



Contents

1	Executive Summary	III
1	Introduction and Background	1
1.1	Introduction	1
1.2	Background and Context	1
1.3	Methodology	3
1.4	Structure of the Report	4
1.5	Acknowledgements	5
2	Employment Profiles in the Fishing Sector	7
2.1	Introduction	7
2.2	Employment by Fleet Segment	7
2.3	Employment by Nationality	13
2.4	Nature of Employment in the Fishing Sector	14
2.5	Earnings in the sector	16
2.6	Summary of Findings	21
3	Strengths and Weaknesses of Emplyment Profiles	23
3.1	Introduction	23
3.2	Relative Benefits of Employment Profiles	23
3.3	Benefits of Employment Type by Fleet Segment	27
3.4	Real Costs to Employers of Different Employment Types	30
3.5	Summary of Findings	31
4	Challenges of Attracting New Entrants to the Fishing Sector	33
4.1	Introduction	33
4.2	Recruitment and Retention	33
4.3	Challenges to Attracting New Entrants to the Sector	35
4.4	Summary of Findings	47
5	The Fishing Sector on the Context of the Wider Labour Market	49
5.1	Introduction	49
5.2	National and Regional Labour Market Trends	49
5.3	Competition for Labour	55
5.4	Increasing Returns to Education	64
5.5	Size of Labour Force in Coastal Regions	65
5.6	Gender gaps in the Irish Fishing Sector	68
5.7	Summary of Key Findings	68
6	Roadmap to Improving Attractiveness of the Sector	71
6.1	Introduction	71
6.2	Perceptions and Awareness of the Fishing Sector	71
6.3	Training and Career Progression	72
6.4	Means of Employment	78
6.5	Policy Recommendations	81
7	Conclusions	87
	Tables and Figures	90



Executive Summary

Introduction

The aim of this project is to provide a detailed analysis of the Irish fishing sector labour force and develop proposals to address the main challenges concerning recruitment and retention of crew in the sector.

Methodology

The analysis in this report is drawn from a range of data sources, and inputs from stakeholders and fishing representative organisations. BIM fisheries data has informed the analysis of the fishing sector segments, trends and average crew Surveys were also carried out with fishing crew and employers in the sector. These surveys provided important new evidence on the views of the sector on the labour market and on ways to address any issues identified. The survey findings also provided some indicative estimates of the prevalence of different types of employment contracts and earnings.

Data from the CSO was used to complement the survey - specifically, data from the Survey of Income and Living Conditions (SILC)¹, the Labour Force Survey (LFS)², published by the CSO, and administrative data on earnings, as well as other relevant CSO data.

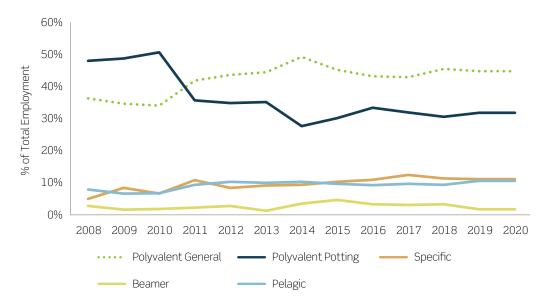
The project team met with representatives of the Killybegs Fishermen's Organisation, the Irish South and East Fishermen's Producer Organisation, the Irish South and West Fishermen's Producer Organisation, the International Transport Workers Federation, and the National Fishermen's Development Group, as well as individual fishermen.

Employment Profiles in the Fishing Sector

The pelagic and polyvalent general fishing segments³ represent the largest fleet segments by employee numbers. The polyvalent general segment was the largest employer in the overall sector between 2008 and 2022. In 2020, 76% of crew worked in this segment, while 5% worked in the pelagic segment.

- More information on the SILC available from the CSO at: https://www.cso.ie/en/interactivezone/statisticsexplained/
- More information on the LFS available from the CSO at: https:// www.cso.ie/en/ methods/labourmarket/ labourforcesurvey/about thelabourforcesurvey/
- 3. The polyvalent general fishing segment is the largest segment in the Irish fleet with around 1,400 vessels from a total of 1,900. The pelagic segment is composed of 23 large vessels with significant gross tonnage and engine power (42% and 27% of total fleet respectively).

Share of Total Fishing Sector Crew by Segment



Source: Indecon analysis of BIM data.

Employment by Contract Type

Employment in the fishing sector is typically constituted by a combination of vesselowners, PAYE workers, share fishers and atypical workers. Share fishers are typically crew who work in the fishing industry and where all or part of their pay comes from sharing the profits or gross earnings of the fishing boat⁴. PAYE workers are employees with specific rights and protections, for whom employers must deduct tax, Pay Related Social Insurance (PRSI) and Universal Social Charges (USC)⁵, while atypical or non-EEA workers are temporary workers with fewer such rights and protections. The Atypical Working Scheme allows non-EEA nationals to do certain short-term contract work that is not eligible for another form of employment permit⁶. Crew members of certain fishing fleets can seek permission to work in the Irish fishing industry under the Atypical Working Scheme. BIM's measure of contract type also considers vesselowners who either work as crew or work alone and are deemed to be self-employed for tax purposes.

Most survey respondents are share fishers (40%), a smaller proportion of respondents are PAYE employees (34%), and roughly a quarter are self-employed vessel-owners (24%).

There are important differences in employment types between segments, with pelagic workers holding mostly PAYE contracts (70%) and polyvalent workers employed mostly as share fishers (71%). Understandably, polyvalent workers involved in inshore fisheries are mostly vessel owners (58%), employing a small number or no crew.

- More information about the definition of share fishing agreements can be found here https://www.gov.uk/guidance/share-fisherman-income-tax-and-national-insurance-contributions
- 5. More information about PAYE employment is available here https://www.revenue.ie/en/employing-people/becoming-an-employer-and-ongoing-obligations/guide-to-paye/index.aspx
- 6. For example, this Scheme allows contract work for individuals not eligible for permits such as a critical skills employment permit, general employment permit, conduct for service employment permit, internship employment permit, sport and cultural employment permit, exchange agreement employment permit or an intra-company transfer employment permit.

Employment Contract Type by Fleet Segment						
Contract	Pelagic	Polyvalent General	Polyvalent Potting	Total		
Vessel-owners	N/A	22%	58%	24%		
PAYE employee	70%	N/A	N/A	34%		
Share fisher	26%	72%	29%	41%		

Source: Analysis of responses to BIM crew and vessel owner survey.

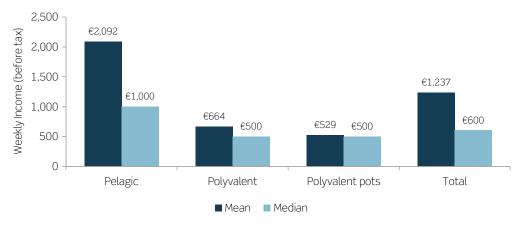
Note: The Polyvalent General category contains Prawn and Whitefish fishing combined. Polyvalent Pot fishing is listed separately. N/A not reported due to small sample given.

In addition to the above, there are also some atypical workers in the sector. The International Transport Workers Federation (ITWF) was consulted for this study, providing useful input on the perception of the Atypical Workers Scheme. Data on the prevalence of foreign workers in the Irish fishing sector was found from published data on the Atypical Working Scheme for non-EEA crew in the Irish fishing fleet⁷. A sector-specific atypical worker permission scheme was launched on February 15th, 2016, to regulate the engagement of existing and future non-EEA workers on whitefish vessels. The Department of Justice and Equality is responsible for administering the scheme. In 2020 the Department issued 40 permits and renewed 143. This indicates that atypical workers constitute 6.4% of employment in the fishing sector based on the latest estimate for total employment in the fishing sector of 2,848⁸.

Earnings by Fleet Segment

The figure below (Weekly Income by Fleet Segment) includes the findings of the survey for crew earnings. The analysis finds that crew in the pelagic segment report the highest average weekly earnings.

Weekly Income by Fleet Segment



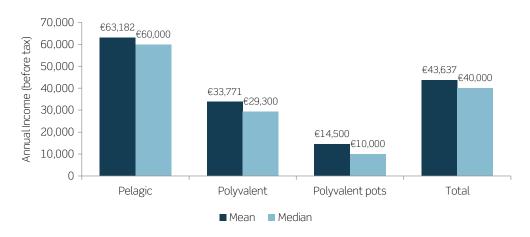
Source: Analysis of responses to Indecon survey.

More information on the Atypical Working Scheme for non-EEA crew in the Irish fishing fleet is available here https:/ www.irishimmigration. ie/coming-to-work-inireland/what-are-mywork-visa-options/ applying-for-a-longstav-employmentvisa/atypicalworking-scheme/ atypical-workingscheme-for-non-eeacrew-in-the-irish-fishingfleet/

^{8.} BIM, 'The Business of Seafood, 2021'

Analysis of reported data on annual earnings finds that pelagic workers earn more annually, even when the prevalence of seasonal contracts in this sector is taken into consideration.

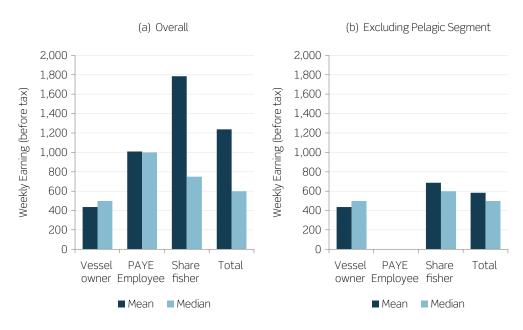
Annual Income by Fleet Segment



Source: Analysis of responses to BIM Labour Force Analysis survey undertaken by Indecon.

While uncertainty exists where self-reporting of incomes takes place, the figure below in the figure (Weekly Income by Employment Type) indicates that PAYE employees tend to earn the most using the median measure of reported weekly earnings. Share fishers tend to earn less than PAYE workers according to the median value, but it is also the case that the reported data includes some high outlier values, which distort the mean values.

Weekly Income by Employment Type



 $Source: Analysis \ of \ responses \ to \ BIM \ Labour \ Force \ Analysis \ survey \ undertaken \ by \ Indecon.$

However, the pelagic segment has a significant impact on the findings in relation to average and median earnings across the whole sector. By separating this segment from our analysis of worker earnings, the earnings of vessel owners and share fishers become more similar. It is noteworthy that, on average, this study finds that vessel owners earn slightly less than share fishers. This is largely driven by lower earnings of vessel owners in the polyvalent potting segment who may operate smaller boats with either one or two crew or where the vessel is sole operated by the owner.

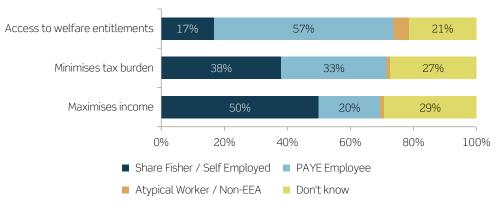
Excluding the pelagic segment brings down the overall average and median earnings and removes the more extreme values in the data. However, it is noteworthy that doing so removes all PAYE employees from the data. This reveals the prevalence of this form of employment in the pelagic segment and the relative rarity of this form of employment in other fleet segments.

Strengths and Weaknesses of Employment Profiles

A key objective of this study was to assess the relative benefits of different forms of employment in the sector from the perspective of crew and employers. Most respondents to the survey of crew view self-employment or share fishing as most beneficial to maximising their income. A significant majority of workers see PAYE employment as the most beneficial in terms of access to welfare entitlements and benefits, while a minority regard self-employment as beneficial.

Overwhelmingly, employers favour share fishing agreements. Moreover, the view expressed in the survey findings that share fishing was the most beneficial means of employment for most employers in the sector was largely echoed in consultations conducted with stakeholders as part of this study. It was also noted that, among stakeholders and respondents to the survey research, the real cost of employing crew is seen as being significantly higher for employers under the PAYE system compared to the share fishing model.

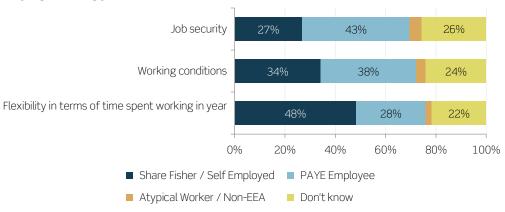
Crew Views on Income, Tax and Welfare by Employment Types



 $\label{thm:constraints} \mbox{Source: Analysis of responses to BIM Labour Force Analysis survey undertaken by Indecon.}$

Among vessel crew, BIM's research found that the majority regard self-employment or share fishing as most beneficial from the perspective of flexible working. When asked about general working conditions, support for self-employment fell to 34% and support for PAYE employment rose to 37%.

Crew Views on Working Conditions, Flexibility and Security Under Diffent Employment Types



Source: Analysis of responses to Indecon survey.

Employers also expressed a preference for share fishing arrangements, in the context of flexibility of doing business and increasing/decreasing their workforce as required, as well as having the lowest administrative burden in facilitating employment.

Consultations with stakeholders and representative bodies in the sector broadly supported the findings of the survey research. It was noted in these consultations that a key advantage of PAYE employment for crew was that it provided additional job security and certainty of income.

Despite the issues identified in consultations for this research in relation to the share fishing approach, particularly in relation to the access to the social welfare system and the inherent uncertainty involved in the share fishing model, broad support remains for share fishing as the most beneficial means of employment in many fleet segments of the sector. In the view of many stakeholders, the primary motivation for entering the sector is the financial return and, in many cases, the share fishing approach is seen by employed crew as being the most financially beneficial form of employment.

Real Costs of Employment

The real costs to employers of hiring employees extend beyond the wages/salaries agreed between the employer and the employee. These additional costs can include onboarding costs, in other words the costs associated with socialising new crew members to acquire the necessary skills, knowledge and behavoiurs to work with the wider crew. These include training, equipment and administration costs and employer payroll taxes. Many of the real costs of employment are likely to be common across the share fishing and PAYE models of employment. However, the impact of this additional cost on PAYE employment was cited in consultations as a disincentive for the use of this employment model. Depending on the level of crew earnings,

employers may be required to pay employers' PRSI at a rate of 8.8% or 11.05% for a Class A employee. For example, for an employee earning €30,000 per annum on a PAYE employment basis, the employer could be required to pay €2,863 in employer PRSI contributions.

To hire an atypical worker involves many of the costs outlined for PAYE employees with additional legal costs to certify the contract for work, as required under the atypical workers' scheme. Other costs may providing the contract of employment in the worker's native language. An additional cost when hiring atypical workers may also include the requirement for the employer to ensure that the fisher is repatriated, at the employer's expense at the end of the contract period.

Among vessel owners/employers, the survey research found that the share fishing model was seen to have the lowest administrative burden as a means of hiring crew. This is largely explained by the fact that, under this model, share fishing crew are required to manage their own tax returns.

PAYE employment may also represent an additional real cost to an employer relative to the share fishing model when account is taken of the legal entitlements of PAYE employees in relation to annual leave, public holidays, and working time requirements. PAYE employees are entitled to minimum amounts of annual leave and paid public holidays. These additional entitlements represent additional costs to an employer relative to a self-employed share fishing model, where crew would take holidays at their own expense.

Challenges of Attracting New Entrants to the Fishing Sector

Nearly 90% of respondents to the survey of employers in the fishing sector agreed with the statement that retaining and attracting crew represented a significant challenge to their business. During separate consultations with representative bodies, the view was also expressed that there were significant recruitment challenges across most segments of the fishing fleet, with the exception of the pelagic segment, principally because of the provision of employment contracts and the level of potential pay in this segment which were seen as positives.

Welfare Entitlements

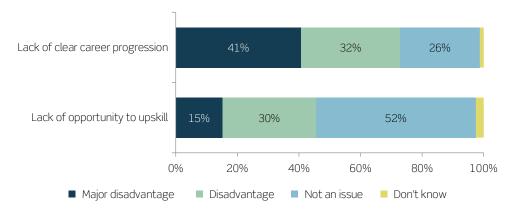
A lack of access to welfare entitlements was cited by employers as having a significant impact on recruitment and retention of crew in the sector. In response to the survey, 76% of crew indicated that a lack of welfare entitlements was a major disadvantage to building a career in the sector. Similarly, 83% of employers cited it as having a very significant or significant impact on attracting and retaining crew.

Stakeholders and representative bodies consulted as part of this study also noted that the share fishing model led to an element of uncertainty with regards to income, both from a fishing trip-by-trip basis and over the course of the fishing season. A lack of access to the social welfare safety net was seen to exacerbate this uncertainty and was viewed increasingly as a significant deterrent to new entrants.

Training and Career Progression

Of crew members surveyed, 73% indicated that a lack of career progression was a disadvantage or major disadvantage to working in the sector. Of employers surveyed, 72% cited career progression as a significant or very significant challenge to recruitment and retention in the sector. Nearly half (45%) of crew indicated that a lack of opportunity to upskill was a disadvantage to working in the sector, with 60% of employers citing this as a significant or very significant challenge to recruitment and retention.

Challenges to the Sector - Training and Career Progression



Source: Analysis of responses to Indecon survey.

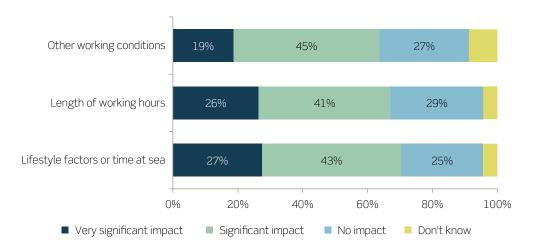
The absence of a clear career progression path was also cited by almost all stakeholders interviewed for this study. This issue was described as a significant obstacle to attracting new entrants to the sector. Additionally, it was noted in consultations that a lack of progression paths was an issue in terms of retention of crew in the sector. It was articulated that as crew working in the sector age, they may require a higher and steadier level of income and, without a clear path to obtaining the qualifications and skills required for advancement, may be more likely to seek opportunities outside the fishing sector.

Evidence from BIM comissioned research on careers in the seafood sector, which explored the views of young people and career guidance counsellors, also supports the importance of opportunities for promotion and progression in influencing career choices. The BIM research found that, among young people (those aged 16-17), there is a significant proportion who do not see the seafood sector as offering career opportunities for young people or provide the possibility of career progression.

Working Conditions

BIM's survey of crew indicated that lifestyle factors/time at sea were seen as a disadvantage or major disadvantage by 58% of respondents. Similarly, 70% of employers indicated that that lifestyle factors/time at sea presented a significant or very significant challenge to recruitment and retention in the sector. The duration of working hours was also cited by significant proportions of respondents to both the crew and employer surveys as an impediment to recruitment and retention in the sector.

Employer Views on Challenges to Recruitment the Sector - Working Conditions



Source: Analysis of responses to Indecon survey

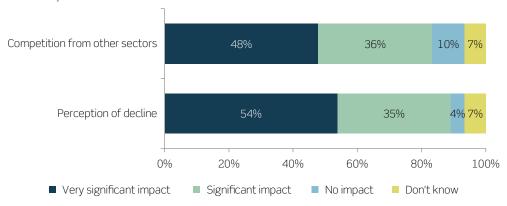
Stakeholders consulted for the research project broadly echoed the views of the survey respondents with regard to the length of time spent at sea and the working conditions being significant challenges to attracting new entrants to the sector. It was also noted in consultations that some of the issue of working conditions discouraging new entrants was likely more a perception than entirely reflective of the reality in the sector given the fleet has been modernised and is safer and the work somewhat less onerous than previously.

The findings from the BIM research on careers in the seafood sector broadly support the finding that issues in relation to working conditions are important when students are considering future career paths. The BIM research found that the seafood industry is seen by participants to consist of hard work (between 65% and 80% of respondents agreeing with this image of the sector) and long hours (between 66% and 70% of respondents agreeing). Additionally, many respondents consider the sector to require a high level of physical fitness.

Competition and Perception

The BIM commissioned carrers in the seafood sector research also found that 84% of fishing vessel owners/employers indicated that competition from other sectors had a significant or very significant impact on recruitment and retention in the fishing sector. Similarly, 89% indicated that the widely held perception of the fishing sector as a sector in decline was acting as a significant or very significant impediment to recruitment and retention in the sector.

Employer Views on Challenges to Recruitment to the Sector - Competition and Perpection



Source: Analysis of responses to Indecon survey.

Stakeholders in the sector interviewed as part of this research broadly agreed that external perceptions of the sector also have a detrimental effect on recruitment. It was noted, for example, that the perception of the fishing industry in general as engaging in unsustainable practices leading to over-fishing were damaging the perceptions of the sector amongst the wider public.

It was also noted in consultations that the sector is competing with school leavers considering higher education. There is an increasing trend among young people in Ireland's coastal communities to consider further educational opportunities and this is a major constraint on the supply of labour to the fishing sector from among school leavers in coastal communities. Similarly, stakeholders noted the potential earnings from the construction sector, which was considered to be in direct competition for workers, as a significant draw to seasonal crew. In particular, this was the case for those workers who may opt for opportunities in construction rather than return to work as crew on a seasonal basis.

Evidence from the research undertaken by BIM also provides support for the finding that negative perceptions of decline of the fishing sector act as a constraint to recruitment. Perhaps most worryingly from a recruitment perspective, the BIM research found that the seafood sector was the least likely sector to be recommended as a career choice by adults to a young person choosing a career path, with only 14% of all adults recommending the industry. This is relative to 91% who would recommend a career in technology, 83% who would recommend a career in professional services and 39% who would recommend a career in the retail or hospitality sectors.

The Fishing Sector in the Context of the Wider Labour Market

When considering the challenges faced by the fishing sector in recruiting and retaining crew, it is important that any analysis contextualises the labour market pressures affecting the supply and demand of labour in the sector. This study explored the two main pressures on the labour force, namely increasing demand for labour in other economic sectors and the increasing prevalence of, and returns to, higher education in the Irish labour market.

Labour Market Trends

In recent years, there has been broad-based employment growth in the Irish economy and a reduction in the unemployment rate. While employment growth has been highest in the Eastern and Midland region, strong growth has been seen across all regions. Similarly, average earnings have been increasing in recent years across all regions.

Regional Employment Rates (2012-2020)

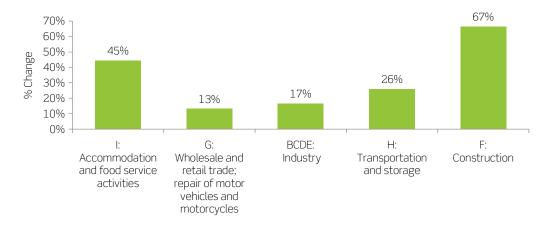


Source: Indecon analysis of CSO's Labour Force Survey.

The fishing sector is competing for labour in a segment of the Irish labour market in which there is currently a high proportion of individuals who do not hold a higher education qualification. This is also a feature of other sectors such as agriculture, forestry, wholesale, retail, transportation, and accommodation. The fishing sector, however, does require particular skills and a level of resilience not seen in these competing sectors.

A number of the economic sectors that compete for labour most directly with the fishing sector have experienced strong growth in employment over the last decade, with particularly large increases evident in the hospitality and food services, and construction sectors.

Regional Employment Rates (2012-2020)



Source: Indecon own analysis using CSO data.

Increasing levels of reported vacancies in the economy in recent years are also indicative of a growing demand for labour and increasing worker choice and bargaining power. Looking specifically at the fishing sector's main competitors for labour (see figure below), it can be seen that each sector is experiencing rising vacancy rates, suggesting greater competition for labour. Rising levels of voluntary job mobility in Ireland in recent years are indicative of the increased level of choice available to individuals in the labour force. Rising vacancy rates are also aligned with more anecdotal and industry specific reporting of skills shortages in recent months. For example, we note that Fáilte Ireland has launched a significant campaign to tackle hospitality labour shortages after the COVID-19 pandemic. Specifically, the campaign is designed to attract workers into the sector through marketing and awareness strategies.⁹

Job Vacancy Rate - Selected Sectors



Source: Indecon analysis of CSO data.

