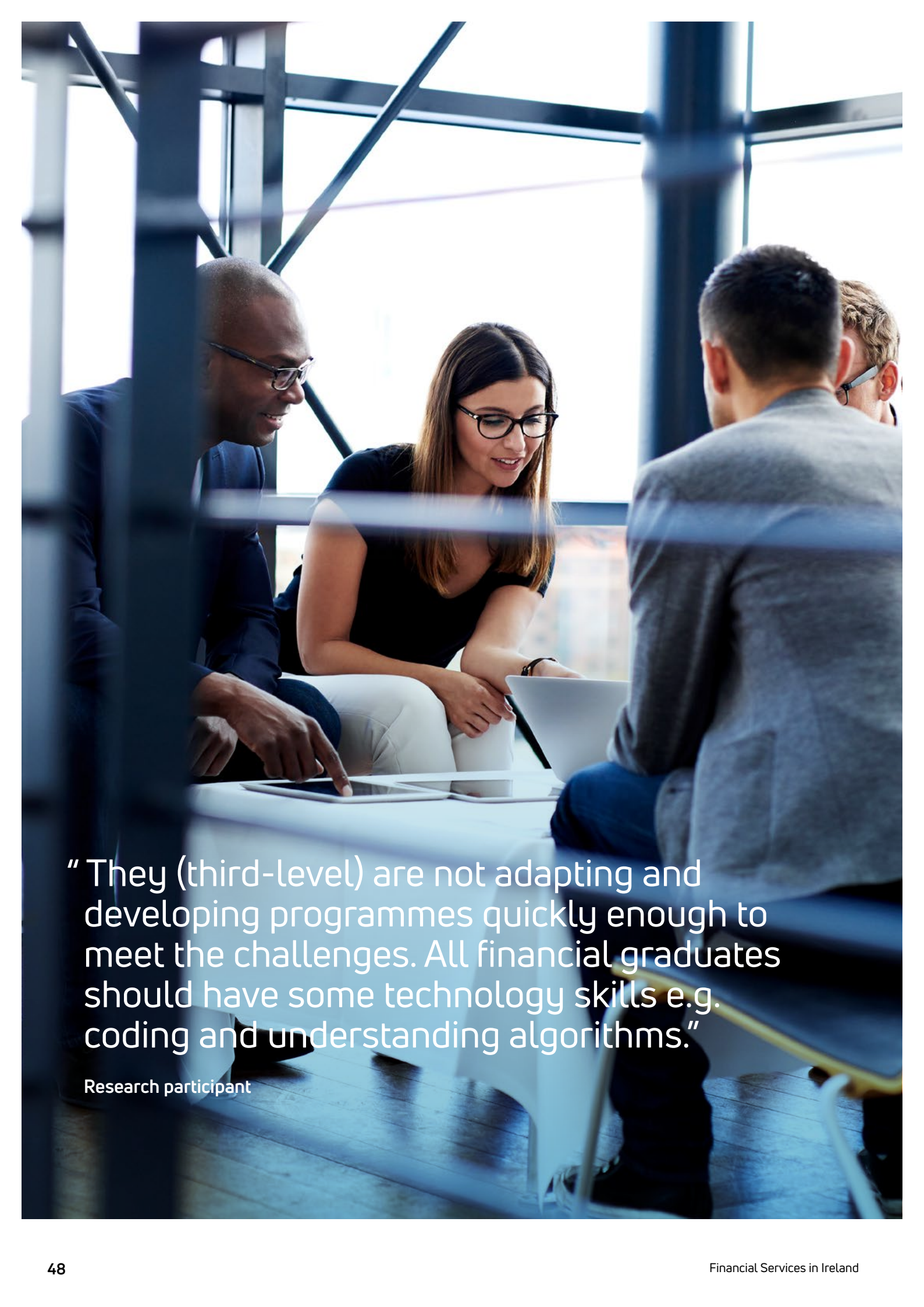
Views were also sought on the format of how development opportunities are offered. There was agreement that as many development opportunities as possible should be offered in various flexible formats to suit the changing working environments and to encourage employees at all stages of their careers to access them.

Figure 6 / Preferred Methods of Education/Training Delivery



“ The aim is to demonstrate a clear career path for well-trained and qualified people, leading to long-term retention of staff who are experienced in relationship management and true customer care, i.e. understanding and anticipating not only a client’s perception of its needs and objectives but also guidance towards new market developments. We want the education and training ecosystem to work with us collaboratively at each step on this path.”