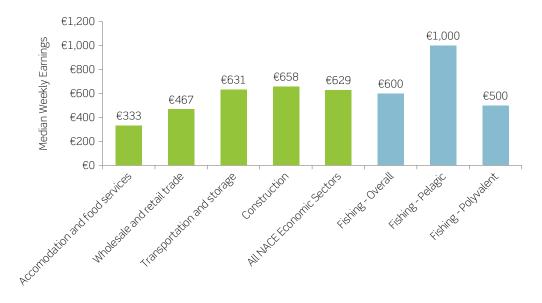
More information about Fáilte Ireland's campaign is available here https:// www.failteireland.ie/ Utility/News-Library/ Statement-from-Paul-Kelly-to-the-Oireachtas-Commit.aspx

Comparative Earnings in Fisheries Sector

Median weekly earnings in the fisheries sector are just below the average for all sectors, and mostly lower than similar sectors. Furthermore, earnings in the polyvalent sector of the fishing fleet are significantly lower than the national average. Median earnings in the pelagic segment, on the other hand, are significantly higher.

Earnings data for the fishing sector indicates that while the pelagic segment is well placed to compete for labour via wage competition, the other sectors of the fishing fleet offer significantly lower earnings opportunities than sectors requiring comparable qualifications.

Median Sectoral Weekly Earnings, 2020



Source: CSO Administrative Data and Indecon survey analysis

Changes in Rural and Coastal Labour Force

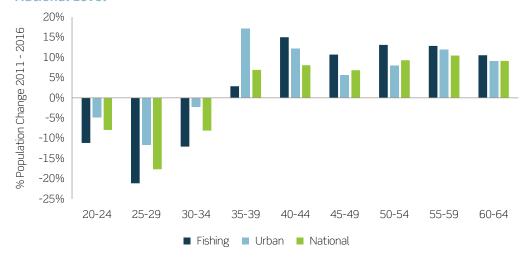
The ongoing relatively slower growth - and in some instances decline - in population in rural areas in comparison to urban areas is also likely to reduce the pool of labour available to the fishing sector. The recent population censuses demonstrate that rural and coastal areas have been growing more slowly and have seen a greater reduction in the younger working age population and a greater increase in the cohort of the population aged over 40 compared to urban areas of the country.

While the population of Ireland is ageing, this is happening at a slower rate in urban areas, and a higher rate in areas near fishing ports. The latter have experienced a significantly greater decline in the numbers of persons aged 20-34 compared to the cities and the national average. These areas have also seen slower growth in the population aged 35 to 39. The population of these fishing areas is ageing at a much faster rate than elsewhere: between the last two population censuses in 2016 and 2011, these areas gained more people aged 40+ than in the major cities or across the state as a whole.

The age profile of fishing workers has changed sharply between 2011 and 2016. Using Labour Force Study (LFS) data, it can be observed that the share of workers aged 55-64 in the population has increased from 12% in 2011 to 19% in 2020. Meanwhile in the agricultural, mining, and fishing sector¹⁰, this rate has increased from 30% in 2011 to 32% in 2020. Although the rate was already high in 2011, the sector has aged further by 2020. This is also reflected in the respondents to the Indecon survey of crew. Only 20% of respondents to the survey were aged 35 or less. This is indicative of the challenges of attracting new entrants to the sector.

The relatively larger decline in the younger cohorts of the population in the areas around the major fishing ports presents an additional challenge to recruitment of new entrants to the fishing fleet given that the traditional make-up of new crew members has been younger males. As this cohort becomes a smaller segment of the population in coastal areas the pool of labour from which the fishing sector has traditionally drawn new entrants is also shrinking.

Demographic Profile of Areas Near Fishing Ports, Urban Centres and the National Level



Source: Indecon analysis of CSO data.

Roadmap to Improving the Attractiveness of the Fishing Sector

As part of the research for this project, the views of crew, employers, representative bodies as well as wider stakeholders¹¹ were sought on the policy interventions that could be introduced to alleviate some of the challenges faced by the fishing sector in attracting and retaining workers.

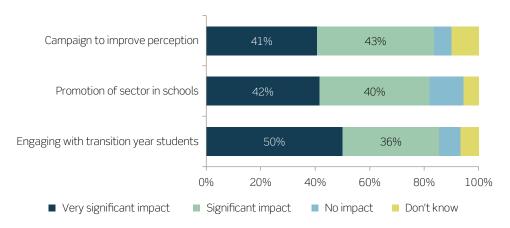
Perceptions and Awareness

There was strong support from existing crew and employers for positive communication to improve the perception and awareness of the fishing sector including engagement with transition year students. A wider campaign to improve the perception of the sector to civil society was also suggested. Over 85% of crew respondents noted that both interventions would have a positive impact on the sector. Employers also favoured both interventions and recommended promotion of the sector in schools.

- 10. The highest level of sectoral disaggregation available in the LFS.
- 11. The research team are appreciative for advice from BIM, as well as from a wide range of stakeholder organisations. These include the Irish South and East Fishermen's Produce Organisation, the National Inshore Fisheries Organisation, the South and West Fish. Producers Organisation, the Killybegs Fishermen's Organisation, the National Fishermen's Organisation Development. The International Transport Workers Federation, as well as a financial advisor who is a specialist in the sector.

Consultations also led to several suggestions for future communications around fishing as a job and the opportunities in the sector. It was emphasised that there was a need for promotional material to ensure that this exercise of increased engagement with young people was fruitful. It was also suggested by stakeholders that a trainee deckhand programme would potentially allow young people to experience employment in the sector over the course of one or two weeks and to gain some level of understanding of fishing as a career.

Views of Employers on Improving Perceptions and Awareness of the Sector



Source: Analysis of responses to Indecon survey.

Training and Career Progression

Survey respondents were asked whether a more formal system of on-the-job training, increased clarity in career progression, and provision of formal and transferable qualifications would improve the attractiveness of the sector both for existing workers and new entrants.

Workers were broadly in favour of each proposal, with over 75% of respondents agreeing. The most popular proposal among workers was the provision of transferable qualifications. These measures were also popular among employers, with over 75% agreeing with the proposals outlined. As before, the most popular intervention among employers was the provision of transferable qualifications.

The stakeholders and representative bodies met as part of this research were also broadly in agreement with the findings of the survey research in terms of the need for clarity on career progression and increased opportunities for training and upskilling as a means of improving the attractiveness of the sector to new entrants. Suggestions for initiatives in this regard include:

- Streamlining of the existing course offerings by BIM
- Development of an apprenticeship programme for the sector
- Development of a watchkeepers ticket
- Development of a qualification that provided transferrable skills across the marine economy
- The introduction of a seaman's book to provide crew with a 'professional identity'

Means of Employment

Approximately 70% of crew respondents to the BIM survey indicated that a switch from self-employed to PAYE would be beneficial in attracting new entrants to the sector. Employers showed less support with 49% indicating that this would have a significant impact on attracting new entrants.

Among employers, unsurprisingly there was wide support for the impact of the introduction of an additional tax allowance for those in the fishing sector. Over 95% of employers agreed that this would have a significant or very significant impact on improving the attractiveness of the sector. Representative bodies consulted were also very supportive of reforms to the tax treatment of employees in the sector as a means of increasing the attractiveness for new entrants.

Stakeholders were generally supportive of providing more PAYE based employment opportunities, in those segments of the fleet where it was feasible for employers. They were supportive of the potential benefits offered by PAYE employment in terms of attracting new entrants, particularly those leaving school. It was generally agreed that PAYE employment creates an easier entry to the sector than via the share fishing model in terms of administrative burden from the perspective of the employee as well as providing certainty of income and a level of security of tenure. Additionally, PAYE employment is likely to be more attractive to individuals seeking mortgages as, in the eyes of financial institutions, it provides a more secure form of employment and security of income. However, it was noted that PAYE employment is unlikely to be workable for all sectors of the fleet. For inshore vessels particularly, where boats are typically owner-operated with a small crew and a protracted fishing season, respondents found it difficult to understand how it would be applicable.

It was suggested that the move to a hybrid model of employment on a PAYE basis with elements of pay linked to the extent of the catch may be the best approach. This would capture some of the benefits to crew of the share fishing model but also partially address the issues of access to the welfare system and other drawbacks of the share fishing model in terms of security of tenure. Developing such a system would be complex from a social welfare and taxation point of view. However, it was suggested that the employment contracts currently offered in the pelagic segment which typically offer a base wage with a bonus on the basis of the size of the catch could be considered for application to the wider sector, and was a potential starting point. It was noted there would potentially be resistance to this from those areas of the fishing fleet in which the share fishing model remains the most viable means of employment. This was likely to be the case for smaller employers across all segments and in the polyvalent potting segment in particular.

Policy Recommendations

As demonstrated in this report, the fishing sector faces both internal and external challenges to recruitment and retention of crew. The evidence from the consultations, the survey of crew and employers, and the observable earnings differences across the fleet segments indicate that the challenge is largely faced by all segments of the fishing fleet outside of the RSW pelagic segment.

Based on the available evidence outlined in this report, Indecon has developed a range of policy proposals to assist the fishing sector in alleviating some of the recruitment challenges faced by the sector.

Engagement and awareness

Wider recruitment and promotional policies should be focused on maximising awareness amongst the coastal labour force of the benefits of employment in the sector, with a particular focus on engagement with school leavers. BIM has a key role to play in this awareness raising.

- 1. Efforts should be made to increase engagement with schools, career guidance counsellors, and transition year students to maximise awareness of the fishing sector as a career.
 - Ensure that schools and guidance counsellors are aware of the opportunities in the sector and have high quality promotional material and information to hand to provide to students in this regard.
 - b. Ensure that careersportalie website has sufficient information on opportunities in the sector for new entrants.
 - c. Engage with transition year students via BIM and industry to ensure that students understand the opportunities in the sector and to attempt to overcome misconceptions of the sector in terms of both the prospects, pay and conditions as well as the nature of work.
 - d. Visits to schools by local fishing sector representatives, supplemented by site visits to encourage engagement and give an understanding of the career opportunities within the sector.
 - e. BIM to explore the possibility of introducing a trainee deckhand programme to enable young people to spend a short period at sea to experience the role and understand the nature of the work involved. While BIM do offer an existing trainee deckhand programme, this existing programme should be enhanced and more focused on ensuring that participants are aware of the opportunities for advancement both within the fishing sector and the wider marine economy.

2. Undertake a communications campaign to improve the perception of the sector as a viable sector in which to build a career and not a sector in terminal decline. Efforts should also be focused on demonstrating to those outside the sector that working conditions on modern boats are not aligned with the typical understanding of working conditions in the sector. As part of this campaign, a focus should be placed on highlighting successful areas representing the future of the sector, and which would be attractive to young school leavers. In this regard, social media is a critical tool for effective engagement with young people and should be used effectively in making the industry appealing to this demographic.

Career Progression and Training

There is a requirement from both a safety and operational perspective for those employed in the sector to have access to enhanced formal training. There is also a need to provide additional clarity on career progression within the sector. Additionally, research undertaken by BIM has highlighted the importance of an understanding of a wider career path for school leavers in making career choices. The evidence presented in this report from both the survey of employers and engagement with stakeholders and representative bodies in the sector has emphasised the importance of improving training opportunities within the sector as well as a clear career progression path for new entrants. Policy options which were identified in the survey that seek to address these key issues include:

- 1. Consideration should be given to the development of an apprenticeship programme for new entrants to the fishing sector. A formal apprenticeship structure would provide new entrants with a training-based induction to the sector and ensure that they receive the grounding in the skills required to progress their career. Feedback from representative bodies suggested that an apprenticeship framework could be based around a restructuring of a number of the courses already offered by BIM and could also include onboard training and upskilling. Training should include safety and engineering as well as more specific skills as required.
- 2. Explore the potential for the establishment of a formal qualification in seafaring which would qualify individuals to work in the fishing sector and other sectors of the maritime economy. The provision of a transferable qualification of this nature could serve to increase the number of people in the labour market with the skills to work in the fishing sector. It may also encourage new entrants to enter the sector if they see the skills acquired in the fishing sector as transferable to other sectors of the maritime economy. This would offer the potential for career progression both within the fishing sector and the wider maritime economy.
- 3. Explore the potential of introducing additional qualifications prior to the full skipper's ticket such as a watchkeepers ticket to enable crew to assume additional responsibilities in their roles as they progress their career. Certification of skills should be encouraged with as many certificates transferrable across the maritime economy as possible.

- 4. BIM and the industry should ensure that new entrants and existing workers in the sector are aware of the certificates of competency for the sector and the supports available to crew to avail of additional training. BIM should ensure that as new entrants undertaken training courses for the first time that they are made aware of potential additional training opportunities.
- 5. BIM and industry should prepare material clearly outlining the different roles in the sector, the responsibilities of each role and the experience and qualifications required to obtain each role. This material should be available to potential new entrants via career guidance counsellors and avenues such as careersportal.ie.
- 6. BIM should engage with employers (i.e., vessel owners) in the sector to ensure that the training courses offered are aligned with the requirements and that employers see a tangible benefit from upskilling their employees.
- 7. Explore the possibility of introducing a seaman's book for the fishing sector in Ireland to track an individual's employment history, skills and qualifications in the sector. This would provide individuals with a professional record and facilitate the establishment of a central record of an individual's qualifications and certifications.

Employment Practices

There remains widespread support for share fishing as a means of employment in the sector from both employers and employees. Employers generally see share fishing as the lowest cost means of employing workers for them while workers in the sector view share fishing as the most lucrative form of employment for them. However, a lack of entitlement to welfare was seen by workers in the sector as a key strength of employment on a PAYE basis.

- BIM should ensure that all employers in the sector are aware of the process of employing people as PAYE workers and ensure that supports are available to assist employers with the administrative process of becoming PAYE employers. Additionally, consideration should be given to organising workshops possibly with the assistance of accountancy firms to ensure that employers in the sector are aware of the options open to them in terms of employment practices and the potential costs and benefits of these options based on the specifics of their business.
- 2. Consideration should be given to encouraging employers in a position to do so to employ crew on a PAYE basis but with a portion of their income continuing to be contingent on a share of the overall catch. This would provide workers with the protections of PAYE employment while also continuing to provide them with the potential income benefits of the share fishing model. A hybrid model of this nature would overcome some of the challenges of share fishing in terms of lack of access to social welfare entitlements while also continuing to offer crew the potential financial benefits of a share fishing arrangement. The feasibility of such a model needs to be checked and, if feasible, designed in coordination with the Department of Social Welfare and the Revenue Commissioners.

Taxation

A average weekly earnings in the fishing sector are typically lower than those in competing sectors of the economy. This, combined with the nature of the work and the risks involved, result in difficulties in recruitment. The cost pressures facing the sector indicate that broad based increases in wages in the segments of the sector facing the most significant recruitment challenges are unlikely to be viable in the short to medium term. Aside from raising wages, the other means of increasing takehome pay for crew are changes to the taxation of employment in the sector.

Employers in the sector strongly indicated that an enhanced tax allowance for those in the sector would be a very significant means of increasing the attractiveness of the sector to new entrants and improve retention. A full impact assessment of tax allowances for the fishing sector was beyond the scope of this report and would require consultations with both central government and the Revenue Commissioners. However, tax policy changes merit consideration as a means of improving the attractiveness of the sector.

The research project team recommend that any reforms should be considered as a means of assisting the sector in attracting and retaining staff. This could contribute to enhancing the significant economic contribution to coastal economies in Ireland. While any changes in tax treatment for the sector should be subject to a full economic appraisal to ensure that it represents an effective use of scare public resources, there may be merit in revisiting the introduction of a seafarers/tax allowances/PRSI refund for the sector. With the above in mind, as part of the roadmap to improving the attractiveness of the sector to new entrants, we recommend the following:

- 1. BIM in conjunction with the Producer Organisations and the Department of Agriculture, Food and the Marine should explore the possibility of engaging with the Revenue Commissioners, the Department of Finance, and the Department of Social Protection to examine the possibility of reform to the tax treatment of employment in the fishing sector. These reforms should focus on establishing how employment in the sector could be facilitated with access to the social welfare system but retaining an element of the potential windfall benefits of the share fishing model under a PAYE system. While we note that there is currently no register of those employed in the sector, which may be required to facilitate these reforms, any initial scheme could be designed as an opt-in measure to avoid the need for the development of a formal register of employment. However, the precise design of any reformed tax treatment is a matter for subsequent analysis and consultations with the relevant agencies.
- 2. This engagement process should also consider the possibility of reforming the existing fisher tax credit to align with the allowances available under the seafarers' allowance. Additionally, consideration should be given to the potential benefits to the sector of instituting a separate or alternative allowance based on days spent at sea.

Conclusions

This report has completed a labour force analysis of the Irish fishing fleet using new primary research of crew and employers in the sector, consultations with key stakeholders and representative bodies in the sector and labour market data from the CSO. The new primary research has provided insights into employment practices within the sector, as well as insights into the key challenges facing the sector in terms of recruitment and retention in the sector and potential policy solutions.

The analysis in this report has confirmed the widely held view that the fishing sector faces significant recruitment challenges. Issues within the sector which were identified as limiting the attractiveness of the sector to new entrants include the average earnings in the sector, the lack of welfare entitlements under the share fishing model, a lack of a demonstrable path to career progression in the sector, the length of time at sea required and the perception that the sector is one in decline.

In a wider labour market context, the sector is facing challenges in terms of the relatively slower growth in the labour force in rural and coastal areas and the fact that the demographics of these areas are seeing the population age more quickly than in urban areas of the country. Additionally, a number of the sectors with which the fishing sector is competing intensively for workers, have been experiencing significant growth in recent years. The number of people in the labour force without higher education qualifications has been steadily decreasing in recent years, leading to a smaller share of the labour force that are likely to be seeking employment in sectors predominantly employing those without higher education qualifications, such as fishing. The increasing returns to higher education in the Irish labour force are continuing to draw younger people into further and higher education rather than entering the labour force as a relatively unskilled worker. This focus on the returns to higher skilled employment highlights the importance of ensuring that potential new entrants are aware of the training and qualifications available to those in the fishing sector, as well as the supports for workers pursuing these, and the pathways to skilled employment in the fishing sector and the wider marine economy that these qualifications can open up.

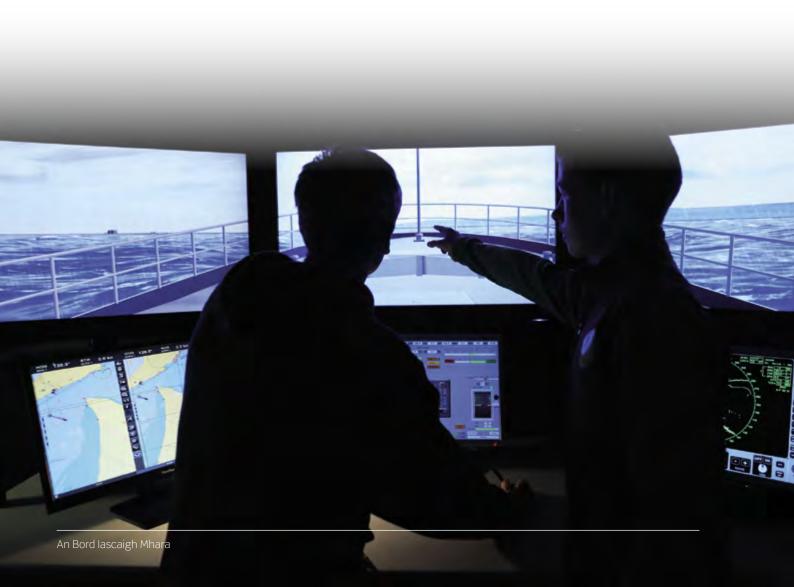
The primary research completed for this study has demonstrated that, outside of the pelagic segment, wages in the fishing sector are lower than those on offer in sectors of the wider economy, particularly construction, a sector which also attracts a similar cohort of the labour force to that of the fishing sector. Consultations for this study have indicated that employers in many segments of the fishing fleet do not see any scope for wage increases in the sector in light of a rising cost base and diminishing profitability.

Given the challenges facing recruitment to the sector, this report has outlined a number of recommendations with regards to increasing engagement with young people, improving the perceptions of the sector as a viable choice for new entrants as well as developing an apprenticeship programme for the sector and considering the development of a wider qualification facilitating employment in both the fishing and wider maritime economy.

The availability of a transferable qualification within the marine sector has the potential to be an important means of attracting new entrants to the fishing sector by providing the opportunity for future career development within the wider blue economy.

With regards to employment practices, while recognising that share fishing is likely to remain the means of employment most beneficial for smaller employers in the sector, employers should be encouraged to consider the merits of offering PAYE employment to new entrants in order to provide access to social welfare entitlements and additional certainty with regards to income and job security. Consideration should be given to encouraging employment on a PAYE basis with a portion of the total income remaining contingent on the overall catch. Supports should be in place to ensure that employers are aware of the process of hiring via PAYE.

Finally, while the assessment of the ultimate costs and benefits of changes to taxation policy are beyond the scope of this research document, changes in the tax allowances for the fishing sector have the potential to increase the attractiveness of the sector to new entrants by increasing the take home pay of crew in the sector. Consideration of any policy interventions in this regard would require consultations with both central government and the Revenue Commissioners.



1. Introduction and Background

1.1 Introduction

The main objectives of this labour force analysis is to provide a detailed analysis of the labour force market for the Irish fishing sector, including a description of the ways in which crew are employed, as well as developing proposals to resolve the main constraints to recruitment in the sector.

Specifically, the scope of the research comprises the following:

- Description of how crew are employed including terms and conditions, tax and welfare rules across Irish fleet segments
- Estimation of how many crew are employed in each fleet segment with an assessment of the proportion of crew in each employment category
- Evaluation of the real costs to the employer of different employment categories
- Pros and cons of the different crew structures in terms of tax, social welfare, benefits etc.
- Development of a roadmap to improve attractiveness of working in the Irish fishing industry.

This chapter begins with a brief review of the background and context for the fishing sector in Ireland, a discussion of the methodology used in the analysis in this report and an outline of the report structure.

1.2 Background and Context

The latest data from BIM indicates that the seafood sector, including fisheries, processing and aquaculture contributed &1.26 billion to the Irish economy in 2021 and supported 16,647 jobs. 12 Of these jobs, 2,848 are estimated to be employed directly in the fisheries fishing sector. Including direct and indirect employment across the wider seafood sector, BIM estimate that the seafood sector accounts for 7% of employment in coastal areas of Ireland. Other research published by BIM on the economic impact of the 10 largest fishing ports in Ireland in 2019 estimated that the commercial fishing sub-sector sustained 2,275 jobs, &112 million of wages, and made a &277 million contribution to the national economy in 2018 from these 10 ports alone. 13

Complementary research by BIM has estimated the total population of the areas which rely on the wider seafood sector as 585,000 people, with a labour force of 275,000 and with 239,000 total employees. ¹⁴ This estimate was based on CSO data and estimated the population which resides close to the coastline and in rural areas. This labour force of 275,000 people represents the pool of labour from which the sector has traditionally drawn its workforce.

^{12.} BIM, 'The Business of Seafood, 2021'.

^{13.} BIM, 'The Economic Impact of the Seafood Sector at Ireland's Main Ports'

^{14.} BIM, 'An Estimation of a Reference Population for the Irish Seafood Sector'.