Research participant



“ They (third-level) are not adapting and developing programmes quickly enough to meet the challenges. All financial graduates should have some technology skills e.g. coding and understanding algorithms.”

Research participant

In particular employees with young families and caring responsibilities were highlighted as beneficiaries from such flexibility.

As can be seen in Figure 6 on the previous page, accredited evening courses at 30.3% and workplace training at 29.3% were deemed the best formats with micro credentialed modules following at 25.3%. With only 2% of the result opting for weekend workshops this may be an indication of the needs of young families or, perhaps, changes in priorities due to COVID-19.

As referenced above, 2016 saw new higher education apprenticeships established in International Financial Services. New apprenticeships in Insurance, Accounting, and Technology were also established. All were designed in collaboration with industry partners in response to various gaps in skills needs with a view to industry 'growing' its own talent. Traineeships are another form of work- based learning, which are between 6 and 20 months in duration and lead to a further education award.

Participants were asked to give their views on the preparation for financial services given by the education system in Ireland at third-level. Following graduation, 10% of working third-level graduates are employed in the financial services sector in Ireland. There was a view expressed by employers that third-level education institutions are not delivering the type of solutions

that are needed in a rapidly developing technological environment. This is not consistent with the proliferation of programmes on offer from multiple education institutions. There appears to be a mismatch and possible disconnect between programmes provided and the needs articulated by employers, but in the main, the provision required exists but there is not enough awareness of what is on offer and this needs to be rectified.

Employers and educators appear to have moved more towards micro-credentials in targeted skills areas, especially in technical skills rather than longer and more detailed awards such as degrees. A consistent message throughout the research was the need to see further collaboration between all involved in the organising and delivery of suitable training and education to fit the needs of the industry. It was felt by participants, that this collaboration is more evident at the professional level (as in with professional bodies) but not necessarily with third-level institutions. Participants cited effective examples at post-graduate level in the areas of AML, Fintech and Risk and Compliance, delivered in part time flexible formats.

In discussions with those in international institutions, several of the interviewees saw accreditation as important and that it is viewed as a competitive advantage to the Irish operation when competing for internal new business. 82% of those surveyed recognised the value of certified higher education qualifications.

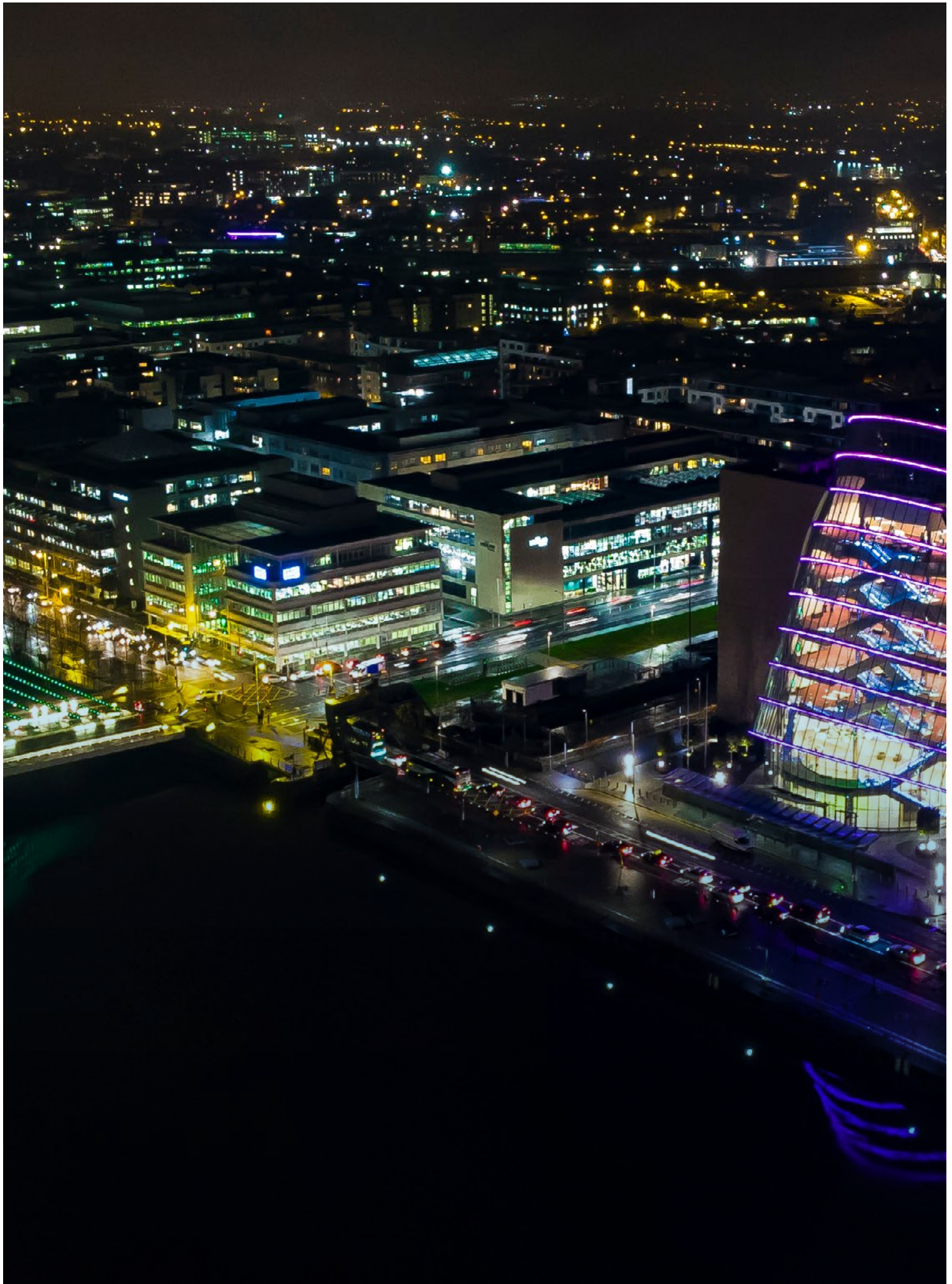


Conclusion

Ireland is predicted to have one of the smallest pandemic-related declines in GDP due to several factors. However, uncertainty remains globally. Ireland's reliance on a large inflow of newcomers to feed its economic engine may face challenges in the coming years as the full impact of COVID-19 on immigration and international students remains unknown.

Having said that, financial institutions may be able to leverage unique domestic and international recruiting opportunities in the coming months. Ireland's financial services sector has a strong stable foundation to build upon, combined with an opportunity to target key talent resources. Furthermore, the existence of strategic partnerships with colleges, universities and professional bodies; the rise in continuing education and other non-traditional training programmes; early talent initiatives such as apprenticeship; a continued and expanded focus on upskilling current employees and an openness to consider reskilled candidates, all combine to have a positive net impact on the talent pipeline in financial services.

As Ireland's financial services sector navigates an increasingly digital future, we will continue to experience significant change. This change will be, fuelled by the increasing pace of technological innovation, the convergence of finance and technology evidenced by the rapid growth of fintech and digital finance, the increasing importance of ESG and sustainable finance, evolving consumer demands, globalisation, changing demographics, and the need for recruitment and retention strategies such as the *Women in Finance Charter*. The ability to attract, recruit and retain top talent is essential to the sector's continued success.



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Banking Payments Federation Ireland
Bank of Ireland Group
Barclays Europe
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Brown Brothers Harriman
Bunge
Canada Life Re International
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DB Service Centre Ltd
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DEPFA Bank plc
Deutsche Boerse
Dublin Business School
Duff & Phelps (Ireland) Ltd
Eisner Amper Ireland
Ernst & Young
ESB
Falcon Group USA
Federation of International Banks in Ireland (FIBI)
Financial Services Ireland (FSI)
GAM Investment Management
GECKO Governance
Golden Arches Insurance DAC
Google
Grant Thornton
HDI Reinsurance (Ireland) SE
HSBC Bank Ireland
Ibec
Innopharma
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Insurtech Ireland
IOB
Ireland South East Financial Services Cluster
Irish Association of Investment Managers
Irish Funds (IF)
Irish Banking Culture Board CLG
Irish League of Credit Unions
IT IBM Ireland Ltd
Itron Management Services Ltd
Kerry Group
Lincoln Recruitment
National College of Ireland
Nordic Aviation Capital
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Mount Street Group
PAT Group
Payac
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Rabobank Dublin
RBS Investment Services
Regional Skills Forum
Revolut Payments Ireland Ltd
S & P Global
SABIC
Savi Recruitment
SC Lowy
SCOR Global Life Reinsurance Ireland
Securitas Treasury Ireland Ltd
Sedicci
South East Technological University
(formerly Waterford IT Campus)
Simmons & Simmons
Skillnet Ireland
SMBC Aviation Capital
Smurfit Kappa Treasury
State Street International Ireland Ltd
Stillwater Asset Management
Sustainability Works
SVP Wealth Management
Technology Ireland ICT Skillnet
Techstars Ireland
The Asset Management Exchange
The Panel
Top Tier Recruitment
Utmost Services Ireland Ltd
Xerox
Zurich Insurance plc

Appendix One

Specialist educational and training programmes in international financial services that will be developed and/or delivered in 2022

Appendix One

This appendix sets out a range of specialist educational and training programmes in international financial services that will be developed or delivered in 2022, as was known in December 2021. It is not complete, and additional programmes may be added to the suite during the year.