While BIM has identified a substantial portion of the national labour force living in areas that could be defined as part of the Irish seafood community, sourcing crew is a recognised problem for the sector. The analysis in this report addresses this industry identified need with regards to recruitment and is aligned to a Strategic Goal included in the Department Agriculture Food and Marine (DAFM's) Statement of Strategy of "delivering a sustainable, growth driven sector focused on competitiveness and innovation driven by a skilled workforce delivering value added products in line with market demands." ¹⁵

The challenges faced by the fishing sector in Ireland in terms of worker safety, training and employment have been recognised previously. In 2015, the important Leech Report on safety, training and employment in the Irish fisheries industry¹⁶ was published. The Working Group was tasked with outlining proposals which related to improving safety standards on vessels, increasing compliance with safety regulations, making the fishing industry more attractive as an area of employments and finding ways to implement a more robust careers structure for current employees in the sector.

The Report made a number of recommendations with respect to the issues mentioned above. Selected recommendations of particular relevance for this study include:

- Mandatory Certificates of Competency (Deck and Engine) should be introduced by DTTAS for the operators of all vessels with appropriate safety-training in stability and work-related safety.
- Certificates of Proficiency (Deck and Engine) should be introduced by DTTAS for deckhands with appropriate safety training in stability and work-related safety.
- Appropriate Training Incentives and Career Structures should be put in place for those working in the fishing industry.
- The introduction of a more tailored, and appropriate, social protection system
 that would include share fishermen. This new system would take account of
 the specific needs of the fishing industry, along the lines of the Family Income
 Supplement (FIS) and Farm Assist Schemes.
- That BIM develops a career-development programme for aspiring deck and engineer officers in the fishing industry.

While the Leech report had a focus on safety issues which are outside the scope of this research, many of the recommendations made in the report with regards to improving the attractiveness of the sector to new entrants are of relevance to this study. The analysis undertaken for this study and the feedback from those in the sector, as will be demonstrated in the subsequent sections of this report, largely support the recommendations made in the Leech report. These recommendations centred on improving training incentives and career structures as well as improving access for those in the sector to the social welfare system. The analysis in this report builds on the recommendations and issues identified in the Leech report by providing additional recommendations on improving the attractiveness of the sector and outlining the insights from those working in the sector with regards to the strengths

^{15.} DAFM Annual Report 2019.

BIM, 'Report of the Working Group on Safety, Training & Employment in the Irish Fishing Industry'.

and weaknesses of different forms of employment. This report also provides an appraisal of the wider labour market context in which the fishing sector operates.

1.3 Methodology

The analysis in this report relies on a range of data sources, as well as inputs from stakeholders and fishers representative bodies. We briefly present each of these data sources and discuss some of their characteristics

BIM economic data informed the analysis of the fishing sector in terms of segments, trends, and average crew size by fishing segment. This data was provided to Indecon after consultation with BIM and considers administrative records from 2008 to 2020. These records contain data on crew size and number of employees operating in a given sector, as well as the total fishing industry. A survey was sent to crew (i.e., employees) and vessel owners (i.e., employers in the sector). The survey provided important evidence on the views of the sector on the labour market and on ways to address any issues identified. It also provided some indicative estimates of the prevalence of different types of employment contracts and conditions of employment. The survey also considered the estimates of earnings and measured the opinion of those in the sector on various aspects of the terms of reference for the study. Specifically, respondents were asked which employment working arrangement is the most beneficial to workers across a range of dimensions as well as terms and conditions of employment and their views on the public perception of the industry.

Crew were also asked about the difficulties of working in the sector and to consider possible interventions and how effective these would be in drawing and retaining crew in the sector.

The survey workstream also sought the view of employers in the sector. Again, respondents were asked the characteristics of their boat(s) and crew, number of workers, and the average weekly and annual earnings of their workers. As was the case for the survey of employees, the opinions of employers were sought on employment practices in the sector, the challenges facing the sector in terms of recruitment and potential policies that could alleviate some of these challenges.

298 responses were obtained of which 173 were from employers and 125 from individual crew members. While this provides important new evidence to understanding the labour force in the Irish fishing fleet, care is needed in interpreting the data and in particular, the cross segmental findings. In addition to the survey research, data from the CSO was used to compliment the Indecon survey; specifically, data from the Survey of Income and Living Conditions (SILC), the Labour Force Survey (LFS)¹⁷, both published by the CSO, administrative data on earnings, and other CSO data. The purpose of Ireland's SILC is to provide individual level and household level statistics on income, living standards, poverty, deprivation, and inequality. We are particularly interested in the earnings of those in the fishing sector, and how their earnings compare to those of other sectors.

^{17.} Both collected and published by the CSO with additional information available on the SILC at: https://www.cso.ie/en/interactivezone/statisticsexplained/surveyonincomeandlivingconditionsexplained/and the LFS at: https://www.cso.ie/en/methods/labourmarket/labourforcesurvey/about thelabourforcesurvey/about thelabourforcesurvey/

The purpose of the CSO Labour Force Survey is to provide a representative and generalisable sample of Irish individuals and households. It collects quarterly data on the economic and working status of the Irish population and contains detailed measures of sectors and occupations. It has run since 1998 and the most recent data considers 2021.

The CSO's Earnings Analysis using Administrative Data Sources (EAADS) is a dataset which relies on the Revenue Commissioner's P35L dataset of employee annual earnings. This data is linked to the CSO and other data to provide demographic breakdowns of earnings similar to those previously provided by the National Employment Survey (NES). It contains earnings data by NACE economic sector, gender, age, nationality, and region (residence).

In addition, key stakeholder in the fishing sector were also engaged as part of this work. The project team benefitted from valuable inputs from BIM as well as from representatives of the Killybegs Fishermen's Organisation, the Irish South and East Fishermen's Producer Organisation, Irish South and West Fishermen's Producer Organisation, Transport Workers Federation, and the National Fishermen's Development Group, as well as from a financial advisor who is a specialist in the sector. This stakeholder engagement process provided important inputs to the analysis.

1.4 Structure of the Report

The report is structured as follows:

- Section 2 outlines the profile of employment in fishing sector
- Section 3 analyses the strengths and weaknesses of different forms of employment from the perspective of both crew and employers
- Section 4 demonstrates the challenges facing the sector in encouraging recruitment of new entrants
- Section 5 illustrates the wider labour market context in which the fishing sector is operating
- Section 6 outlines a set of recommendations for alleviating some of the challenges faced by the fishing sector in recruiting new entrants
- Section 7 concludes the report

1.5 Acknowledgements

BIM would like to acknowledge the independent economic research and consultancy organisation, Indecon, who were commissioned to work in partnership with BIM for this labour force analysis of the Irish catching sector. We are particularly grateful to the stakeholders who met with the research team to inform the study for their time and their insights. These stakeholders include John Lynch of the Irish South and East Fishermen's Producer Organisation (ISEFPO), Alex Crowley, Eddie Moore, Robert Kearney, Seamus Breathnach and John Menary of the National Inshore Fisherman's Association (NIFA), Patrick Murphy of the Irish South and West Fish Producers Organisation (ISWFPO), Sean O'Donoghue of the Killybegs Fishermen's Organisation (KFO), Art Kavanagh, and the members of the National Fisherman's Development Group (NFDG). We are also grateful to Michael O'Brien of International Transport Workers' Federation (ITWF) for his inputs. BIM are also very grateful to the crew members and employers in the sector who took the time to complete the survey, which provided valuable inputs to the research. We would also like to acknowledge the assistance of the Irish Social Science Data Archive (ISSDA) in facilitating access to some of the data utilised in this study.





2. Employment Profiles in the Fishing Sector

2.1 Introduction

This chapter examines the employment types, earnings, and the main segments of work in the Irish fishing sector. It also explores differences between employment types and earnings between fishing segment groups and other groupings like age and experience. The research that many group differences in outcomes like earnings can be explained by workers' fishing segment. Data from the BIM survey employers and crew members, and from administrative data collected by BIM in this analysis.

2.2 Employment by Fleet Segment

This section starts by considering the segments of the fishing sector using two sources of data. The first is the survey of workers and employers operating in the sector. The second is economic data previously collected by BIM under the EU's Data Collection Framework (DCF) as well as a study of ten ports carried out by BIM in 2019 and made available to Indecon. We find that fishing workers are divided into two main segments, with corresponding differences in contracts, working time agreements, and pay.

The fleet segments in the Irish fishing fleet are defined by Licensing Authority for Sea-fishing Boats¹⁸ and include:

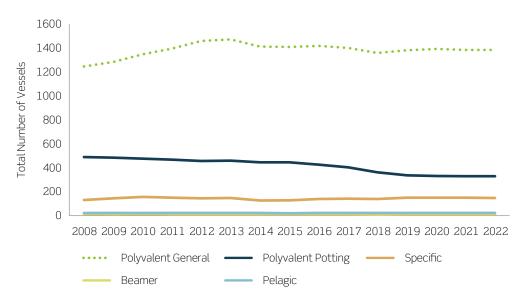
- Refrigerated Seawater (RSW) Pelagic Segment: This segment contains vessels engaged predominantly in fishing for pelagic species (mainly herring, mackerel, horse mackerel, blue whiting and boarfish).
- Beam Trawler Segment: This segment contains vessels, dedicated to beam trawling. Vessels in this segment may fish only by means of beam trawls, and target demersal species, including plaice, sole, turbot etc
- Polyvalent Segment: This segment comprises the greater part of the sea fishing fleet. Polyvalent vessels are multi-purpose and include small inshore vessels (netters and potters), and medium and large offshore vessels, targeting whitefish, pelagic fish and bivalve molluscs. The segment has four sub-segments:
 - vessels under 18m in length overall
 - vessels equal to or over 18m in length overall
 - the scallop sub-segment
 - the potting sub-segment

^{18.} Licensing Authority for Sea-fishing Boats, Annual Report 2020.

- Specific Segment: This segment contains vessels which are permitted to fish for bivalve molluscs and aquaculture species. There are two sub-segments:
 - scallop sub-segment
 - specific general sub-segment
- Aquaculture Segment: in this segment vessels must be used exclusively in the harvesting, transport, handling and/or landing of aquaculture products

Most Irish fishing vessels operate in the polyvalent segment, either the general polyvalent segment or the polyvalent potting segment. A smaller number of vessels operate in the specific or dredger segment (150). The pelagic and beam trawler segments have the lowest number of vessels.

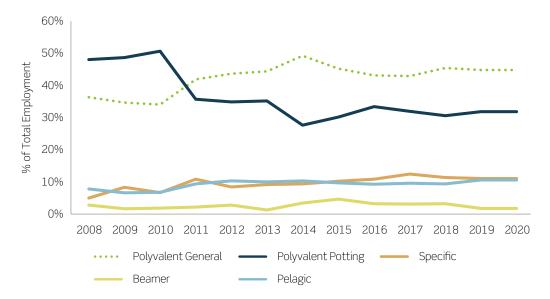
Figure 2.1: Irish Fleet Size by Segment (2008-2022)



Source: Irish vessel register.

Further, it can be observed that that the polyvalent segment is the largest fleet segment by employment share. Below, we see that the general polyvalent segment is the largest employer between 2008 and 2020. In 2020, 76% of all crew worked in the polyvalent general and potting segment, while 11% of all crew worked in the pelagic segment.

Figure 2.2: Share of Total Crew by Segment



Source: Indecon analysis of BIM data.

Figure 2.3a shows that the pelagic crews tend to be larger in size, having 10-12 crew members on a vessel on average. The crew size of beamer vessels has averaged between 6 and 7 crew. However, the number employed in the beamer segment is low in terms of the total fleet (~ 2% in 2020). The biggest source of employment is in the polyvalent general segment with an average crew size of approximately four.

Figure 2.3: Number of crew members by employer fishing segment

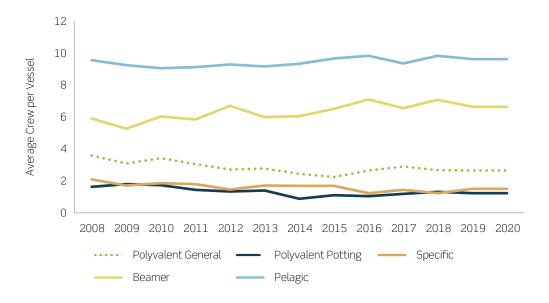
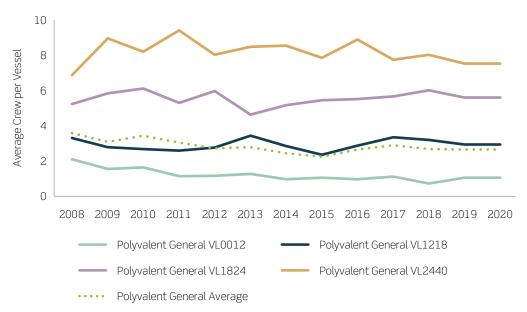


Figure 2.3b: Number of crew members by length class of polyvalent general segment



Source: Indecon analysis of BIM and DCF Data.

Within the polyvalent general segment, crews tend to average around four per vessel, although there is considerable variation depending on vessel size and fishery the vessel operates in. In Figure 2.3b the polyvalent general segment is split into vessel length classes. It can clearly be seen that the most important length classes of VL1824 and VL2440 have average crews of 6 and 8 respectively. Prawn freezer trawlers within this segment can have up to 8 or more crew on board. Many of the larger vessels in this segment work with a crew and a half or two crews to ensure downtime between fishing trips is limited. The RSW pelagic segment is a smaller segment in terms of the number of vessels. These vessels typically operate with larger crews of up to 10-12 per vessel.

Regarding the survey results which are presented here the proportion of crew from the pelagic segment is high compared to other fleet segments and therefore these respondents are perhaps overrepresented in the data. However, these workers have provided important insights on their employment terms and conditions as well as their specific earnings and working conditions.

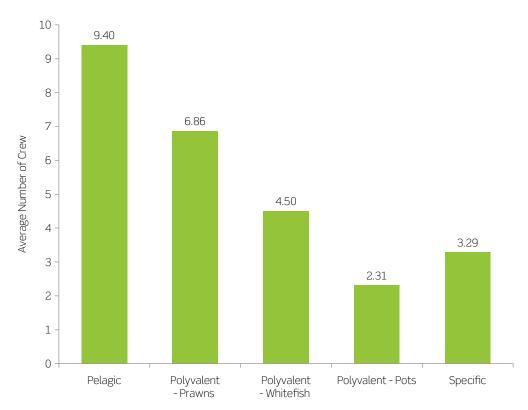
The breakdown of the respondents to the BIM survey of workers in the sector by fleet segment is shown in Table 2.1.¹⁹ As will be demonstrated, there are distinct differences between the fleet segments in terms of crew size, earnings, and opinions on recruitment and retention in the sector. In general, most workers responding to the survey are concentrated in the pelagic and polyvalent segments.

^{19.} Polyvalent Potting vessels are a subsegment of the Polyvalent Segment and fish exclusively by means of pots (for example, lobsters or crabs.)

Table 2.1: Respondents to Indecon Survey of Crew by Fleet Segment			
	Percentage of Respondents		
Pelagic	42%		
Polyvalent- Prawns	10%		
Polyvalent- Whitefish	18%		
Polyvalent-Pots	22%		
Beam-trawl	3%		
Other	5%		
Total	100%		

Employers who participated in the survey show that, certainyl among BIM's survey respondents, crews are larger on average in the pelagic, polyvalent prawn, and polyvalent whitefish segments (Figure 2.4). The polyvalent pot segment has smaller crew sizes on average, as this segment is mostly made up of single fishers who are self-employed and generally, boat owners or have only one or two crew members, often on a part-time basis. Importantly there are differences between segments in terms of crew size, but there are also differences within the wider polyvalent segment, mainly related to fishing method and vessel size. It should be noted that the estimates are self-reported numbers by those employers who responded to the survey and were based on the specific questions asked, namely, what was the approximate breakdown by the number of people working on your vessels by fleet segment. There was significant variance in the estimates within the responses and for example, even for the larger pelagic segment, estimates of those currently employed at the time of the response to the survey ranged from 6 – 17. Caution, however, should be exercised in interpreting precise estimates.

Figure 2.4: Number of average people working on owners vessels



Note: The figure for the Pelagic segment refer to responses from larger pelagic vessels.

While the estimates in Figure 2.4 are of interest in understanding the profile of respondents to the survey, more comprehensive 2020 estimates of average crew per vessel by segment is available from BIM data included in their Annual Economic Report. This showed that average crew in the Pelagic segment was 9.6, in the Beamer segment was 6.6, in Polyvalent General was 2.7, in Polyvalent Potting was 1.2 and in Specific segments was 1.5. As noted previously,

Table 2.2 demonstrates the breakdown of vessel sizes amongst responses to the employer survey. Most employer respondents report having one or two boats (under 24 metres in length). Nearly 10% of employer respondents had larger vessels over 24m.

Table 2.2: Size of Vessels Among Survey Respondent	ts
	Percentage
One or more vessels 24+ metres	10%
One vessel < 24 metres	59%
Two or more vessels < 24 metres	28%
Two or more vessels < 24 metres and one or more larger vessels	3%
Total	100%
Course Andreis of account to be described.	

Source: Analysis of responses to Indecon survey.

Table 2.3 shows that most vessel owners who responded to the survey employ small crews, with just two to five workers. Almost a third of employers have just a single worker or are generally being operated singlehandedly by the vessel owner. Employers with six or more workers accounted for 24% of respondents to the survey.

Table 2.3: Employer Respondents to Survey by Crew Size		
	Percentage	
One or none	30%	
Two to five	46%	
Six or more	24%	
Total	100%	

Source: Analysis of responses to Indecon survey.

2.3 Employment by Nationality

Regarding the nationality breakdown of crews amongst the respondents to the Indecon survey, we see that Irish workers made up 82% of respondents, Non-EEA workers hold the smallest share of respondents at 6%, with other EEA crew accounting for the remaining 12%. This, however, is likely to reflect a low response rate to the employee survey by non-EEA employees and the survey of employers indicates that, of those who employ crew, nearly 50% of crew are non-Irish.

One source of data on the prevalence of foreign workers in the Irish fishing sector is the Atypical Working Scheme for non-EEA crew in the Irish fishing fleet.²⁰ The purpose of the scheme is to provide a mechanism to deal with short term employment, or certain other employment situations that are not governed by the Employment Permits Acts.

A sector-specific atypical worker permission scheme was launched on February 15th, 2016, to regulate the engagement of existing and future non-EEA workers on whitefish vessels. The Department of Justice and Equality is responsible for administering the scheme. In 2016 the department issued 181 permits for the scheme and renewed 107 of these in the next year. In 2020 the Department issued 40 such permits and renewed 143. based on the latest estimate for total employment in the fishing sector of 2,848²¹, this indicates that atypical workers constitute around 6.4% of employment in the fishing sector.

^{20.} More information on the Atypical Working Scheme for non-EEA crew in the Irish fishing fleet is available here https:/ www.irishimmigration. ie/coming-to-work-in-<u>ireland/what-are-my-</u> work-visa-options/ applying-for-a-longstav-employmentvisa/atypicalworking-scheme/ atypical-workingscheme-for-non-eeacrew-in-the-irish-fishingfleet/

^{21.} BIM, 'The Business of Seafood, 2021'.

Table 2.4: Permissions for the Atypical Working Scheme for non-EEA crew members in the Irish fishing fleet

Year	New permissions	Permissions renewed	Changes in employer
2016	181	N/A	0
2017	29	107	3
2018	65	130	14
2019	76	137	12
2020	40	143	16

Source: Department of Justice.

2.4 Nature of Employment in the Fishing Sector

This section provides a breakdown of employment in the sector by the manner of employment in terms of vessel-owners, PAYE workers, and share fishers. Share fishers are typically crew who work in the fishing industry and where all or part of their pay comes from sharing the profits or gross earnings of the fishing boat²². In contrast, PAYE workers are employees with specific rights and protections, for whom employers must deduct tax, Pay Related Social Insurance (PRSI) and Universal Social Charges (USC)²³, while atypical or non-EEA workers are temporary workers with fewer such rights and protections. The Atypical Working Scheme allows non-EEA nationals to do certain short-term contract work that is not eligible for another form of employment permit²⁴. Crew members of certain fishing fleets can get permission to work in Ireland under the Atypical Working Scheme. The measure of employment type also considers vessel-owners who either work with a small number of part-time crew or work alone.

Table 2.5 shows the breakdown of worker types in the data (Total column), most survey respondents are share fishers (40%), a smaller portion of respondents are PAYE employees (34%), and roughly a quarter are self-employed fishers (24%) who own their boat. In addition to the above, there are also some atypical workers in the sector. To obtain insights to these individuals, Indecon obtained inputs from discussions with the International Transport Workers' Federation (ITWF). We have also examined recent research by Maynooth University, "Experiences of Non-EEA Migrant Workers in the Irish Fishing Industry"25. This study cites the concerns of atypical workers in the sector with regards to safety, working hours and significantly lower pay than those crewing similar boats on a 'share fishing' basis, amongst other concerns with the existing scheme for employing atypical workers in the fishing sector. While a detailed review of the atypical working scheme is beyond the scope of this research, the findings of this research from Maynooth University, as well as the views expressed by the ITWF in consultations with Indecon, there is merit in considering reform of the scheme if non-EEA workers employed through the atypical worker scheme are to become a more significant source of labour for the sector in the future.

- 22. More information about the definition of share fishing agreements can be found here https://www.gov.uk/guidance/share-fisherman-incometax-and-national-insurance-contributions
- 23. More information about PAYE employment is available here https://www.revenue.ie/en/employing-people/becoming-an-employer-and-ongoing-obligations/guide-to-paye/index.aspx
- 24. For example, this Scheme allows contract work for individuals not eligible for permits such as a critical skills employment permit, general employment permit, conduct for service employment permit, internship employment permit, sport and cultural employment permit, exchange agreement employment permit or an intra-company transfer employment permit.
- 25. Although employment levels in 2020 were high, it is important to note that LFS statistics count respondents who were "absent from work due to COVID", either because of the illness, because of care obligations due to the illness, or their place of work was closed due to COVID restrictions, as employed but absent from work. In this way, the level of employment where respondents are specifically at work or working from home is likely lower.

The differences in the profile of crew across segments in the data was previously noted. There are also important differences in employment types between segments, with crew onboard pelagic RSW vessels employed mostly on PAYE contracts (70%) while crew on Polyvalent vessels being mostly share fishers (71%). Workers on Polyvalent potters are mostly vessel-owners (58%), and we note smaller vessels in the wider polyvalent segment also have a similar profile.

Table 2.5: Employment Contract Type by Fleet Segment				
Contract	Pelagic	Polyvalent General	Polyvalent Potting	Total
Vessel-owner	N/A	22%	58%	24%
PAYE Employee	70%	N/A	N/A	34%
Share fisher	26%	72%	29%	41%

Source: Department of Justice.

Regarding working time contacts (Table 2.6)., we see that respondents (Total column) mainly work full-time (45%), or on a seasonal basis (46%). A smaller group of respondents work on a part-time basis (8%). Seasonal workers are those who work as part of the fleet at particular times of year while those employed on a part-time basis may only fish a certain number of days in a month but also have other jobs.

Table 2.6: Working time contract by segment				
Employee contract type	Pelagic	Polyvalent General	Polyvalent Potting	Total
Full-time	15%	94%	28%	46%
Seasonal	80%	N/A	52%	46%
Total	100%	100%	100%	100%

Source: Analysis of responses to Indecon survey. N/A not reported due to small sample given.

As before, there are differences in working time contracts by fishing segment. The RSW pelagic fishing segment tends to operate seasonally (80%), while the polyvalent segment are full-time (93%). This sharp difference reflects the conditions of each type of fishing segment and has consequences for earnings and working conditions. For example, these findings are likely reflective of the seasonal nature of the pelagic fleet with no work undertaken over the summer and the polyvalent pots segment who similarly typically only fish for six months of the year.

Regarding experience, most respondents had over 10 years' experience in the overall fishing sector, as illustrated in Table 2.7. Levels of experience do no differ much between segments, with most workers in each segment listing 10 years of experience or more.

Table 2.7: Average years of experience among workers **Pelagic Polyvalent Polyvalent Total** General **Potting** 21% 28% 22% Between 1 and 20% 10 years 79% 72% 78% 10 years and 80% more **Total** 100% 100% 100% 100%

In general, this research finds important differences in employment type among respondents between fishing segments, which it appears are not driven by different levels of experience within the crew in each segment. Different sets of labour and employment conditions for workers across segments are also noted. There are differences in the composition of crew by segment, for example, deckhands, engineers, skippers etc. but this was not examined in the survey but may merit consideration for future research projects.

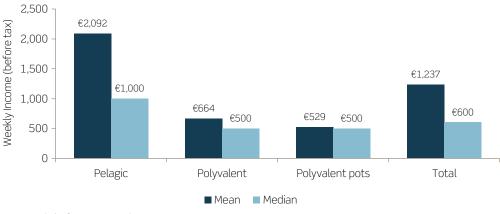
2.5 Earnings in the sector

This section considers survey statistics on weekly earnings by different segments. In the previous section we established three characteristics of the fishing sector:

- 1. Employment conditions differed by fleet segment;
- 2. Working time contracts also differed by fleet segment;
- 3. There were few differences in the level of experience between segments.

It is demonstrated in this section that these differences lead to significant differences in earnings. Figure 2.5 shows mean and median weekly earnings by segment as well as overall. Workers in the RSW pelagic segment report the highest earnings by mean and median, and workers in the polyvalent and polyvalent pot segments report lower earnings by mean and median.

Figure 2.5: Weekly income by segment



Source: Analysis of responses to Indecon survey.

The gap between the mean and median suggests there are extreme values in the RSW pelagic segment, with some very high earners. We have demonstrated previously that most crew in the RSW pelagic segment are seasonal workers, while in the polyvalent segment most are full-time share fishers. Therefore, pelagic fishers earn over a relatively short period while polyvalent fishers have a more even distribution of earnings over the year. This is likely reflective of the seasonal nature of the pelagic segment with the sector typically operating for only 6-months of the year. Because of this, we summarise annual earnings by fishing segment.

70,000 €63,182,€60,000 Annual Income (before tax) 60,000 €43,637 ___€40,000 50,000 40,000 €33.771 29 300 30,000 20,000 €14,500 €10,000 10,000 0 Pelagic Polyvalent Polyvalent pots Total ■ Mean ■ Median

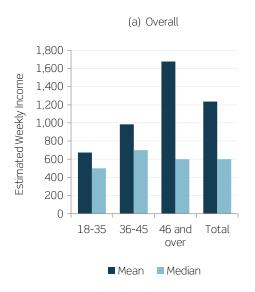
Figure 2.6: Annual income by segment

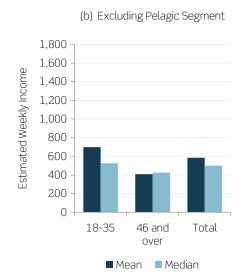
Source: Analysis of responses to Indecon survey.

The survey evidence indicates that average annual earnings are still higher in the pelagic segment. Figure 2.7 shows the mean and median difference in weekly earnings by age. Older workers (aged 46 and over) tend to earn more than the other age groups. However, we notice that there is a sharp difference between the mean and the median in this group. This suggests that there are several extreme values for earnings among respondents 46 and over, which is affecting the mean estimate. Despite this, the median value shows that older workers also tend to earn more, on average (almost €600 per week), when compared to the median value of younger workers.

Excluding the pelagic segment, earnings flatten out between age groups, with older workers earning the least, and younger workers earning slightly more. Even the extreme values in the analysis have flattened with the exclusion of the pelagic segment. This suggests that segments may be more important than age when analysing weekly earnings.

Figure 2.7: Weekly income by age group





The higher earnings among workers over 46 in part is likely to be due to levels of experience and skills required, the nature of the work, and positions held. Further analysis suggests that the percentage of those over 46 is higher in pelagic than in polyvalent (pots) segments.

However, the difference in earnings among those aged 18-35 and those aged 46 and over after the pelagic segment is omitted (panel b) likely stems from the fact that older workers also rely on the polyvalent pots segment (shown below) and so their lower earnings may stem from this difference in segments.

Table 2.8: Age of crew by segment

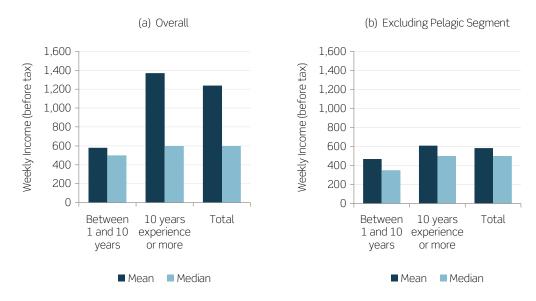
Simplified employee segment

Age	Pelagic	Polyvalent General	Polyvalent Potting	Total
18-35	11%	41%	24%	21%
36-45	31%	31%	N/A	28%
46 and over	58%	28%	56%	51%
Total	100%	100%	100%	100%

Source: Analysis of responses to Indecon survey. N/A not reported due to small sample given.

A similar difference is reflected in the more and less experienced groups. More experienced workers earn more according to mean and median measures of weekly income.

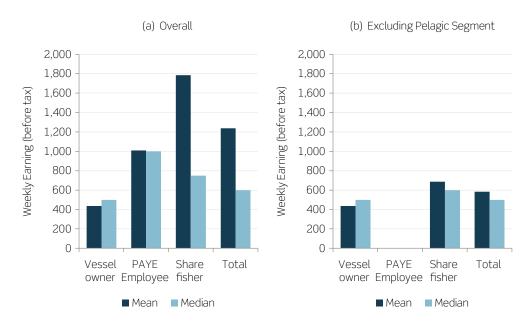
Figure 2.8: Weekly income by level of experience



Further, differences in reported earnings can be observed between employment type. Figure 2.9 shows that self-employed or vessel owners tend to earn the least, on average, and that PAYE employees tend to earn the most, if we consider the median measure of weekly earnings. Share fishers tend to earn slightly less according to the median value, but as before, share fishers tend to hold some extreme values and earn the most if using the mean value. This suggests there are, again, a few highly paid share fishers in the data. As before, it is important to consider the employment type differences between segments, noted in Table 2.5, where Vessel owners are heavily concentrated in the Polyvalent Pot fishing segment, and are less common in the wider Polyvalent segment.

If the influence of the pelagic segment is excluded, the differences largely disappear. PAYE employees are dropped from the chart as almost all respondents who indicated they were employed on a PAYE basis were in the pelagic segment. The extreme values among share fishers have also disappeared, while vessel-owners are unaffected by dropping the pelagic segment. The gap between vessel owners and share fishers in terms of weekly earnings likely reflects the fact that vessel owners are concentrated in the polyvalent pot fishing segment amongst respondents, while share fishers are strongly concentrated in the wider polyvalent segment.

Figure 2.9: Weekly income by Employment Type



Research by Maynooth University suggests that those employed via the atypical scheme are typically employed at the national minimum wage, based on a 39-hour working week. The Maynooth University research suggests that atypical workers typically receive €1,500-€2,000 per month. This is significantly lower than the median rate reported in the survey responses across both PAYE employees and share fishers.

Finally, Figure 2.10 shows the estimate of average earnings based on the figures reported by employers. It can be observed that vessel owners with more crew tend to pay higher wages, although there are extreme differences between the mean and median value in some categories. Employers with just one crew or no crew at all, pay roughly \in 400 a week, while employers with two to five crew pay roughly \in 500 a week if using the median value (the mean value is \in 900 a week, though this is likely affected by extreme values in the data). Employers with six or more crew tend to pay the most, at just under \in 700 a week using the median value, and just under \in 800 a week if using the mean value.

1,000 900 800 700 **Neekly Earnings** 600 500 400 300 200 100 0 Total One or less Two to five Six or more employees employees employees ■ Mean ■ Median

Figure 2.10: Employer Weekly Earnings

Generally, vessel owners who took part in the survey pay a median €500 per week or an average of over €700 per week, with larger vessel owners paying larger amounts on average with some extreme values among employers with 2-5 crew. As we know from BIM economic data (Figure 2.2), the pelagic RSW segment is one where the average crew size is roughly 12 crew members crew.

2.6 Summary of Findings

This section has outlined the employment profiles in the fishing sector based on the Indecon survey of crew and employers and wider BIM data. The key findings include:

- In 2020, 45% of crew worked in the polyvalent general sector, 31% in the polyvalent potting sector while 11% worked in the pelagic RSW segment.
- Pelagic crews tend to be larger in size, having 10-12 crew members on a vessel on average. Given the diversity of vessel sizes in the polyvalent segment, the average number of crew is four. The vessels between 18-24m have 6 crew on average while those from 24-40m have 8 crew on average.
- Responses to the Indecon survey indicate that, on average, crew in the sector are made up of predominantly Irish workers (82%) although a small portion of crews are EEA workers, while there are small number of non-EEA workers (6%).
- The plurality of survey respondents is share fishers (40%), a smaller portion of respondents are PAYE employees (34%), and roughly a quarter are self-employed fishers (24%) who own their boat.
- Pelagic workers are employed mostly on PAYE contracts (70%) and polyvalent workers are mostly employed on share fisher arrangements (71%).

- Workers in the pelagic segment report the highest earnings by mean and median, and workers in the polyvalent and polyvalent pot segments report lower earnings by mean and median. The differences in reported earnings between crew are likely to be attributed to the segment in which these individuals work. It may also be influenced by the age profile, the level of experience required, the working conditions, and the number of hours worked.
- Self-employed or vessel owners tend to have reported lower earnings, on average. However, these workers are also heavily concentrated in the polyvalent potting segment. PAYE employees tend to earn the most in median weekly earnings, and again such workers are heavily concentrated in the pelagic segment. Share fishers tend to earn slightly less according to the median value, but as before, share fishers tend to hold some extreme values and earn the most if using the mean value. This suggests, similar to earlier data, that there are a few highly paid share fishers in the data.



3. Strengths and Weaknesses of Employment Profiles

3.1 Introduction

This section outlines the views of workers and employers on the different forms of employment in the fishing sector and their respective advantages and disadvantages. For crew, it focuses on two sets of measures, their opinions on income, welfare, and taxes, on one hand, and working conditions, time flexibility, and job security on the other. It also analyses the views of crew working in different fleet segments. For employers, it also focuses on two sets of measures, the impact of employment contracts on revenue, taxes, and costs on one hand, and flexibility and administrative burden on the other.

This research finds that workers are split in their preferences for certain contracts, and that the segment in which workers are based may be linked to their preferences. While the majority of employers, responding to the survey see advantages in share fishing employment agreements, there are some differences among employers. A higher percentage of employers operating in the pelagic segment indicated support for PAYE employment than employers in the wider fleet segments.

3.2 Relative Benefits of Employment Profiles

This section considers workers' and employers' opinions of specific forms of employment in the fishing sector. Respondents to the Indecon survey of crew and employers were asked which form of employment is most beneficial to workers or employers across issues including the administrative burden on their business and the best means of maximising earnings. The employment types considered were:

- a PAYE employee contract,
- a share fishing agreement,
- or an atypical contract.

Both workers and employers largely considered PAYE employment versus share fishing, atypical contracts were not cited as the most beneficial form of employment for any aspect by any respondents.

3.2.1 INCOME, TAX, AND WELFARE ENTITLEMENTS

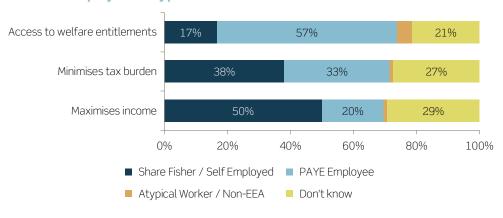
In this sub-section we consider perceived benefits of different employment types for workers and employers. Regarding income, tax, and welfare benefits. It is clear workers see different forms of employment as beneficial for different reasons.

Most respondents to the survey of crew view self-employment or share fishing as most beneficial for maximising income (around 80%), with the other fifth seeing PAYE employment as preferable. When crew were asked about minimising tax burdens, their support for share fishing falls slightly, and workers become split by those favouring share fishing and those favouring PAYE contract employment.

Almost no crew saw atypical contracts as favourable. Finally, regarding access to welfare entitlements and benefits, a significant majority of workers saw PAYE employment as the most beneficial employment type to access the social welfare system.

Figure 3.1 outlines different aspects of wages and income and shows how these lead to different preferences by workers.

Figure 3.1: Crew Views on Income, Taxation, and Welfare Entitlements Under Different Employment Types



Source: Analysis of responses to Indecon survey.

Employers' views of different types of employment in terms of tax, revenue, and costs of doing business were also considered. Overwhelmingly, employers favour share fishing agreements when it comes to hiring workers. Only a small share of employers sees PAYE employees as beneficial in terms of increasing revenue and lowering costs.

Figure 3.2: Employer Views on Income, Taxation, and Welfare Entitlements Under Different Employment Types



Source: Analysis of responses to Indecon survey.

There is an obvious split between workers and employers, with employers having a clearer preference for one employment type – share fishing.

Echoing the findings for employers surveyed and further illustrating the preference of many employers for the share fishing model, stakeholders noted that for many smaller employers the administrative burden of hiring crew on a PAYE basis was a deterrent, citing in particular the PRSI costs that would have to be paid. There was also a view that employing crew on a PAYE basis may lead to employers in the sector being more likely to be subject to a tax audit. Both stakeholders and the survey evidence indicated that the overarching perception was that the real cost of employing crew is significantly higher for employers under the PAYE system versus the share fishing model. This is explored further in section 3.4.

3.2.2 WORKING CONDITIONS, FLEXIBILITY, AND SECURITY

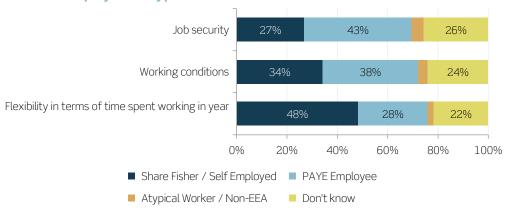
A similar pattern emerged between crew and vessel owners when asked about the benefits of different employment types regarding working conditions. Respondents to the crew survey again reported different employment types as beneficial for different reasons.

Most workers see share fishing as most beneficial for flexibility in working arrangements, although almost a third of workers regarded PAYE employment as favourable in terms of flexibility of working.

When workers were asked about general working conditions, their support for share fishing fell, and they were split by those favouring share fishing and those favouring PAYE contract employment. Finally, regarding job security, workers see PAYE employment as preferable, although almost a third of workers equally saw share fishing as providing a significant level of job security on loyalty grounds.

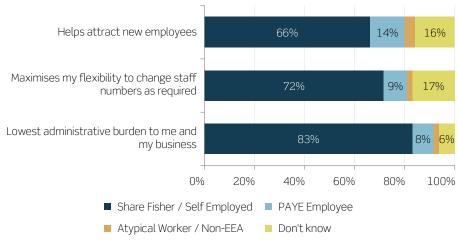
Many of these differences likely stem from the terms and conditions of employment and more importantly, earnings as discussed above. In Figure 2.9 we previously showed that earnings between share fishers and PAYE employees were different, with share fishers having more extreme values and higher earning on average, while PAYE earnings were less affected by extreme values but higher at the median. We also showed that these differences largely disappear when removing the influence of the RSW pelagic segment. We consider the extent that these differences exist within the RSW pelagic and polyvalent segments separately.

Figure 3.3: Crew Views on Working Conditions, Flexibility, and Security Under Different Employment Types



As before, vessel owners have a clear preference for share fishing based on the flexibility of doing business, as well as hiring or firing. These workers represent the lowest administrative burden, according to employers, they allow employers flexibility to change crew numbers easily, and they find it the easiest way to attract new workers to the sector. Once again, only a minority of employers saw PAYE workers as beneficial. While employers report share fishing as the best means of attracting new employees, this may be reflecting a bias in that it is the preferred means for those who they have been able to attract to the sector. Given the documented issues with recruitment and retention in the sector, other forms of employment, as explored elsewhere in this report, may attract new entrants for a range of reasons.

Figure 3.4: Employer Views on Working Conditions, Flexibility, and Security Under Different Employment Types



Source: Analysis of responses to Indecon survey.

Stakeholders noted that a key advantage of PAYE employment for crew was that it provided additional job security and certainty of income. Some representative bodies consulted noted that in some instances employees have requested that they be employed on a PAYE basis rather than on a share fishing basis as PAYE employment is more amenable to obtaining a mortgage than self-employment via share fishing.

A lack of security of tenure under the share fishing model was noted as a key disadvantage of this approach for some existing crew and/or potential new entrants to the sector.

While stakeholders again noted that the share fishing model offered the lowest administrative burden for the employer, they did note that it imposed a significant administrative burden on crew who are responsible for filing their own taxes. The shifting of the administrative burden of employment to the crew member is a potentially significant cost savings for employers. Additionally, it may also represent a barrier to entry of the sector for younger people.

In conclusion, despite the issues identified here, there was still broad support for share fishing as the most beneficial means of employment in many segments of the sector. In the view of many stakeholders, the primary motivation for entering the sector is the financial return and, in many cases, the share fishing approach is seen as the most financially beneficial by crew.

When considering the atypical workers scheme, the ITWF suggested that the connection of the right to work with a specific employer resulted in limited flexibility and security of individuals, under this scheme. Similarly, the ITWF suggested the inability for those working as atypical workers to access a stamp 4 visa as an impediment for these individuals. The case for enabling atypical workers to obtain a stamp 4 visa was also made in consultations with other representative bodies as part of the research. This needs to be considered within the context of wider labour market and permit issues.

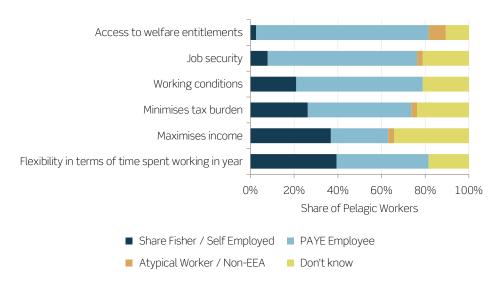
3.3 Benefits of Employment Type by Fleet Segment

This section considers the responses by crew to the Indecon survey but splits the answers by segment of the fishing fleet. This is an important distinction given that the dominant means of employment typically differs by fleet segment, as do earnings and other factors. With this in mind, it is useful to explore the differing views of crew in the different fleet segments on the benefits of different forms of employment.

Figure 3.5 shows the breakdown of responses for those in the RSW pelagic segment. Here we see a much higher preference for PAYE employment. As shown in Table 2.5, almost 70% of the RSW pelagic segment are employed on a PAYE basis. Most RSW pelagic workers prefer PAYE employment for access to welfare entitlements (79%), Job security (68%), working conditions (58%), and minimising the tax burden (47%). The exception is opinion on maximising income, where "don't know" is an especially common answer among respondents (34%). Further respondents appear somewhat split in terms of whether PAYE employment (42%) or share fishing (39%) is best for flexibility in terms of working time during the year. Despite this, most workers in the sector see PAYE employment as desirable.

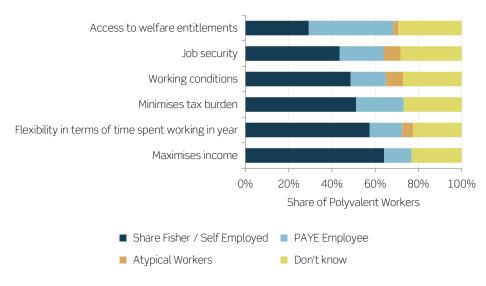
A key dimension of this results is access to welfare entitlements in the off-season or in cases of redundancy. Workers who operate as share fishers are essentially self-employed and therefore do not have the same level of access to job seekers benefits and other forms of income support.

Figure 3.5: Pelagic segment Crew Views on Different Employment Types



Considering the responses of those in the polyvalent sector, a different trend can be observed in which most respondents prefer share fisher arrangements over PAYE employment. The only area where respondents viewed PAYE employment as superior is in terms of access to welfare entitlements, where a higher portion of polyvalent workers prefer PAYE employment contracts (39%) compared to share fishery employment (29%). However, regarding job security (43%), working conditions (49%), minimising the tax burden (51%), flexibility in working time (57%), and the chance to maximise income (64%) respondents preferred share fishing agreements. As noted in Table 2.5, over 70% of workers in the polyvalent segment are employed on a share fishing basis and show a clear preference to remain employed as such.

Figure 3.6: Polyvalent Sector Crew Views on Different Employment Types

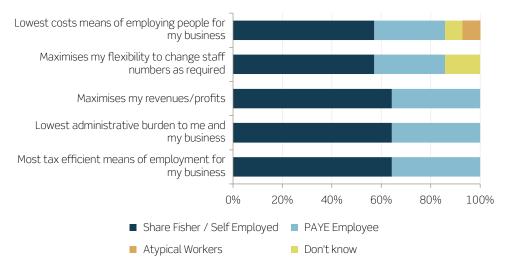


Source: Analysis of responses to Indecon survey.

It is also insightful to consider employer preferences for certain employment types by splitting the results above by the fishing segment in which they report employing the most crew. Since employers can work in multiple segments of the wider sector, the preferences of the pelagic segment are defined as those employers who report any activity in the pelagic segment, irrespective of whether they also report employing crew in other segments. The results are listed below. Importantly, this measure does not include employers for whom we have no information regarding their crew size and employers who did not engage with the questions regarding crew size. In this way, the measure is a subset of all employers.

Interestingly, amongst respondents, the majority of employers who operate at least part of their business in the pelagic segment also report that share fishers are the most beneficial in terms of costs to their operation. Almost 60% of these employers see share fishing as best value in terms of employing people and maximising flexibility. Over 60% of these employers see share fishing as beneficial in terms of maximising revenues and profits, maximising tax efficiency, and lowering the administrative burden of the business. However, support for share fishing as the preferred means of employing crew is lower amongst employers in other fleet segments, demonstrating some degree of preference for PAYE employment amongst workers in the pelagic segment relative to the wider fleet.

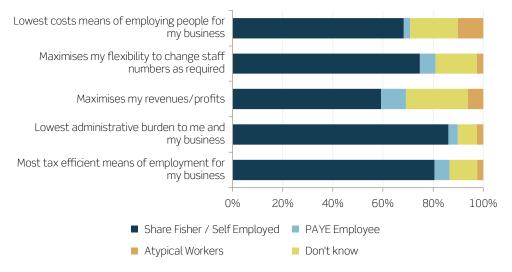
Figure 3.7: Employer Views on Different Employment Types, Pelagic and other segments only



Source: Analysis of responses to Indecon survey.

The majority of employers who do not operate any of their business in the Pelagic segment feel that share fishers are also the most beneficial in terms of costs to their operation. Over 60% of these employers see share fishing as beneficial in terms of lower costs and maximising flexibility. Over 80% of these employers see share fishing as beneficial in terms of maximising tax efficiency and lowering the administrative burden of the business.

Figure 3.8: Employer Views on Different Employment Types, Other segments only



Overall, responses show that worker preferences largely depend on the fishing segment where they work. This suggests a level of satisfaction with their own employment conditions.