PROGRAMME	DEVELOPERS OR PROVIDERS
Accredited Programme in Sustainable Finance Regulation for Compliance Professionals	Skillnet Ireland – IFS Skillnet and Sustainable Finance Skillnet, with the Compliance Institute
Certified Masterclasses in Equality Diversity & Inclusion	Ireland South East Financial Services Cluster and CIRDAS at the Institute of Technology Carlow
MBS in Investment Fund Administration	Ireland South East Financial Services Cluster, Waterford Institute of Technology and Munster Technological University
IOB lifelong learning portfolio (Digital and Innovation; Fintech; Sustainable Finance; Risk Management; Culture; Compliance)	IOB
Professional Certificate for Designated Persons in a Fund Management Company	IOB (level 9 accreditation by UCD)
BA (Hons) in Insurance Practice – Apprenticeship	Insurance Institute, Life Insurance Association and the Atlantic Technological University at Sligo
MSc in Blockchain (Distributed Ledger Technologies)	Skillnet Ireland – Technology Ireland ICT Skillnet and Dublin City University
2x MSc programmes on innovation and fintech	<ul style="list-style-type: none"> • Skillnet Ireland – Technology Ireland ICT Skillnet, and Munster Technological University • Skillnet Ireland – Technology Ireland ICT Skillnet, and Atlantic Technological University
MSc in Compliance – IFSSkillnet	Skillnet Ireland – IFS Skillnet, IOB, and UCD
Climate Change & the TCFD: Risks & Opportunities for the Banking Industry EU Taxonomy: Environmentally Sustainable Investments	Skillnet Ireland – Sustainable Finance Skillnet

PROGRAMME	DEVELOPERS OR PROVIDERS
<p>Regulatory Reporting Professional designation</p> <p>Professional Diploma in Leading Cultural Change and Ethical Behaviour in Financial Services</p> <p>Professional Diploma in Investment Fund Services</p> <p>Professional Diploma in Digital Transformation Financial Services</p> <p>Diploma in Digital Product Management in Financial Services</p> <p>Professional Diploma in Applied Alternative Investments</p> <p>Professional Diploma in Advanced Banking Risk Management</p> <p>Professional Certificate in Investment Fund Services</p> <p>Professional Certificate in Financial Crime Prevention</p> <p>Professional Certificate in Digital Financial Services and Data Analytics</p> <p>Professional Certificate in Data Protection</p> <p>Professional Certificate in Complex Financial Instruments</p> <p>Diploma in Taxation</p> <p>Diploma in Corporate Finance</p> <p>Certificate in Business Analysis</p> <p>Professional Certificate in Fintech Risk and Compliance</p> <p>Professional Certificate in AML in a Fintech Environment</p> <p>Graduate Certificate in Financial Intelligence and Technology</p>	<p>Skillnet Ireland – IFS Skillnet</p>

Appendix Two

Acronyms

Appendix Two

ACCA	Association of Chartered Certified Accountants
AI	Artificial Intelligence
AML	Anti-Money Laundering
AUA	Assets Under Administration
AUM	Assets Under Management
BFPI	Banking and Payments Federation Ireland
CEO	Chief Executive Officer
CIPD	Chartered Institute of Personnel and Development
DARQ	combination of: <u>D</u> istributed Ledger Technology; <u>A</u> rtificial Intelligence; <u>E</u> xtended <u>R</u> eality; <u>Q</u> uantum Computing
DFHERIS	Department of Further & Higher Education Research Innovation & Science
EFT	Exchange Traded Funds
EGFSN	Expert Group on Future Skills Needs
ESG	Environmental Social Governance
ESRI	Economic and Social Research Institute
FIBI	Federation of International Banks in Ireland
FSI	Financial Services Ireland
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GHG	Green House Gas
HR	Human Resources
IAIM	Irish Association of Investment Management
IFS	International Financial Services
IF	Irish Funds
INEDS	Independent Non-Executive Directors
IT	Information Technology
L&D	Learning & Development
MOOCS	Massive Online Open Courses
SDG	Sustainable Development Goal
STEM	Science Technology Engineering Maths



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An Roinn Breisoideachais agus Ardoideachais,
Taighde, Nuálaiochta agus Eolaíochta
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