3.4 Real Costs to Employers of Different Employment Types

Real costs to employers of hiring employees extend beyond the salary agreed between the employer and the employee. These additional costs can include:

- onboarding costs
- administration costs
- training costs
- employer payroll taxes
- equipment costs

Onboarding costs include the costs of recruiting new staff such as advertising and time spent interviewing candidates. Administrative costs can include the costs to the employer of arranging the employment agreements, any legal costs, and costs involved in bringing the employee into the payroll system. If a new employee is required to complete training before they can begin their role, the costs of facilitating this training may also be incurred by the employer. Finally, depending on the nature of the employment agreement, the employer may incur additional costs via employer PRSI.

Importantly when considering the fishing sector, employer PRSI will only be incurred for PAYE employment. The impact of this additional cost of PAYE employment was cited as a disincentive for the use of this employment model. A majority of employers who responded to the survey demonstrated strong support for the share fishing model as the approach which minimises the tax burden on crew, although this preference for share fishing was lower for those employers operating in the pelagic segment. Depending on the level of employee earnings, employers may be required to pay crew PRSI at a rate of 8.8% or 11.05% for a Class A employee.

For example, for an employee earning €30,0000 per annum on a PAYE employment basis, the employer would be required to pay €2,863 in employer PRSI contributions.

The survey of employers in the sector also noted that the share fishing model has the lowest administrative burden on them in as a means of hiring crew. Under the share fishing model, crew are required to manage their own tax returns.

PAYE employment may also represent an additional real cost to an employer relative to the share fishing model in light of the legal entitlements to PAYE employees in terms of annual leave, public holidays and working time requirements. PAYE employees are entitled to minimum amounts of annual leave and paid public holidays. These additional entitlements represent additional costs to an employer relative to a self-employed share fishing model where crew take holidays at their own expense. The vessel owner as the employer has no legal obligation in granting holidays or retaining a job for a share fisher who takes such holidays.

To hire an atypical worker involves many of the costs outlined above for PAYE employees but there may be additional costs involved in engaging a solicitor to certify the contract for work, as required under the atypical worker's scheme. Other costs may include the costs of providing the contract of employment in the worker's native language. An additional cost which may be incurred when hiring atypical workers is the requirement for the employer to ensure that the fisher is repatriated, at the employer's expense at the end of the contract period.

Many of the other real costs of employment are likely to be common across the share fishing and PAYE models of employment. Onboarding costs, training costs, and the cost of any additional equipment are likely to be similar regardless of the method of employment of any new crew member. Additional safety and other equipment costs of additional crew was cited as a significant real cost to employment in the sector, particularly for smaller crews.

3.5 Summary of Findings

In this section, we have demonstrated the views of the fishing sector on the relative benefits of different forms of employment. The key findings in this regard include:

- Most respondents to the survey of crew viewed share fishing as the most beneficial form of employment for maximising their income. Crew also typically see share fishing as the best means of employment for minimising their tax burden.
- There was support from respondents to the crew survey for PAYE employment as the best means of employment for facilitating access to welfare entitlements and in providing crew with more certainty on income.
- Employers demonstrate significant support for share fishing as their preferred means of employment in terms of maximising revenues, as the lowest cost means of employing crew and as the most tax efficient means of employing crew.
- Both consultations with representative bodies and the survey evidence indicates
 that the real cost of employing crew is higher for employers under the PAYE
 system versus the share fishing model.

- With regards to other aspects of employment, the majority of respondents to the crew survey indicated that share fishing provides the greatest flexibility in working arrangements, but that PAYE employment provided greater job security.
- Employers had a significant preference for the share fishing model as the means
 of employment with the lowest administrative burden and which provided the
 greatest degree of flexibility.
- In examining the views of crew respondents by fleet segment, it is evident that preferences largely depend on the fishing segment where they work. Crew employment type preferences correlate with the type of employment that workers currently hold. This suggests some level of satisfaction with existing employment conditions, or perhaps a lack of familiarity with the nature of working under an alternative contract or arrangement. The exception to this general trend is the agreement that PAYE employment provides a significant benefit in terms of access to welfare entitlements.
- Real costs of employment to employers are generally viewed as higher for PAYE employment than via share fishing. Employers PRSI is a significant contributor to these additional real costs of employment under the PAYE system but the additional administrative costs and obligations for PAYE workers also represent an increase in the real costs of employment relative to the share fishing model.



4. Challenges of Attracting New Entrants to the Fishing Sector

4.1 Introduction

This section explores perceptions of the fishing sector, and the challenges facing recruitment of crew. Evidence presented in this section is drawn from the survey of employers and crew, as well as BIM research undertaken on careers in the fishing sector via a representative survey of the population and interviews with career guidance counsellors.

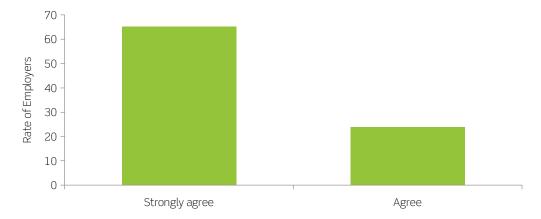
The nature of this study's survey of crew and employers has been outlined previously. The BIM research careers in the seafood sector included a survey of the general public. It comprised a representative sample with 1,165 adults aged 16 or over within Ireland. The survey ensured a nationally representative sample of adults weighted across gender, age, region, social class, working status and educational attainment. Furthermore, the survey was bolstered by a subsample of 16–17-year-olds, totalling 136 respondents.

The views of guidance counsellors were sought as part of this separate piece of research in order to better understand the behaviour and needs of students when choosing career paths. These views – from six guidance counsellors in secondary schools located in coastal locations – were obtained via in-depth telephone interviews. The guidance counsellors provided an insight into the profile of the wider seafood sector in their respective regions, and the presence of the seafood industry for students considering career options, vis-à-vis other local employers in the agriculture, retail, hospitality, or tourism industries.

4.2 Recruitment and Retention

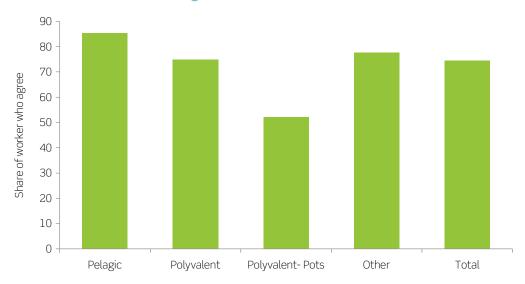
In this section we consider the issue of crew retention, from the employer and the worker perspectives is considered. On the employer side, Figure 4.1 shows that over 60% of respondents to the Indecon survey strongly agree that attraction and retention of workers are key issues for their business. More specifically, a small proportion of employers disagree with the statement, which suggests that only an extreme minority are unconcerned with these issues.

Figure 4.1: Employer opinion on whether the attraction of new employees and the retention of existing employees is a challenge for their business



We also consider whether workers see themselves as remaining in this sector, and whether there are differences between segments. In total, 75% of workers say they see themselves working in the sector for the medium to long-term. However, support for the sector is clearest among pelagic workers where over 85% of workers support this statement. It is lower in the polyvalent segment (75%) and lower still in the polyvalent pot segment (52%). The residual sector closest resembles the polyvalent segment, where 77% of workers agree with the statement.

Figure 4.2: Segment differences in whether workers will work in the fishing sector in the medium to long term



Source: Analysis of responses to Indecon survey.

Representative bodies consulted expressed the view that there were significant recruitment challenges across most segments of the fishing fleet, with the exception of the pelagic segment. Obtaining employment on a pelagic vessel was a challenge for crew and that there was high demand for positions on boats in the pelagic segment. The reasons cited for this strong demand was the seasonal nature of the employment, the provision of employment contracts and the level of potential pay.

However, stakeholders in other segments of the sector were generally in agreement with the sentiments found in the responses to the survey of employers in the sector in that recruitment and retention in the sector had been significant challenges in recent years for a range of reasons.

The next section considers the main challenges in retaining and attracting workers, from the perspective of both workers and employers. Given the high level of concern that employers feel about recruitment, and the sharp differences in worker intention by fleet segment, it is worth considering the main drivers of retention among fishing sector workers.

4.3 Challenges to Attracting New Entrants to the Sector

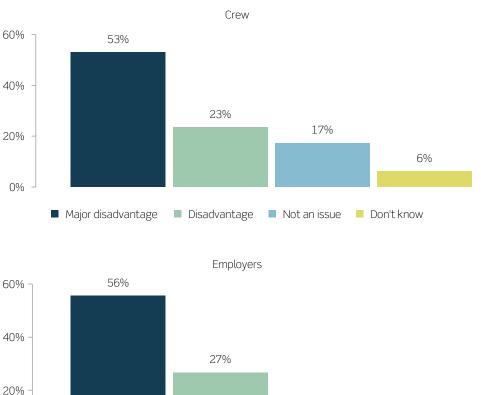
This section outlines some of the key challenges:

4.3.1 WELFARE ENTITLEMENTS

A perceived lack of access to welfare entitlements, already identified as a key downside of employment via the share fishing model, is cited as a major disadvantage of careers in the fishing sector by crew and as having a very significant impact on recruitment and retention by employers in the sector. Approximately 76% of crew who responded to the survey indicated that a lack of welfare entitlements was a major disadvantage or a disadvantage to a career in the sector. Similarly, 83% of employers cited it as having a very significant or significant impact on attracting and retaining crew.

A lack of welfare entitlements was also cited in consultations with several of the stakeholders interviewed for this study. It was noted that the share fishing model led to an element of uncertainty with regards to income both from a given trip and over the course of a season. A lack of access to the social welfare safety net exacerbates this uncertainty and may act as a significant deterrent to new entrants.

Figure 4.3: Challenges to Recruitment to the Sector - Welfare Entitlements



■ Very significant impact

0%

When asked for additional comment in the survey of employers, it was noted the impact of weather on the potential earnings of fishermen. Some noted that this should lead to welfare payments, stating "there should be social welfare for fishermen if the weather's bad, they should get a payment." An employer noted "the very sporadic nature of inshore fishing and the problems crew members have in accessing social welfare when not working makes it hard to attract crew. They are better off to stay on social welfare." Indications suggest this may have been exacerbated with the PUP scheme administered during the Covid-19 Pandemic.

9%

■ Significant impact ■ No impact ■ Don't know

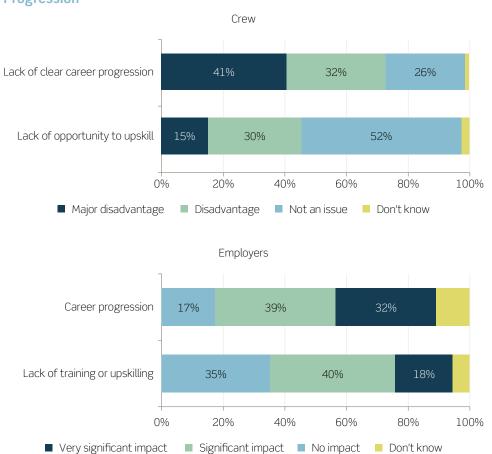
9%

A lack of access to the social welfare system was also cited as a key challenge to attracting new entrants in consultations undertaken as part of the research. While stakeholders acknowledge that the share fishing model provides the highest potential financial return to crew, there was a concern that young people entering the sector may prefer the security and relative simplicity of PAYE employment rather than being self-employed directly after leaving school. The requirement for share fishers to be responsible for their own tax affairs represents a level of administrative complexity that is a barrier to school leavers joining crew as share fishers. Stakeholders noted that to attract a wider profile of potential new entrants to the sector, there should be more consideration of PAYE employment to provide the additional security to tenure, certainty of income, and access to the social welfare system.

4.3.2 TRAINING AND CAREER PROGRESSION

A significant portion of respondents to the BIM Labour Force survey indicated that a lack of training and opportunity to upskill as well as a lack of clear career progression represent disadvantages to working in the sector and challenges to recruitment and retention. Approximately 73% of crew indicated that a lack of career progression was a disadvantage or major disadvantage to working in the sector; and 72% of employers cited career progression as a significant or very significant challenge to recruitment and retention in the sector. Almost half (45%) of crew indicated that a lack of opportunity to upskill was a disadvantage to working in the sector, with 60% of employers citing this as a significant or very significant challenge to recruitment and retention.

Figure 4.4: Challenges to Recruitment to the Sector - Training and Career Progression



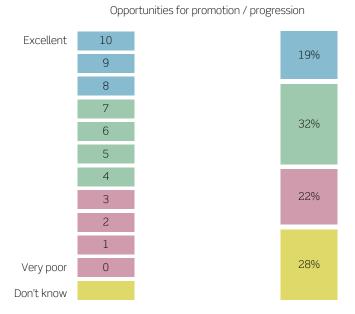
Source: Analysis of responses to Indecon survey.

A lack of a clear career progression path was also cited by almost all representative organisations interviewed for this study. A lack of an evident professional career progression was described as a significant obstacle to attracting new entrants to the sector. Additionally, stakeholders noted that a lack of career progression was also an issue in terms of retention of crew in the sector. It was articulated that as crew working in the sector become older, they may require a higher and steadier level of income and without a clear path to obtaining the qualifications and skills required for advancement, may be more likely to seek opportunities outside the sector.

Stakeholders were of the view that while there are a number of courses available for those working in the sector at the moment, they are somewhat disconnected. There was a view that currently, while there is comprehensive safety training available at the outset of an individual's career in the sector, there is gap in potential training and progression between this and obtaining a skipper's ticket.

The following figures presents findings from the BIM research on careers in the seafood sector which provides support to the importance of opportunities for promotion and progression in career choices based on the findings of the research amongst adults aged 16 and over.

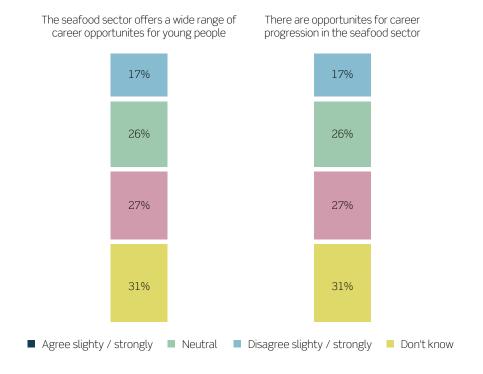
Figure 4.5: Importance of Career Progression in Career Choice



Source: BIM Research on Careers in the Seafood Industry.

Additionally, amongst younger people (those aged 16-17), there is a clear proportion of this cohort who do not see the seafood sector as offering career opportunities or the possibility of career progression within the sector.

Figure 4.6: Views of Young People on Career Progression in the Seafood Sector



Source: BIM Research on Careers in the Seafood Industry.

4.3.3 WORKING CONDITIONS

The BIM Labour Force survey asked crew and employers about the impact of working conditions on the attractiveness of the sector in terms of lifestyle factors/ time at sea, the length of working hours and other issues with working conditions. The survey of crew indicated that lifestyle factors/time at sea were seen as a disadvantage or major disadvantage by 58% of respondents. Similarly, 70% of employers indicated that lifestyle factors and time at sea presented a significant or very significant challenge to recruitment and retention in the sector. The length of working hours was also cited by significant proportions of respondents to both crew and employer surveys as an impediment to recruitment and retention in the sector. While half of crew surveyed reported that the length of working hours and other working conditions were not a challenge to recruitment, these respondents were already working in the sector and, are likely not to see the prevailing conditions as an obstacle to working in the sector. On balance, the image of the fishing sector as one requiring physical and hard work with long hours is a consideration for potential new entrants when considering their career opportunities in the fishing industry.

Crew Other working conditions 23% 56% Lifestyle factors and time at sea 27% 31% 40% Length of working hours 24% 49% 0% 20% 40% 60% 80% 100% Major disadvantage Disadvantage ■ Not an issue ■ Don't know **Employers** Other working conditions 45% 27% 27% Lifestyle factors and time at sea 42% 25% 40% 28% Length of working hours 0% 20% 40% 60% 80% 100% ■ Very significant impact ■ Significant impact ■ No impact Don't know

Figure 4.7: Challenges to Recruitment to the Sector - Working Conditions

Stakeholders and representative bodies consulted for the research project broadly echoed the views of the survey respondents with regards to the length of time required at sea and the working conditions at sea being significant challenges to attracting new entrants to the sector. However, stakeholders did note that some of the issue of working conditions discouraging new entrants was likely more a perception rather than entirely reflective of the reality in the sector. The fact that the fleet has been modernised and therefore safer, while the work is somewhat less onerous due to modernisation and technologies on board vessels were cited as reasons why this perception is not totally correct.

The findings from the BIM research on careers in the seafood sector broadly supports the idea that issues with working conditions are important when students are considering future career paths. The research indicates that having a safe working environment, being well paid and having equal opportunities for men and women are among the highest criteria for career choice among those sampled. In this respect, the seafood sector fairs less favourably than other sectors, where it is seen as challenging and a difficult working environment. Figure 4.8 shows that the seafood industry is characterised as demanding hard physical work (between 65% and 80% of respondents agreeing with this image) and long hours (between 66% and 70% of respondents agreeing with this image). Additionally, many respondents consider working in the sector requires a high level of physical fitness.

18-24 16-17 All 16+ 80% Hard work Long working hours 69% Challenging Skilled work 38% Varied work 22% Interesting 19% For young people 9% Rewarding Exciting 6% Opportunities for women 4% Pleasant working environment 4% Job security 3% Other 1% None of these 5% 11% 6%

Figure 4.8: Images associated with career in seafood sector

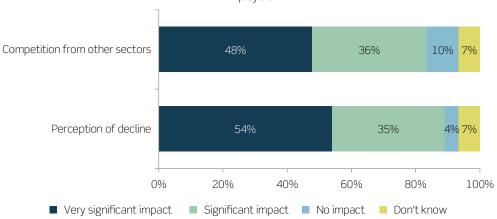
In their submission, the International Transport Workers' Federation (ITWF) cited the working conditions on some boats as a major disincentive to attracting Irish people to work in the sector and that a perceived tolerance for these working conditions is an incentive for some employers in the sector to hire non-EEA crew.

4.3.4 COMPETITION AND PERCEPTIONS

An additional challenge to recruitment and retention in the sector evident from the survey of employers was the competition from other sectors, in combination with the perception of the fishing sector as being in decline. A majority (84%) of employers indicated that competition from other sectors had a significant or very significant impact on recruitment and retention. Similarly, 89% indicated that the perception of decline in the fishing industry was acting as a significant or very significant impediment to recruitment and retention of both existing and new crew.

Figure 4.9: Challenges to Recruitment to the Sector - Competition and Perpection

Employers



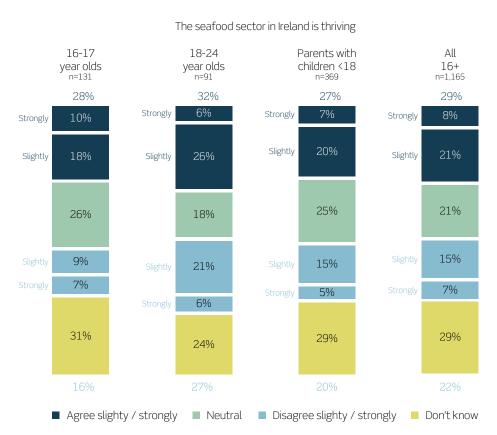
Source: Analysis of responses to Indecon survey.

Stakeholders in the sector interviewed broadly agreed that the perceptions of the sector to those outside the industry has a detrimental effect on recruitment. It was noted that the perception of the sector as engaging in unsustainable practices and engaging in over-fishing were damaging the perceptions of the sector amongst the wider public. Additionally, representative bodies consulted agreed that the sector suffered from the perception of work on fishing boats as being particularly hard and dangerous relative to other jobs, despite significant modernisation of the fleet in recent years.

The consultation process also noted that the sector is competing with school leavers considering higher education and that the trend amongst young people in the coastal communities to consider further educational opportunities is a major constraint on the supply of labour. Similarly, stakeholders noted the potential earnings from the construction sector as a significant draw to workers who previously had worked as seasonal crew on board fishing vessels.

Evidence from the research undertaken by BIM on careers in the seafood industry provides further evidence that the perception of the sector as one in decline is a constraint to recruitment. The research finds that there are very mixed views on how the seafood sector is performing. As indicated in Figure 4.10, across all adults 16+ that were surveyed, 29% agreed that the "seafood sector in Ireland is thriving", while 22% disagreed and 29% said they "don't know", indicative of a general lack of understanding of the sector as a whole. The high proportion of "don't knows" is likely reflecting that many are not aware of how the sector is performing at all.

Figure 4.10: Views on the performance of the seafood sector



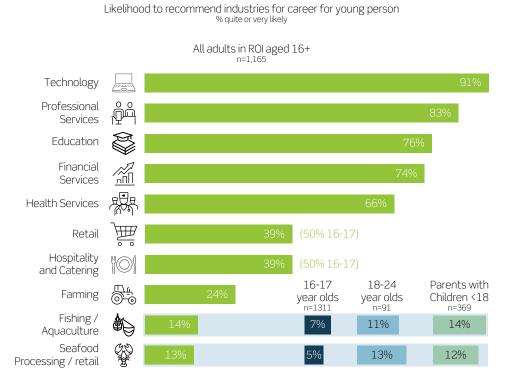
Source: BIM Research on Careers in the Seafood Industry.

A quote from a career guidance counsellor interviewed as part of the BIM research on careers in the seafood sector is illustrative of the negative perceptions of the fishing sector and as an industry in decline:

"Decline in fishing that they would have seen or [that] their parents, grandparents would have seen infiltrates the student psyche. They just won't go into a career that they think is dying."

The research also found that the seafood sector was the least likely sector to be recommended for a career choice by adults to young people. Only 14% of all adults would recommend the industry as a career choice, a much lower percentage than would recommend farming, and hospitality and catering. Only 5% of 16–17-year-olds indicated that they would recommend the industry as a career choice to a young person.

Figure 4.11: Likelihood to recommend industries for a young person



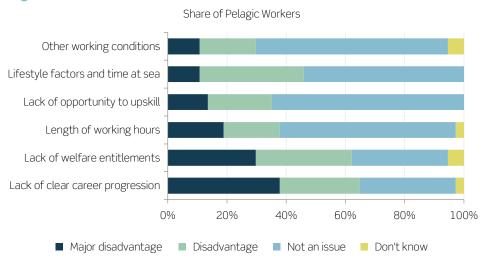
Source: BIM Research on Careers in the Seafood Industry.

It is crucial that the seafood sector is portrayed as being economically viable in the long term to improve its attractiveness. There is little doubt about the economic contribution of the sector within coastal regions (and the country as a whole), but the broad perception is that the sector is under significant economic pressure, with uncertainty about its long-term prospects. The fishing industry is in direct competition for labour with the likes of the construction sector, the retail sector, and the hospitality and tourism sectors, which are often seen offering more stable employment and less onerous work than the fishing sector.

4.3.5 VIEWS BY FLEET SEGMENT

The proportion of respondents indicating disadvantages of all options in the RSW pelagic segment is lower than the overall survey sample, suggesting there are fewer challenges within this sector than in the wider fishing industry. Lack of welfare entitlements remain an important challenge (61%), as is the lack of career progression (64%). However, other measures are more likely to be perceived as not an issue by most workers, such as time at sea (45%), a lack of opportunity to upskill (34%), and the length of working hours (36%). All these indicators suggest fewer challenges for pelagic fishers.

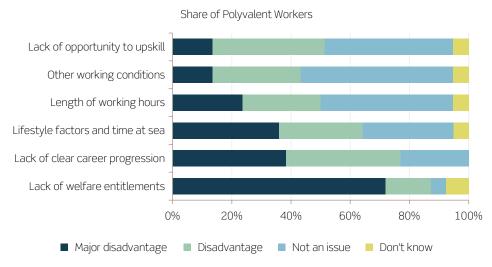
Figure 4.12: Worker Views on Challenges to Recruitment in the Sector - Pelagic segment



Source: Analysis of responses to Indecon survey.

Respondents in the polyvalent sector report more challenges, with a large number of workers noting welfare entitlements (87%), career progression (76%), and lifestyle factors (65%) as challenges. Beyond this, workers in the polyvalent fleet segment, noted a lack of opportunity to upskill (51%), and working hours (50%) as other significant challenges.

Figure 4.13: Worker Views on Challenges to Recruitment in the Sector – Polyvalent Sector



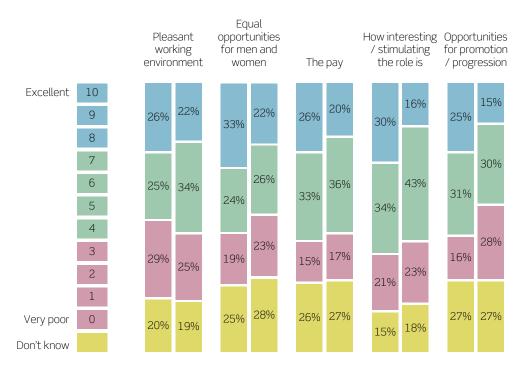
Overall, significant differences exist between the challenges listed between the pelagic and polyvalent segments. Given the security of employment among pelagic fishers, as well as higher average earnings, this is perhaps unsurprising. Fishers from polyvalent vessels note more challenges and issues, with most respondents agreeing that working conditions are a significant challenge for newcomers to the sector.

4.3.6 ALIGNMENT OF THE FISHING SECTOR WITH CAREER PRIORITIES OF YOUNGER PEOPLE

The preceding sections have outlined the primary challenges perceived by those within the fishing sector to recruitment and retention. The BIM research on careers in the seafood sector provides useful insights into the perceptions of those outside the fishing sector on it as a career choice.

The research demonstrates that there are a number of key drivers of career consideration for students. Firstly, the focus for students tends to be on the long-term implications in making a career choice. Students are generally driven to pursue a career in which they have an interest, and which they will not find boring. Secondly, students prioritise career paths and look for the presence of a clear picture on what opportunities for progression exist. Thirdly, financial aspects of a career rank highly as factors in career choice, without being the primary motivating factor. Fourthly, young people tend to place a high value on their time, meaning it is not entirely consumed by their career choice and they have sufficient room to explore other activities and interests. Lastly, for many students, where they work is not as high a priority, with many wanting the opportunity to explore life outside of where they have grown up.

Figure 4.14: Views of Young People on Important Factors in Career Choices*



Note: First column represents views of 16-17-year-olds. Second column represents views of 18-24-year-olds Source: BIM Research on Careers in the Seafood Industry .

Generally, there was an unfavourable perception of the seafood industry as a career path amongst the 16–17-year-old cohort. There is a general sense that the seafood sector does not offer career opportunities for young people, with progression and career paths unclear. Young people are less likely to feel that the seafood sector offers them opportunities for a fulfilling lifelong career, while the responses suggested a large degree of uncertainty on what exactly the industry offers. Many young people do not tend to view the seafood sector as an industry with a pleasant working environment, nor is there a perception that the opportunities for men and women, as well as the pay, are particularly good. Few (in most cases between 15% and 25%) agreed that there were good career opportunities and paths for progression in the industry, while there was some degree of worry expressed among young people about what their peers would think of their career choice if they were to work in the seafood industry (39% of 16–17-year-olds and 28% of 18–24-year-olds).

Consultations with career guidance counsellors as part of the BIM research project on careers in the seafood sector cited the key advantages of careers in the seafood sector as primarily being that it provides opportunities for students to stay in the local area in which they have grown up. They also saw fishing as providing employment opportunities for a wide range of student types and abilities.

4.4 Summary of Findings

This section has outlined the main challenges to recruitment and retention in the fishing sector based on evidence from the Indecon survey of crew and employers in the sector, consultations with stakeholders in the sector and evidence from other research undertaken by BIM on careers in the wider seafood sector. The key findings of this chapter include:

- Respondents to the employer survey indicate that there are significant challenges
 to recruitment. Consultations with representative bodies also provided further
 evidence that there are significant recruitment challenges across most parts of
 the fishing fleet, with the exception of the RSW pelagic segment.
- A lack of welfare entitlements was cited as a significant challenge to recruitment by both employers and crew. Stakeholders consulted also broadly shared the view that a lack of welfare entitlements under the share fishing model added a level of uncertainty to employment in the sector and was a deterrent to attracting new entrants.
- Approximately 73% of crew indicated that a lack of career progression was a
 disadvantage or major disadvantage to working in the sector; 72% of employers
 cited career progression as a significant or very significant challenge to
 recruitment and retention in the sector.
- Almost half (45%) of crew indicated that a lack of opportunity to upskill was a disadvantage to working in the sector, with 60% of employers citing this as a significant or very significant challenge to recruitment and retention. A lack of an evident professional progression path was also described as a significant obstacle to attracting new entrants to the sector in consultations with stakeholders.
- The importance of career progression for young people when choosing a career is evident from the BIM research on careers in the seafood and sector and the evidence indicates that young people typically do not see a clear career path in the seafood sector.
- Approximately 70% of employers indicated that lifestyle factors/time at sea was
 a significant impediment to attracting new entrants to the sector. Representative
 bodies consulted broadly echoed the views of the survey respondents with
 regards to the length of time required at sea and the working conditions as being
 significant challenges to attracting new entrants to the sector.
- A majority (84%) of employers indicated that competition from other sectors had
 a significant or very significant impact on recruitment and retention in the sector.
 Similarly, 89% indicated that the perception of the fishing sector as a sector in
 decline was acting as a significant or very significant impediment to recruitment
 and retention in the sector.
- Evidence from the research undertaken by BIM on careers in the seafood industry provides support for the finding that the perception of the sector being one in decline as a constraint on recruitment.



5. The Fishing Sector in the context of the Wider Labour Market

5.1 Introduction

This section contextualises the labour market pressures affecting the supply and demand of labour for Ireland's fishing sector. Specifically, it explores the two main pressures on the labour force for the fishing sector; increasing demand for labour in other sectors and the increasing prevalence of young people returning to higher education. The fishing sector is facing pressure on two fronts; the pool of workers without a third-level education is reducing, as more young people opt for third-level education, and the pool of workers without third-level education is in increasing demand in growing sectors like construction.

We use several data sources throughout the chapter to complete the analysis, including the following:

- EU Survey on Income and Living Conditions (EU-SILC)
- Labour Force Survey (CSO)
- · Earnings data from administrative data sources; and
- Demographic and economic data from Central Statistics Office (CSO) and Higher Education Authority (HEA)

For the sectoral analysis this research focuses on those sectors that are considered to be most comparable and in most direct competition for labour with the fishing industry (i.e., those with a significant number of non-tertiary educated workers). In particular, we analyse employment and sectoral changes within the construction sector, since this is a key competitor for the fishing sector in terms of the workforce profile it attracts.

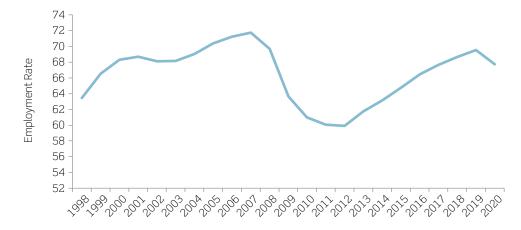
5.2 National and Regional Labour Market trends

The fishing sector is drawing labour primarily from coastal regions. However, these regions are impacted by the performance of the wider national labour market and employment opportunities in other sectors of the economy. This section outlines the recent trends in the Irish labour market and how these trends may have impacted on recruitment to the fishing sector.

5.2.1 EMPLOYMENT

Figure 5.1 shows the rate of employment in Ireland since 1998, which rose gradually from 63% in 1998, to 71% in 2007. During the European debt crisis, the rate fell sharply from 71% in 2007 to 60% in 2012. After a period of recovery, the rate peaked in 2019 at 69.5% before dipping to 67% most likely due to the economic shock brought on by the COVID-19 pandemic. Importantly, although the rate has not recovered to 2007 levels, 2019 and 2020²⁶ levels saw high levels of employment.

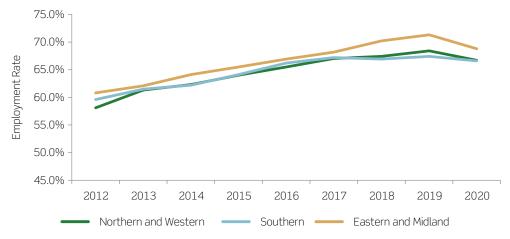
Figure 5.1: National employment rate (1998-2020)



Source: Indecon analysis of CSO's Labour Force Survey. Note: Employment rate among those aged 15-64.

Further, we consider the regional differences in the employment rate using the NUTS2 categories (Figure 5.2). This data is available from 2012 and shows that the three regions have similar levels of employment, with the Eastern and Midland region having a higher rate by 3-4 percentage points. Overall, the rates grew steadily since 2012 increasing from roughly 60% to roughly 67% in 2020. The decline in 2020 was most pronounced in the Eastern and Midland region, falling three percentage points since 2019. This figure suggests that the growth nationally does not differ by region.

Figure 5.2: Regional employment rates (2012-2020)



Source: Indecon analysis of CSO's Labour Force Survey. Note: Employment rate among those aged 15-64.

Note: The Northern and Western NUTS2 region is made up of Border counties (Cavan, Donegal, Leitrim, Monaghan, and Sligo), and West counties (Galway, Mayo, and Roscommon). The Southern NUTS2 region is made up pf Mid-Vest counties (Carle, Limerick, and Tipperary), Southest counties (Carlow, Kilkenny, Waterford, and Wexford), and South-West counties (Cork, and Kerry). The Eastern and Midland NUTS2 region is made up of Dublin, Mid-East counties (Kildare, Louth, Meath, and Wicklow), and Midland counties (Laois, Longford, Offaly, and Westmeath).

^{26.} Although employment levels in 2020 were high, it is important to note that LFS statistics count respondents who were "absent from work due to COVID", either because of the illness, because of care obligations due to the illness, or their place of work was closed due to COVID restrictions, as employed but absent from work. In this way, the level of employment where respondents are specifically at work or working from home is likely lower.

We also consider the rate of unemployment at a national and regional level. In 1998, unemployment stood at 8% before falling quickly to 4% in 2001. During the European debt crisis and subsequent recession, the rate increased to almost 16% in 2011 before falling gradually to 5% in 2019. As before, the 2020 increase in unemployment was likely associated with the economic restrictions of the COVID-19 lockdown. Further, although official levels of unemployment were high, it is likely that many respondents who were employed but 'temporarily absent from work' during the COVID-19 lockdown are not captured in the unemployment rate above. Despite this caveat on the data in 2020, it is a strong indicator of labour demand. The steep decline in unemployment in recent years is indicative of a growing demand for labour in the economy.

Figure 5.3: National unemployment rate (1998-2020)

Source: Indecon analysis of CSO's Labour Force Survey. Note: Unemployment rate among those aged 15-64.

All regions show a similar trend in unemployment rates. The Southern region has slightly higher unemployment, albeit a difference of less than one percentage point. Broadly speaking the regions considered have seen a substantial fall in unemployment since its peak in 2012, and as before, the fall in unemployment is not concentrated in one area, but rather occurring equally across the regions.

Figure 5.4: Regional unemployment rates (2012-2020

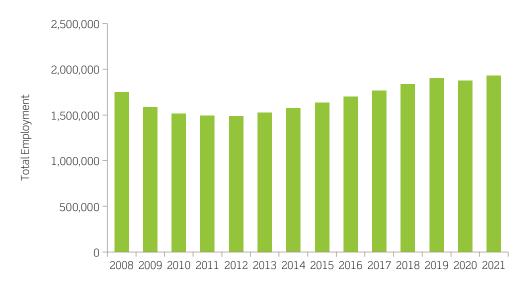


Source: Indecon analysis of CSO's Labour Force Survey. Note: Unemployment rate among those aged 15-64.

Note: The Northern and Western NUTS2 region is made up of Border counties (Cavan, Donegal, Leitrim, Monaghan, and Sligo), and West counties (Galway, Mayo, and Roscommon). The Southern NUTS2 region is made up of Mid-West counties (Clare, Limerick, and Tipperary), Southest counties (Carlow, Kilkenny, Waterford, and Wexford), and South-West counties (Cork, and Kerry). The Eastern and Midland NUTS2 region is made up of Dublin, Mid-East counties (Kildare, Louth, Meath, and Wicklow), and Midland counties (Laois, Longford, Offaly, and Westmeath).

A graudual fall in the total workforce occured after the recession caused by the European debt crisis. Total employment reached a low of 1.48 million in 2012, before an upturn in the economy led to steady increases in the following years, where total employment returned to pre-recession levels by 2017. The COVID-19 pandemic brought with it a moderate decrease in employment in 2020, but the gradual reopening of the economy in 2021 has seen total employment reach around 1.92 million in 2021.

Figure 5.5: Employment, Total



Source: CSO.

Figure 5.6 compares total employment for selected sectors with similar employment profiles to the fishing sector. It is clear from the figure that the fishing sector is much smaller than these comparator sectors, with employment figures at 2,850 in 2021. These figures are significantly lower in comparison to the likes of wholesale and retail sector trade (270,000 in 2011 and 303,000 in 2018) and industry (192,000 in 2011 and 225,000 in 2018).

Significant increases in demand for labour in these competitor sectors can lead to a considerable increase in the absolute number of workers required. In terms of employment changes, each sector has seen considerable increases in the total number of persons employed between 2011 and 2019, with particularly large increases in hospitality and food services as well as the construction sector. While this growth will have been impacted by the COVID-19 pandemic in subsequent years, indications are that demand for skills in these sectors remains strong. Ongoing expansion of these sectors is likely to lead to continued and increased competition for workers for employers in the fishing industry.

67% 70% 60% 50% 45% 40% 26% 30% 17% 20% 13% 10% 0% 1: G: BCDE: H: Accommodation Wholesale and Industry Construction Transportation and food service retail trade; and storage activities repair of motor vehicles and motorcycles

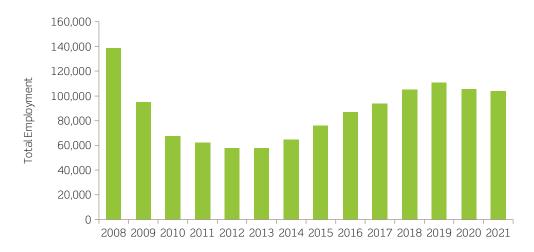
Figure 5.6: Employment Growth 2011-2019, Selected Sectors

Source: Indecon own analysis using CSO data

Focusing on the construction sector, Figure 5.7 shows the change in total employment between 2008 and 2021. The impact of the recession from 2008 on employment numbers can be seen in the sector, falling drastically from a peak of nearly 140,000 in 2008, to 95,000 in 2009, reaching a low of 58,000 in 2012 and 2013. Employment since then has grown steadily, to a recent high of 111,000 in 2019, but this figure is some way short of the 2008 peak and has plateaued owing to the negative impacts of the pandemic on employment, where few jobs have been made available.

Overall, there is a clear trend of growing opportunities within the construction sector and hence an increase in competition for the fishing industry. Note that owing to the introduction of the government furlough scheme, total employment in the sector did not drastically decrease during the pandemic. Rather, as the analysis on job vacancy rates show, very few jobs were vacant in the sector, leading to a stagnation in total employment.

Figure 5.7: Employment, Construction Sector

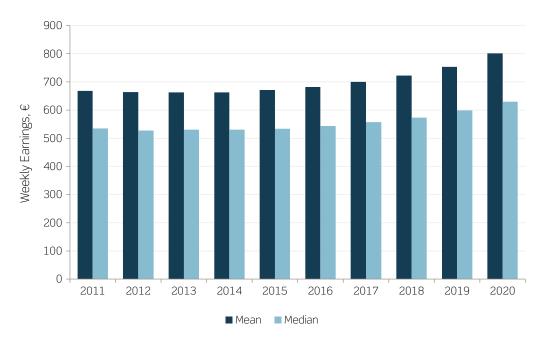


Source: CSO.

5.2.2 EARNINGS

Figure 5.8 presents the trend of national weekly mean and median earnings from 2011 to 2020. Weekly earnings have grown steadily in the last 10 years, from $\[\in \]$ 668 in 2011, to $\[\in \]$ 801 in 2020. On the other hand, median earnings grew much more slowly between 2011 and 2017 ($\[\in \]$ 535 to $\[\in \]$ 557), before gradually increasing to $\[\in \]$ 629 in 2020.

Figure 5.8: National Weekly Mean and Median Earnings



Source: CSO Administrative Data.

More specifically, we consider the earnings of those in the Irish labour market using the CSO's EAADS dataset. Taking 2020, we see that average weekly earnings are recorded as \in 801 nationally, and that earnings in Dublin are typically higher, while in Connacht (\in 716) and parts of Ulster (\in 637) earnings are lower. Despite these regional differences, both the figure above and table below show that earnings have grown roughly 10% for each of these regions since 2018, suggesting that the cost of labour has also risen, regardless of region.

Table 5.1: Mean Weekly Earnings by Region					
		Total		Change	
Region	2018	2019	2020	2018 - 2019	2018 - 2020
Dublin	€827	€864	€937	4.6%	13%
Rest of Leinster	€693	€722	€757	4.1%	9%
Munster	€683	€713	€753	4.4%	10%
Connacht	€651	€682	€717	4.8%	10%
Ulster (Part of)	€573	€599	€637	4.5%	11%
Total	€722	€754	€801	4.3%	11%

Source: Indecon analysis of CSO's EAADS data.

In general, we see that employment and earnings have risen while unemployment has fallen on a national level in recent years. Further, we show that these trends are consistent across regions, which indicates that the rural and coastal regions of most relevance to the fishing sector will continue to see growing competition for workers. The next two sections outline this competition based on two broad factors. The first is increased competition for workers without third-level education; the second is increased return on education. In both sections we see that the fishing sector will likely have to compete with other sectors if it is to meet the demands for workers in the sector.

5.3 Competition for Labour

5.3.1 COMPETING SECTORS

The fishing sector typically employs individuals without a higher education and is competing largely with those other sectors of the economy that draw a majority of their workforce from this cohort of the wider labour force.

The table below shows the rate of people with a third-level education split by current or previous (if unemployed) sector of employment. The fishing sector is a subset of the broader category A in the NACE framework, along with agriculture and forestry. In each year considered, this sector has the highest dependence on non-tertiary educated workers (93% in 2002 to 80% in 2020). Other sectors with a high dependence on such workers are construction (76%), Transportation (70%), Wholesale and retail (70%), and Accommodation (70%). These sectors are highlighted in bold.

Table 5.2: Share of Non-Tertiary Educated Individuals in the Labour Force, Employed and Unemployed (2002-2020)

	Percent			Change	
	2002	2012	2020	2002 - 2012	2002 - 2020
A: Agriculture, forestry, fishing and others	93	86	80	92%	86%
BCDE: Industry	79	64	53	81%	67%
F: Construction	93	89	77	95%	82%
G: Wholesale and retail	87	73	70	84%	80%
H: Transportation	89	80	71	90%	80%
I: Accommodation	85	71	70	84%	82%
J: Information and communication	44	27	18	60%	41%
KL: Financial, insurance services	55	33	23	60%	43%
M: Professional, scientific services	34	23	19	68%	56%
N: Administrative	81	68	63	85%	78%
O: Public administration	68	49	37	72%	54%
P: Education	28	20	18	71%	64%
Q: Human health	56	42	39	75%	70%
RSTU: Other NACE activities	78	64	62	81%	79%
Total	73	57	49	79%	68%

Source: Indecon analysis of LFS data. Note: Considering only respondents aged 15-64. In reviewing labour market trends, while in 2000 almost 45% of individuals had only a primary education or no formal education, this rate has fallen quickly to just 20% in 2020. During the same time, the rate of secondary and post-secondary education, like apprenticeships and other forms of technical training, have remained steady, at slightly above 35%. Finally, the rate of working age respondents with a third-level education increased steadily since 2000, from a rate of 19% to a rate of 42% in 2020.

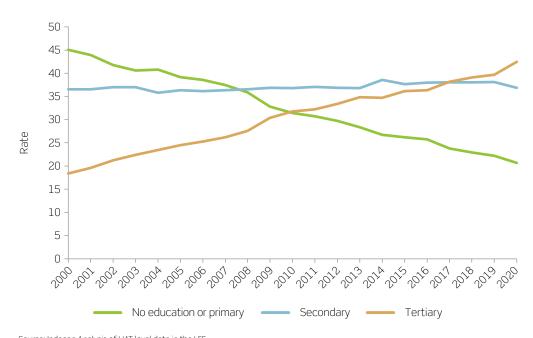


Figure 5.9: Change in population's education (2000-2020)

Source: Indecon Analysis of HAT level data in the LFS. Note: Considering only respondents aged 15-64.

The preceding analysis has demonstrated the key sectors with which the fishing sector is competing for labour, as well as outlining the evidence that the proportion of individuals in the labour force without a higher education qualification has been decreasing. This shrinking share of the national labour force without a higher education qualification has also led to the pool of labour from which the sectors requiring relatively unskilled labour typically hire workers.

Building on this, we now examine the recent performance of these key competing sectors. We examine the unemployment rate in the sectors most likely to compete with the fishing sector. As noted above, these are mainly construction, retail, transportation, and hospitality and accommodation. If unemployment in these sectors is low, they may look to recruit workers more aggressively, not only from the reserve pool of labour (the unemployed) but also from sectors with a workforce with similar skill level to their given sector. We compare the rate of unemployment to 1998 levels, as we have shown the trends more clearly in the section above. Given the unique nature of the COVID 19 lockdown, we present the level of unemployment for both 2019 and 2020.

Looking at the NACE sector where fishing is a subsector (NACE A, Agriculture, Forestry etc.), we see that unemployment in this sector is consistently low, much lower than the average rate recorded for those with a job history (3.9% total).

Similar or competing sectors report higher unemployment, especially in 2020 where many of the sectors were affected by the economic lockdown. However, these sectors have lowered their levels of unemployment significantly between 1998 and 2019. This suggests that despite COVID-19, unemployment levels could soon continue to fall for these sectors of the economy, reflecting a return to the growth in employment experienced in these sectors in recent years. Given that these sectors are as dependent on non-tertiary workers as the fishing sector, continued growth in employment in these sectors will continue to increase competition for labour for the fishing sector.

Table 5.3: Unemployment by sector over time (1998-2020)					
		Total		Change	
	1998	2019	2020	1998 - 2019	1998 - 2020
A: Agriculture, forestry etc	1.54	1.78	1.25	16%	-19%
BCDE: Industry	5.49	3.05	3.40	-44%	-38%
F: Construction	9.47	3.88	4.49	-59%	-53%
G: Wholesale and retail	4.43	3.74	5.06	-16%	14%
H: Transportation and storage	3.63	3.44	5.23	-5%	44%
I: Accommodation and food services	6.49	4.99	8.72	-23%	34%
J: Information and communication	2.01	2.68	2.82	33%	40%
KL: Financial, insurance and similar services	2.09	2.21	3.17	6%	52%
M: Professional, scientific services	2.25	1.63	2.56	-28%	14%
N: Administrative and support services	5.45	5.56	6.72	2%	23%
O: Public administration and defence	1.82	1.28	1.53	-30%	-16%
P: Education	3.36	1.60	1.97	-52%	-41%
Q: Human health and social work	2.78	2.12	2.52	-24%	-9%
RSTU: Other NACE activity	7.06	4.51	6.69	-36%	-5%
Total	4.49	3.06	3.93	-32%	-12%

Source: Indecon analysis of CSO's LFS data. Note: Considering only respondents aged 15-64. Between 2011 and 2016, the two sectors showed similar trends in percentage employment changes, both bouncing back following the shock of the economic crash. It was 2013 when the construction sector began to show an annual *increase* in employment (albeit a small 0.3% increase), with the fishing sector recording its first positive employment change in 2012, at 0.8%. Until 2018, the construction sector has seen resurgent increases in employment, averaging around 13% as a yearly employment increase. Following a large decrease in employment of 11.8% in 2014, the fishing sector recorded an increase of over 5% in 2015, 2016 and 2018.

It is important to consider the strong growth in the construction sector such as that observed in recent years. Given this sector is many multiples the size of the fishing sector in terms of employment, it may have a significant impact on the pool of labour from which the fishing sector may draw. This is particularly the case given the potential for higher average earnings in the construction sector.



Figure 5.10: Employment Percentage Change, Construction and Fishing Sectors

Source: Indecon analysis using CSO data and BIM inputs.

To summarise, non-tertiary educated workers are becoming more uncommon in the Irish labour market, and while the fishing sector is reliant on these workers, they are also an important part of other, productive and competitive sectors who have experienced significant growth in recent years. These competing sectors were experiencing a record low in unemployment in 2019 and are likely to return to growth following the COVID-19 pandemic in 2021.

^{*} Using AER data.

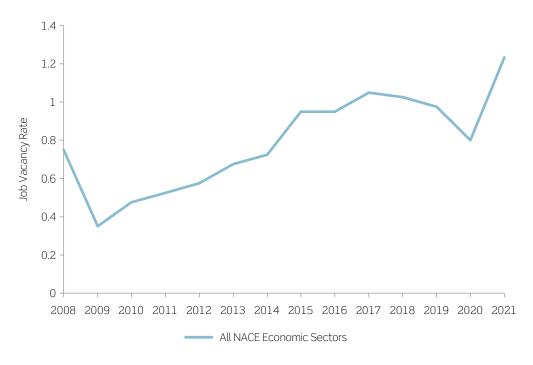
We noted that lower skilled workers are becoming less common in each sector in Table 5.3, and that the key sectors which compete with the fishing industry for labour have all seen a fall in this rate. This is also evident in the job vacancy rate, recorded by the CSO and Eurostat, which provides an assessment of unmet labour demand, where a job vacancy is defined as²⁷:

"a paid post that is newly created, unoccupied, or about to become vacant: (a) for which the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned; and (b) which the employer intends to fill either immediately or within a specific period of time."

Hence, a higher job vacancy rate typically represents a growing sector with many employment opportunities available.

Figure 5.11 shows the change in the job vacancy rate since 2008, covering all NACE economic sectors. A sharp decrease in job vacancies can be observed from 2008 to 2009, as would be expected in the aftermath of the recession which began in 2008. Thereafter, the vacancy grew steadily, reaching around 1% in 2017. The COVID-19 pandemic inevitably led to sharp decrease in job vacancies, owing to the almost total shutdown of many sectors in the economy, though the 0.8% figure in 2020 is still more than double that of the equivalent statistic in 2009. The gradual reopening of the economy has led to another sharp increase in the job vacancy rate, where in 2021 it has reached its highest point (1.2%) in the time analysed. This is illustrative of significant demand for labour in the economy.

Figure 5.11: Job Vacancy Rate, All NACE Economic Sectors



Source: CSO.

^{27.} From "Job Vacancies", Eurostat. https:// ec.europa.eu/eurostat/ web/labour-market/jobvacancies

Looking specifically at the fishing sector's main competitors for labour (construction, wholesale retail and transport, accommodation) in Figure 5.12, a more volatile trend can be observed, with sharp increases and decreases since 2008 for each sector, but particularly construction. Although these rates are below the industry average (marked in blue), each sector is experiencing rising vacancy rates, which suggests greater competition for labour compared to previous years. Of particular note is the increase in 2021, suggesting that these sectors are seeking to increase employment following the impact of the pandemic in the preceding year.



Wholesale and retail trade, transport, accommodation and food service activities

Figure 5.12: Job Vacancy Rate, Fishing Sectors Main Competetors for Labour

Source: CSO.

Rising job vacancy rates are also aligned with more anecdotal and industry specific reporting of skills shortages in recent months. For example, we note that Fáilte Ireland has launched a significant campaign to tackle hospitality labour shortages after the COVID-19 pandemic. This campaign is designed to attract workers into the sector through marketing and awareness strategies²⁸.

Accommodation and food service activities

In addition, reports from the recruitment company Hays²⁹ shows that 91% of the firms sampled cited skills shortages in 2021, an increase of almost 10 percentage points since 2020. Further to this, 84% of the firms sampled plan to hire in the next year, a rate that has reached a 5-year high in 2021.

Research from SOLAS using 2021 data has shown that firms in science, technology, and engineering are likely to report difficulty filling vacancies for workers going forward (46% of the surveyed firms agree with the statement³⁰). In the construction sector, 26% of employers claimed they had difficulty filling vacancies for project or site managers, quantity surveyors, engineers (electrical, civil/site engineers, construction design, EHS), planners, safety officers, and administrators. However, this gap in the construction sector is closely linked to new technologies and "Green Skill" needs. Firms cite several key issues in the hiring process, and despite increasing the offered wages for vacancies, many positions are still difficult to fill. They also noted that COVID-19 resulted in many European and international candidates returning to their home countries. Employers are actively awaiting a return of these workers back to Ireland.

^{28.} More information about Fáilte Ireland's campaign is available here https://www.failteireland.ie/Utility/News-Library/Statement-from-Paul-Kelly-to-the-Oireachtas-Commit.aspx

^{29.} Hays Salary and Recruiting Trends Report 2020.

^{30.} More information about the Difficult to Fill Vacancies Survey is available here https:// www.solasie/f/70398/ x/67ace34/7ad/solasdifficult-to-fill-vacanciessurvey.pdf

While rising vacancy rates are one measure of increasing demand for labour, we also consider the rate of job mobility in Ireland using the Survey of Income and Living Conditions (SILC). Some of the dimensions of this measure further illustrate the changing nature of the labour market. Specifically, we consider rates of voluntary (changed jobs because of finding a better job elsewhere) and involuntary changes in employment (job dismissal, redundancy, and the end of a temporary contract).

The figure below shows that rates of voluntary mobility have risen steadily since 2011 while involuntary mobility has remained low. Importantly, this measure only considers job to job mobility and does not take into account respondents who are long-term unemployed or who recently lost their jobs without finding a new job. Rising rates of voluntary job mobility are indicative of market power for workers who are in a position to move jobs for better conditions elsewhere.

Given the challenges already articulated for the fishing sector in terms of comparable earnings and working conditions / time at sea, a labour market where workers have a higher degree of market power and choice in employment opportunities may exacerbate the challenges of attracting workers.

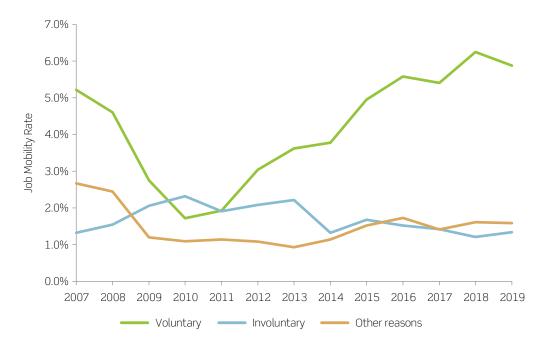


Figure 5.13: Job Mobility Over Time

Source: Indecon own analysis using CSO data and BIM inputs.

Levels of job mobility vary by level of education. This is shown in the figure below, which shows voluntary and involuntary mobility rates by education. Workers with a higher education qualification have the highest rates of voluntary job changing, and roughly average rates of involuntary job mobility. Those without a tertiary education have lower rates of mobility and possibly less bargaining power in the labour market.

6 - 5 - 4 - 3 - 2 - 1 - Voluntary change Involuntary change Other reason

Primary Secondary Tertiary Total

Figure 5.14: Job Mobility by Education

Source: Indecon own analysis using CSO data and BIM inputs.

Generally, it can be observed that workers in the Irish labour market are becoming more educated and mobile. Further, the job vacancy rate is rising overall, and more importantly for the sectors most likely to compete with the fishing industry for labour. As a result, an increase in voluntary job mobility can be seen as workers finding themselves with more bargaining power. This job mobility is evident across many worker groups but is especially pronounced among those with a third-level education.

5.3.2 COMPARABLE EARNINGS

As demonstrated in the previous sub-section, the fishing industry faces competition for labour from a number of sectors that rely on a similar cohort of the labour force for their labour supply. Additionally, employment in these other sectors has been increasing in recent years. This demand for non-tertiary educated workers will likely impact wages, and since wages in the many segments of the fishing sector are typically low, employers will struggle to compete when recruiting.

Figure 5.15 demonstrates the median weekly earnings of respondents by sector for 2020, paying specific attention to the sectors most likely to compete with the fishing industry. We supplement the findings from the CSO Administrative Data Sources with the figures on average earnings from the Indecon survey. Moreover, as well as reporting median weekly earnings for the fishing sector, we also report median weekly earnings per segment type, which further illustrates the discrepancies in weekly earnings between segment type.

When compared to CSO data on wider earnings in the economy, median weekly earnings in the fishing industry are just below the average for all sectors, and mostly lower than similar sectors. Furthermore, earnings in the polyvalent segment of the fishing fleet are significantly lower than the national average. Median earnings in the RSW pelagic segment, on the other hand, are significantly higher.



Figure 5.15: Median Sectoral Weekly Earnings, 2020

Source: CSO Administrative Data and Indecon survey analysis of the Irish fishing fleet.

5.4 Increasing Returns to Education

The proportion of the Irish labour force with a higher education qualification has been increasing in recent years. This is especially true for young males, who have greatly increased their movement into third-level education since 2008. The increasing return to higher education is a further challenge faced by the fishing sector when considering the pool of labour from which the sector is likely to be seeking workers.

Figure 5.16 shows the total number of graduates in Ireland between 2008 and 2020. This number has increased from 53,441 in 2008 to 81,409 in 2020. Further, the number of males receiving third-level qualifications (including diplomas and certificates) has also increased quickly, from 23,173 in 2008 to 36,845 in 2020. Further, the male share of the total number of graduates increased from 43% in 2008, to 47% in 2013, before falling slightly to 45% in 2020.

90,000 80,000 Number of graduates at all levels 70,000 60,000 50,000 40,000 30,000 20,000 10,000 2008 All levels awarded 2020 All levels awarded 2013 All levels awarded Male Female Total

Figure 5.16: Total Numer of Graduates at all Educational Levels

Source: Indecon analysis of Higher Education Authority's Annual Graduate Surveys.

Recent research completed for the Irish Universities Association³¹ found that an indi-vidual with a higher education qualification is likely to have a lifetime earnings premium of 38-42% compared to an individual with a primary education. Elsewhere, the OECD estimates the earnings premium for people with a third-level education and includes data in Ireland.³² They find that a person in Ireland with a third level degree can earn a premium greater than 50% when compared to a similar person with a post-secondary, non-tertiary education. This premium is above the OECD average and is greater than a similar premium in the UK or Germany. In short, there are above average premiums to a third-level education graduate in Ire-land.

The higher earnings premia associated with higher education is a significant draw to younger people considering their career options when leaving school. It represents an additional aspect of the wider labour market trends that pose a challenge to the fishing sector in attracting new entrants.

5.5 Size of Labour Force in Coastal Regions

Demographic and population changes can also impact upon the labour force available to the fishing sector, and the size of the pool of potential workers. Given the propensity for job opportunities in fishing to be in largely rural, non-urban areas, it is worth exploring population changes in rural and urban areas. Previous research by BIM has estimated the total population of the Irish seafood community as 585,000 people, with a labour force of 275,000 with 239,000 total employees.³³ This estimate was based on CSO data and estimated the population which resides close to the coastline and in rural areas. This labour force of 275,000 people represents the pool of labour from which the sector has traditionally drawn its' workforce.

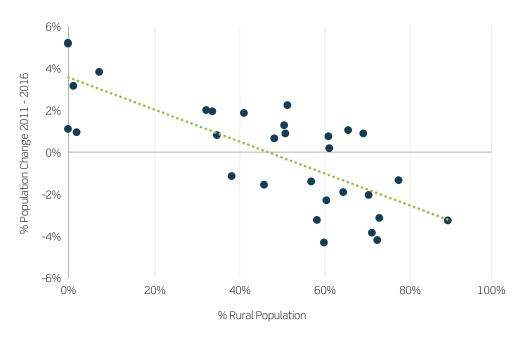
^{31.} Indecon, "Indecon Independent Assessment of the Economic and Social Impact of Irish Universities"

^{32.} OECD report titled "What Are the Earnings Premiums from Education?" can be read here https://www.oecd.org/education/skills-beyond-school/48630790.pdf

^{33.} BIM, 'An Estimation of a Reference Population for the Irish Seafood Sector'.

The difference in population growth between rural and urban areas is apparent in data from the 2011 and 2016 censuses. From 2011 to 2016, counties which had a greater urban population tended to experience higher population growth. Some counties with a larger rural population experienced a decrease in population. This trend is likely to have continued since 2016, with more and more people moving to urban centres for further education and job opportunities. While the 2016 census is somewhat outdated at this stage, the regional population projections to 2036 published by the CSO indicate that the proportion of the population in west, midwest and south west is likely to remain stable or fall, indicating that the trends in working age population illustrated above are likely to have continued since the last census.

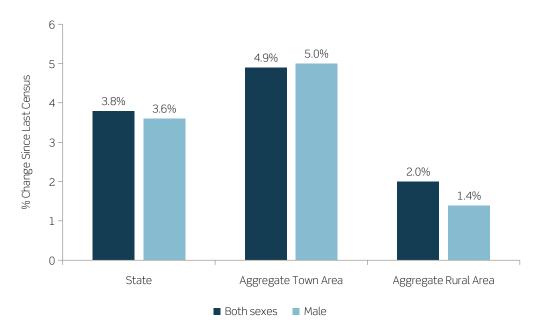
Figure 5.17: Percentage of Working Age Population Living in Rural Areas by County Working Age Population Change from 2011 to 2016



Source: Indecon analysis of CSO statistics.

Figure 5.18 shows the percentage changes in rural and urban populations between 2011 and 2016 (i.e., the two most recent censuses). The results for both sexes and also specifically the male population are shown below, given the high proportion of male workers in the fishing sector. The results show a disparity in the population growth rate in urban and rural areas. In urban areas ("Aggregate Town Area"), there has been a 4.9% increase in the overall population, and 5% increase in the male population between 2011 and 2016. Meanwhile, the corresponding figures for rural areas ("Aggregate Rural Area") are 2% and 1.4% for both sexes and for male-only, respectively. On a state-level, there has been a 3.8% increase in overall population, and a 3.6% increase in overall male population. These figures show that, while the rural population is growing, it is doing so at a slower rate than the state average, and at an even slower rate than in urban areas. This suggests that there may be a relatively smaller workforce pool for the fishing sector to take from and that it may be losing potential workers to other comparable jobs in urban areas.

Figure 5.18: Percentage Change in Rural-Urban Population



Source: Indecon analysis of CSO statistics.

Additionally, while the population of Ireland is ageing, this is happening at a slower rate in urban areas, and a higher rate in towns near fishing ports. Towns near fishing ports experienced a significantly greater reduction in people aged 20 to 34 than cities and the national average; they also gained fewer people aged 35 to 39. The population of these fishing areas is ageing at a much faster rate than elsewhere: from 2011 to 2016 these towns gained more people aged 40 and over than cities or the nation as a whole.

Figure 5.19: Comparison of Demographic Profile of Areas Near Fishing Ports, Urban Centres and the National Level



Source: Indecon analysis of CSO statistics.

This section has demonstrated that the demographic profile of the rural and coastal areas is also a challenge for recruitment in the fishing sector. The population in rural and coastal areas is growing slower than the national average and significantly slower than in urban areas. Additionally, rural and coastal areas are ageing at a faster rate than the national average. These factors indicate that the labour force from which the fishing sector has traditionally drawn in young men from rural and coastal communities, is shrinking.

5.6 Gender gaps in the Irish Fishing Sector

Data on gender gaps in the Irish Fishing Sector are scarce, but limited data suggests the sector is made up mostly of male workers. Figures from the 2020 Labour Force Survey show that just 15% of workers in the agriculture, fishing, and forestry sector were women, while 7.5% of workers in the skilled agricultural workers and skilled fisher occupation were women³⁴. While these metrics measures different forms of involvement in the agriculture and fishing sector, they both illustrate that the majority of employment in these sectors is male.

The rate of women in agricultural and fishing sectors has always been relatively low and in 2007 just 13% of workers in this sector were women, while just 8.5% of all skilled agricultural and skilled fishery workers were women. This characteristic is also a feature of the construction sector. CSO figures from 2019 for example, demonstrate that 94.5% of employment in the construction sector were male. The gender profile may result in competition with the fast-growing construction sector which is likely to limit the pool of labour from which the sector can draw new entrants.

5.7 Summary of Key Findings

This chapter has outlined the changes in the wider labour market in Ireland in which the fishing sector is competing to attract labour. The key findings include:

- In recent years there has been broad based employment growth in Ireland and a reduction in the unemployment rate. While employment growth has been highest in the East, but strong growth has also been seen across the regions.
- Average earnings have been increasing in recent years across all regions.
- The fishing industry is competing for recruits in a segment of the labour market which currently has a high share of individuals without a higher education qualification such as agriculture, forestry, construction, wholesale and retail, transportation, and accommodation.
- The proportion of the working age population with a third-level education has increased steadily since 2000, from a rate of 19% to a rate of 42% in 2020. This highlights that the workforce is becoming more educated overall. This reduces the share of the overall labour force that are likely to seek employment in the fishing industry and other sectors in which higher education qualifications are not ordinarily required.

^{34.} Occupational level data relates to roles within sectors while sectoral level data covers all roles/occupations within a sector.

- The increasing premium from higher education qualifications in the Irish workforce is likely to reduce the proportion of the labour force that would be attracted to careers in sectors which do not require a higher education qualification.
- Median weekly earnings in the fishing sector are just below the average for all sectors, and mostly lower than similar sectors. Furthermore, earnings in the polyvalent and other sub-sectors of the fishing fleet are significantly lower than the national average. Median earnings in the pelagic segment, on the other hand, are significantly higher.
- Earnings data for the fishing sector indicates that while the RSW pelagic segment is well placed to complete for labour via wage competition, the other sectors of the fishing fleet offer significantly lower earnings opportunities than sectors requiring comparable qualifications.
- Rising employment and falling unemployment rates have increased vacancy rates across all sectors of the economy, including those sectors which are most likely to be in direct competition with the fishing sector for labour.
- Higher vacancy rates indicate that demand for labour is strong, and individuals are
 likely to have some choice and bargaining power in their labour market decisions.
 Given the relatively low rates of pay in some sections of the fishing sector, a
 strong labour market is likely to draw labour away from fishing.
- Rising levels of voluntary job mobility in Ireland in recent years are indicative of the increased choice available to individuals in the labour force, which is a further barrier to recruitment in the fishing industry.
- The ongoing relatively slower growth (and in some instances decline) in the
 population in rural areas in comparison to urban areas is also likely reducing the
 pool of labour from which the fishing sector can draw from.
- The recent censuses demonstrate that rural and coastal areas have been growing more slowly and have seen a greater reduction in the younger working age population and a greater increase in the cohort of the population aged over 40 than the urban areas of the country. This cohort is the one the fishing industry draws most employment from.



6. Roadmap to improving attractiveness of the Sector

6.1 Introduction

The fishing sector faces a number of challenges of attracting and retaining staff. These challenges are linked to the nature of employment in the sector and to the changing labour market in Ireland. The fishing sector remains, along with the wider seafood economy, a vital employer and contributor to the economy of the coastal regions of Ireland. The research undertaken for this project has provided insights into how the challenges faced by the sector can begin to be addressed to ensure the fishing industry remains an important contributor to the coastal and national economy.

This section provides an outline of the key factors that crew and employers feel are likely to increase the attractiveness of the sector, as well as a set of policy recommendations for how the sector can begin to overcome the challenges it faces in recruitment and retention of crew.

6.2 Perceptions and Awareness of the Fishing Sector

As part of the BIM Labour Force survey, crew and employers were asked if the sector should engage with transition year students as well as consider the launch of a campaign to improve perceptions of the sector thereby improving its attractiveness to younger people.

Employees were largely in favour of both proposals, with over 85% of respondents noting that both interventions would potentially have a positive impact on the sector. Employers were also in favour of both interventions and would support efforts to promote the sector in schools.

Previous research from the BIM has shown that recruitment and retention in the fishing sector suffers because of the wider public perception of decline in the sector, and the wider public's lack of awareness of the range of roles and occupations available to new recruits to fishing.

Consultations with representative bodies led to several suggestions for future policies to improve the perception of the fishing sector. These include:

- increasing engagement with younger people to inform them of the nature of the work and opportunities in the sector.
- The need for attractive promotional material was emphasised to ensure that increased engagement with younger people was fruitful
- Showcasing the modern and safe nature of the current fleet to counter the perception of fishing as a dangerous industry.
- Promotion of sustainable practices that the fishing fleet follow as a means of countering the narrative of the unsustainability of the sector. V-notching and the use of selective fishing gears were cited as examples.

Stakeholders further suggested that a trainee deckhand programme would provide an opportunity for younger people to experience employment in the sector over the course of one or two weeks. This would provide an understanding of the sector. BIM already runs a deckhand course, but this is seen as too limited in its scope and content to be effective.

Crew Engagement with transition 40% year students Campaign to improve perceptions 47% 43% of sector 0% 20% 40% 60% 80% 100% ■ Very significant impact ■ Significant impact ■ No impact ■ Don't know **Employers** Engaging with transition 36% year students 41% 43% Campaign to improve perception 41% Promotion of sector in schools 80% 0% 20% 40% 60% 100% ■ Significant impact ■ No impact Don't know ■ Very significant impact

Figure 6.1: Views of Crew and Employers on Improving Perceptions and Awareness of the Sector

Source: Analysis of responses to Indecon survey.

6.3 Training and Career Progression

A lack of formal training opportunities and a clear career progression path were identified as disadvantages of working in the fishing sector. The views of crew and employer respondents to the survey on the potential impact of measures to address these issues as a means of improving the attractiveness of the sector is thus unsurprising. Respondents were asked whether a more formal system of on-the-job training, an increase in clarity in career progression, and provision of formal and transferable qualifications would improve the attractiveness of the sector both to retaining existing workers and attracting new entrants.

Workers were broadly in agreement with each proposal, with over 75% of respondents agreeing with the proposals with the provision of a transferable qualification being seen as most beneficial. These measures were also popular among employers, with over 75% agreeing with the proposals outlined particularly the provision of transferable qualifications.

Crew 50% Increased formal OTJ training 44% 41% Clarity on career progression Provision of formal and 57% 33% transferable qualification 0% 20% 40% 60% 80% 100% Very significant impact Significant impact No impact Don't know **Employers** Increased formal 27% 52% on-the-job training Career progression clarity 46% Formal qualification which 46% 40% is transferrable 0% 20% 40% 60% 80% 100% ■ Very significant impact ■ Significant impact ■ No impact Don't know

Figure 6.2: Views of Crew and Employers on Improving Training and Career Progression in the Fishing Sector

Source: Analysis of responses to Indecon survey.

The stakeholders who met as part of this research were broadly in agreement with the findings of the survey research, in terms of the need for clarity on career progression and increased opportunities for training and upskilling as a means of improving the attractiveness of the sector to new entrants.

Stakeholders noted that while there was a wider array of training courses currently facilitated by BIM, these courses are largely disconnected from each other and would benefit from streamlining. It was suggested that the existing courses could be combined to offer a potential apprenticeship programme for the sector which would offer new entrants the possibility of obtaining qualifications over time through training courses as well on-the-job training on the vessel. The view was expressed that a formal apprenticeship would provide new entrants with a clear understanding of their path upon entry to the sector and what qualifications they could expect to obtain over time. The box below provides some background on similar apprenticeships programmes in other jurisdictions.

Box 1: International Approaches to Structured Apprenticeships in the Fishing Sector

In Scotland,³⁵ entrance into a maritime occupation is loosely structured by an apprenticeship system named The Maritime Occupations Framework. This framework is a structured programme involving paid work and classroombased learning. It has five pathways: deck rating, engine room rating, workboat operative, sea fishing, and port operations. The sea fishing track contains a 12- month programme for which participants are awarded a Diploma in Maritime Studies: Sea Fishing.

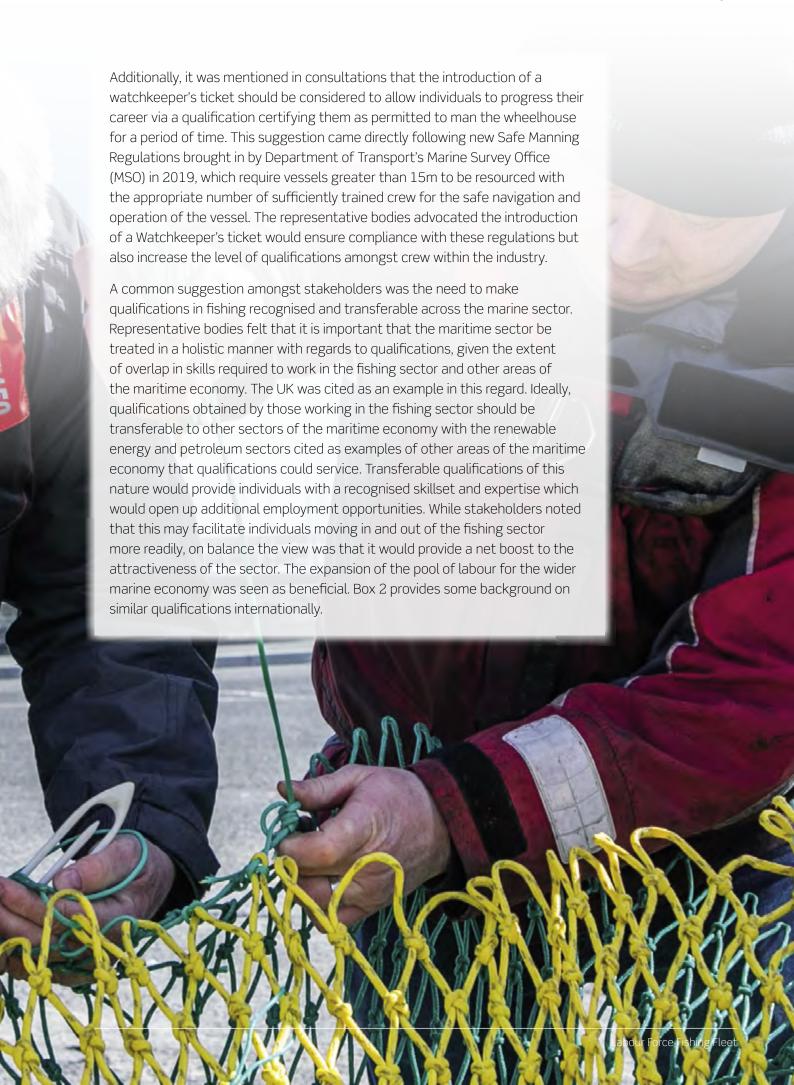
Key skills noted in the programme are communication, working with others, problem solving, ICT, and numeracy. In addition, apprentices are expected to take enhancement courses such as personal survival techniques ('PST'), fire prevention and firefighting, elementary first aid, and personal safety and social responsibilities ('PSSR'), especially those deck rating and engine room rating apprentices. These additional courses are optional for sea fishing apprentices.

Potential apprentices can join the sector if aged over 15 and if an employer is willing to sponsor them. More specifically, there are no formal entry requirements for any of the apprenticeship pathways in the maritime sector (including sea fishing). However, learners must already be working with a recognised employer to gain the experience and knowledge for the qualification. They must also be prepared to undertake off-the-job training.

In other countries like Denmark, Norway, and Sweden potential workers are expected to pass courses in basic skills before gaining employment on a fishing vessel. In Australia, such courses are not necessary but participating in courses ahead of time, increases a potential worker's chance of being accepted on to a fishing vessel for further training.

35. More information about the Scottish system is available here. https://www.skillsdevelopment scotland.co.uk/media/42589/maframework-maritime-occupations-at-scqf-laval-5 off





Box 2: International Approaches to General Marine Sector Qualifications

Many countries have general qualifications for work in the maritime sector, although countries differ in whether these qualifications are mandatory to work in the sector. General qualifications encourage potential workers to consider not only maritime fishing, but also dock work, seamanship, and other occupations in the general maritime sector.

In Scotland, there is considerable overlap between the skills taught in the Maritime Qualifications Framework, particularly between the four sea-going roles (deck rating, engine room rating, workboat operative, and sea fishing) and port operations, which is more closely tied to dock work. Each of these tracks requires its own specialist knowledge and skills, but many of these skills overlap. Former apprentices are encouraged to cross over to other parts of the industry while progressing their own specialisation. Importantly, Scottish workers must start work in the sector before pursuing the qualification, and qualifications are not mandatory to work in the sector.

In Denmark, young people who want to work in the sector must take a two-year training course and earn a "Blue Certificate". ³⁶ At minimum, older applicants must pass a three-week training course in basic seamanship and basic safety before joining the sector. Potential workers must complete, at minimum, a specific safety course. All applicants can take a further two-year course at a specific Fisheries Training Centre. This course covers basic training in safety and health, seamanship, navigation, engines, hydraulics, use of radio and other communication systems.

In the Danish case, more advanced courses are also available at a specific Skippers School which covers advanced fishing and international accreditation as a Master of Fishing (3rd degree or 1st degree). Specifically, Master Fishers work in the commercial fishing industry managing a fishing vessel and fishing operations to catch and preserve fish, crustaceans, and molluscs. They operate radio, radar, sonar, and other navigational aids, as well as check and interpret weather patterns. Master Fishers assist the crew in sorting, cleaning preserving, stowing, and refrigerating their catch. They may also be responsible for the maintenance of their vessel and fishing equipment, and the management of their crew.

In Australia, workers can enter the sector without any formal qualifications. New entrants can even work as master fishers without any formal qualifications but can build to the role with training on the job. However, entry into the occupation is improved with a formal qualification in fishing operations or maritime operations. New entrants in Australia can gain certificates in Fishing Operations, although these are not mandatory for labour market entry.

The fishing sector is also regulated in Finland, with several vocational schools offering training and certification. This education is free but does not cover books and learning materials.³⁷ In order to work in the fishing sector, workers must first earn the Further Vocational Qualification in Fishery.³⁸ In Finland, potential workers must receive this certification before pursuing work in the sector.

Source: Indecon analysis of International Qualifications

^{36.} More information about Denmark's education programme for the fishing sector is available in section 8.3 of the following document https://www.europarl.europa.eu/RegData/etudes/etudes/ join/2013/513972/IPOL-PECH_ET(2013)513972_EN.pdf

^{37.} Information about Finland's vocational school is available here http://www.bsac.dk/archive/Dokumenter/Accidents%20in%20 fisheries/ReportFinland EstoniaFIN.pdf

^{38.} More information about the ISCED level 3 certificate is available here https://eperusteet. opintopolku.fi/ eperusteet-service/api/ dokumentit/6278828

In line with the above, it was suggested that a formal transferable qualification in seafaring or maritime work could be developed and offered to school leavers and other people considering employment in the maritime economy. This would qualify them to work in the fishing sector and of the wider maritime economy. Such a qualification would provide potential new entrants with a flexible skillset and basis from which to develop specific skills.

The view was articulated that making any qualifications transferable internationally would also be an asset in improving the attractiveness of the sector to new entrants.

Stakeholders were broadly of the view that as many skills as possible should be accredited in the sector. Accreditation will provide crew with a clear demonstration of their skillsets and facilitate advancement both within the sector and in the wider maritime sector. There was also a view that certain qualifications should be accredited based on length of service in the sector.

With a view to supporting accreditation and career progression, it was also suggested that a Seamen's book for fisherman be developed for Ireland. This would provide information on an individual's work experience and educational background as well as providing each crew member with a professional identity. This would document service on board fishing vessels worked on, along with when and where the fisherman was engaged and discharged, as well as details of qualifications obtained. The strongly held view was that such a Seamen's book would provide legitimacy to fishing as a career as a fisherman.



Box 3: International Approaches to Career Progression Structures

Countries also differ in the types of careers that are open to workers of the sector and the extent to which new entrants are encouraged to join the sector.

In Scotland, career progression is varied and moves workers to several potential positions. There is no guaranteed pipeline for certain occupations, although workers with maritime qualifications can move to positions like port operatives, ship engineers, coast guards, naval marines, harbour operatives, ship technicians, fisheries officers, or fishing sales assistants. A secondary option is to pursue further education in the form of a technical apprenticeship in maritime occupations. Workers can also pursue a Bachelor's degree in Marine Studies or a Master's degree in Navigation and Maritime Science.

In Australia,³⁹ workers are also encouraged to pursue further qualifications throughout their time in the labour market and Master Fishers⁴⁰ can qualify in the country to be able to work anywhere in the world as in Scotland, noted above. This is also true in Denmark, which encourages further qualifications and international accreditation. Denmark is one of few international schools which offers the Master of Fishing qualification, recognised internationally. Master fishers are qualified to work as master on commercial vessels up to 24 metres long; chief mate or deck watchkeeper on vessels up to 35 metres long; and chief mate or deck watchkeeper on vessels up to 80 metres long in specific waters.

As a final example, Norway's fishing sector is an especially closed labour market with decreasing numbers of workers where career progression is limited. Vacancies are filled informally through internal networks and sponsorships. Scandinavian language requirements are not formally requested but strongly encouraged and training periods are mandatory for labour market entry. 41 This labour market has serious obstacles for potential workers.

Source: Indecon analysis of International Qualifications.

6.4 Means of Employment

As outlined previously, access to social welfare was seen as a significant disadvantage of working in the fishing sector by a significant portion of existing crew. With that in mind, it is perhaps unsurprising that over 70% of crew respondents to the Indecon survey indicated that a switch from self-employed to PAYE employees would have a significant impact on attracting new entrants to the sector. Employers demonstrated less support for the impact of offering additional PAYE employment on attracting new entrants with 49% indicating that this would have a significant impact on attracting new entrants.

Among employers not surprisingly there was wide support for the impact of the introduction of an additional tax allowance for those in the fishing sector. Over 95% of employers agreed that this would have a significant or very significant impact on improving the attractiveness of the sector.

^{39.} More information about the Australian system is available here https://www.tafeinternational.wa.edu.au/Documents/maritime-courses.PDF

^{40.} Additional information about the Australian system can be found here https://www. jobsandskills.wa.gov, au/jobs-and-careers/ occupations/masterfisher

^{41.} Information about training in Norway's fishing sector is available here https://norden.diva-portal.org/smash/get/diva2:1253207/FULLTEXT01.pdf

Crew Switch from self employed 32% 41% to employees 0% 20% 40% 60% 80% 100% ■ Very significant impact ■ Significant impact ■ No impact ■ Don't know Employers 29% 31% Employment over self employment 77% 19% Tax allowance for those in the sector 40% 0% 20% 60% 80% 100% ■ Very significant impact ■ Significant impact ■ No impact ■ Don't know

Figure 6.3: Views of Crew and Employers on Changes to the Means of Employment in the Fishing Sector

Source: Analysis of responses to Indecon survey

Stakeholders and representative bodies consulted as part of the research were generally supportive of providing more PAYE based employment opportunities, in those segments of the fleet where it was feasible for employers to offer this. However, for example in the inshore sector where boats are typically crewed by owner-operators and/or with a small crew of 1-2, PAYE employment is unlikely to be feasible. Nonetheless, stakeholders were supportive of the benefits of offering PAYE employment in terms of providing new entrants, particularly those leaving school, with a more attractive means of entry to the sector than via the share fishing model. It was felt that this would lessen the administrative burden with regards to managing taxation for new entrants as well as providing certainty of income and security of tenure. Additionally, PAYE employment is likely to be more attractive to individuals seeking mortgages or loans through financial institutions.

The findings of the consultations were also very supportive of reforms to the tax treatment of employment in the sector as a means of increasing the attractiveness of the sector. Stakeholders indicated that currently, in some segments of the fishing sector, the commitment involved in terms of time at sea is insufficiently compensated by the earnings available. Reforms to the tax treatment of the sector may assist in overcoming this issue.

The current Fisher Tax Credit⁴² applies to PAYE employees or those who pay tax by self-assessment (share fishers) who are resident in the State and who spend at least 80 days "at sea" actively engaged in sea-fishing (that is, fishing for or taking sea-fish). They must also work on a fishing vessel which is licensed by a European Union (EU) Member State and registered on the EU Community Fishing Fleet. The seafarer's allowance⁴³ applies to people who were at sea for at least 161 days in the course of a year, who work wholly on board a sea-going ship while on an international voyage, who are not Public Sector employees, and who have not claimed split year treatment in respect of the income earned. The seafarer's allowance is not available to those in the fishing sector.

^{42.} More information about the credit is available here https://www.revenue.ie/en/personal-tax-credits-reliefs-and-exemptions/income-and-employment/seafarers-allowance-fisher-tax-credit/fisher-tax-credit/seher-tax-credit/seher-tax-credit/aspx#:~text=%20
You%20can%20
claim%20the%20
claim%20the%20
credit.%28EU%29%20
Member%20State%20
and%20registered%20
and%20mer%30

^{43.} More information about the allowance is available here https://www.revenue.ie/en/personal-tax-credits-reliefs-and-exemptions/income-and-employment/seafarers-allowance-fisher-tax-credit/seafarers-allowance.aspx

Table 6.1: Fisher Tax Credit and Seafarers Allowance				
Fisher Tax Credit	Seafarers Allowance			
80 days "at sea" actively engaged in sea-fishing	161 days at sea, who work wholly on board a sea-going ship while on an international voyage			
€1,270	€6,350			
	Fisher Tax Credit 80 days "at sea" actively engaged in sea-fishing			

Source: Indecon

Evidence from the consultations suggested that the current seafarers tax allowance should be extended to the fishing sector. The existing Fisher Tax Credit is €1,270 per year compared to the seafarer's allowance of €6,350 per year. There are segments of the fishing fleet where crew would often meet the requirements for time at sea as specified for the seafarer's allowance and the view was expressed that these individuals should be entitled to this higher allowance. Indecon understands, however, that not all fishermen would meet the threshold in terms of days at sea and that this merits further consideration given that fishermen have to spend some time onshore for vessel maintenance, net making and repairs.

A potential means of providing the benefits of the seafarer's allowance to the fishing sector without requiring consideration of the eligibility of the existing seafarers allowance would be to increase the allowances under the existing fisher tax credit should the days at sea actively engaged in sea-fishing exceed the 161-day threshold of the seafarer's allowance.

Alternatively, it was suggested that crew who are out of the country for over a certain threshold of time on a given fishing trip or trips should be entitled to an allowance like that afforded to road hauliers. Under the existing scheme for road hauliers, drivers can claim the costs of subsistence allowances from road haulier firms, free of tax. In the scheme, employee's allowable expenses are reimbursed free of tax by an employer, but this does not apply an income tax claim by the employee for those expenses. As it stands, road hauliers who travel more than 8km and are absent between 5 and 10 hours can claim between \in 12 and \in 18, depending on their weekly earnings. This is the minimum benchmark for a claim. Road hauliers who travel to Europe or elsewhere, and who are away for over 24 hours can claim between \in 76 and \in 106 in subsistence payments. This is the maximum benchmark for a claim.

Other categories, between these two extremes, exist. It was noted that all fishing trips are already extensively logged and that this could assist with the administration of any such scheme of allowances for time at sea. A similar allowance could potentially be implemented for crew on fishing journeys over defined time periods.

Stakeholders indicated that there may be scope to engage with the Revenue Commissioners to move to 'regularise' the sector to reduce the reliance on the self-employment model and in doing so provide additional allowances for earned income. It was suggested that the move to a hybrid model of employment on a PAYE basis with elements of pay linked to the extent of the catch may be the best approach to capturing the benefits to crew of the share fishing model.

This would address the issues of access to the welfare system and other drawbacks of the share fishing model in terms of security of tenure. It was suggested that the contracts currently offered in the pelagic segment which typically offer a base wage with a bonus based on size of the catch should be considered for application to the wider sector. There may be resistance to this from those areas of the fishing fleet in which the share fishing model remains the most viable means of employment, but the consensus was that it should be explored. For those segments of the fleet facing the most significant recruitment challenges, exploration of new approaches to recruitment via PAYE or hybrid PAYE approaches are most relevant.

It is worth noting that workers and employers often used residual categories in the survey to list other challenges tied to recruitment and retention. Many issues were mentioned but two were particularly common.

Stakeholders expressed concern that the current quotas for many segments make the profitability of the sector precarious. While there is a need to protect against overfishing in some areas as this will impact on the sustainability of the sector, the availability of quota was an impediment to vessel owners being able to offer higher wages. Noting the concerns raised, this is outside of the scope of this study.

Another concern was about the need to mitigate over-fishing and the environmental impact of this. Again, this is outside the scope of the current study.

6.5 Policy Recommendations

As demonstrated in this report, the fishing sector faces both internal and external challenges to recruitment and retention. The evidence from the consultations process, the survey of crew and employers, and the observable earnings differences across the fleet segments indicate that the challenge is largely faced by the segments of the fishing fleet outside of the RSW pelagic segment.

A primary issue facing these areas of the fishing sector is the improving wider labour market in Ireland in recent years. Employment growth across all sectors, falling unemployment, and rising wages have increased the market power of the labour force to be selective with regards to their employment choices. This has been the case particularly in those sectors that likely traditionally compete most directly with the fishing sector for the labour of younger males without higher education qualifications, namely the construction sector, the retail sector and the hospitality sector. Prior to the COVID-19 pandemic at least, earnings and employment opportunities in the hospitality and retail sectors have also been increasing.

The most effective means of attracting mobile labour to the sector would be a rise in net after tax income. A recent 'The Business of Seafood 2021' publication by BIM, estimated that wages as a percentage of costs have risen from 16% of turnover in the sector in 2008 to 38% in recent years. This indicates that there may be limited scope for significant increase in gross wages in the sector, particularly considering rising fuel and other costs, which will put significant pressure on the cost base of the sector.

While increasing gross wages may not be feasible in the short term for the sector, policy initiatives could be taken to address both internal and external factors impacting the attractiveness of the sector both to new entrants and to the retention of existing crew.

The following sub-sections outline the potential policy options to address the key issues identified in this research as challenges to attracting new entrants to the sector.

ENGAGEMENT AND AWARENESS

Wider recruitment and promotional policies should be focused on maximising awareness amongst the coastal labour force of the potential and benefits to employment in the sector, with a particular focus on engagement with school leavers.

- 1. Efforts should be made collectively by BIM and the industry to increase engagement with schools, guidance counsellors and transition year students to maximise awareness of the fishing sector as a career.
 - Ensure that schools and guidance counsellors are aware of the opportunities in the sector and have high quality promotional material and information to hand to provide to students in this regard
 - b. Ensure that careersportal ie website has sufficient information on opportunities in the sector for new entrants
 - c. Engage with transition year students via BIM and industry to ensure that students understand the opportunities in the sector and to attempt to overcome misconceptions of the sector in terms of both the prospects for the sector and the nature of work in the sector
 - d. Visits to schools by local fishing sector representatives, supplemented by site visits to encourage engagement with the sector and understanding of the opportunities of a career in the sector
 - e. Explore the possibility of introducing a trainee deckhand programme to enable young people to spend a short period at sea to experience the role and understand the nature of the work involved. While BIM do offer an existing trainee deckhand programme, this existing programme should be enhanced and more focused on ensuring that participants are aware of the opportunities for advancement both within the fishing sector and the wider marine economy.
- 2. Undertake a campaign and ongoing efforts to improve the perception of the sector as a viable sector in which to build a career and not a sector in terminal decline. Efforts should also be focused on demonstrating to those outside the sector that working conditions on modern boats are not aligned with the typical understanding of working conditions in the sector. As part of this campaign, a focus should be placed on highlighting successful areas representing the future of the sector, and which would be attractive to young people and their considerations for career prospects.

3. Social media is a critical tool for effective engagement with young people and should be used effectively in making the industry appealing to this demographic.

CAREER PROGRESSION AND TRAINING

There is a requirement from both a safety and operational perspective from those employed in the sector to have access to enhanced formal training. This is also needed to provide additional clarity on career progression within the sector. Additionally, research undertaken by BIM has highlighted the importance of understanding a wider path of choices for school leavers in making career choices. The evidence presented in this report from both the survey of employers and engagement with stakeholders, has emphasised the importance of improving training within the sector and the career progression path in order to attract new entrants. Policy options which seek to address these key issues include:

- 1. Consideration should be given to the development by BIM of an apprenticeship programme for new entrants to the fishing sector. A formal apprenticeship framework would provide new entrants with a structured training-based induction to the sector and ensure that they receive the grounding in the skills required to progress their career in the sector. Feedback from stakeholders suggested that a structured apprenticeship could be based around several of the courses already offered by BIM and could also include onboard training and upskilling. Training should cover safety and engineering as well as more specific skills as required.
- Apprenticeships are offered in the sea fishing sector in Scotland and other parts of the UK. Apprenticeships in sea fishing can be completed over the course of 12 months under these systems and provide the individual with a set of core skills for progression in the fishing sector. There has been a reasonable level of success to this extent, in that the maritime sector in the UK has in the last three years created nine new apprenticeships, developed seven existing apprenticeships and more than doubled the number of workers employed as apprentices.
- 2. Explore the potential for the establishment of a formal qualification in seafaring which would qualify individuals to work in the fishing sector and other sectors of the maritime economy. The provision of a transferable qualification of this nature could serve to increase the number of people in the labour market with the skills to work in the fishing sector. It may also encourage new entrants to the sector if they see the skills acquired in the fishing sector as transferable to other sectors of the economy, and thus offering the potential for career progression both within the fishing sector and the wider maritime economy. Maritime Studies qualifications are offered in the UK which include a range of specific units shared between several qualifications, matching the reality that much of what people need to know is common to a number of sectors, within the broader maritime sector.
- 3. Explore the potential of introducing additional qualifications prior to the full skipper's ticket such as a watchkeeper's ticket to enable crew to assume additional responsibilities in their roles as they progress their career. Certification of skills should be encouraged with as many certificates transferrable across the maritime economy as possible.

- 4. BIM to promote an awareness of the existing available training courses for those in the sector.
- 5. BIM and the industry should ensure that new entrants and existing workers in the sector are aware of the certificates of competency for the sector and the supports available to crew to avail of additional training. BIM should ensure that as new entrants undertake training courses for the first time, they are made aware of potential additional training opportunities.
- 6. BIM and industry should prepare material clearly outlining the different roles in the sector, the responsibilities of each role and the experience and qualifications required to obtain each role. This material should be available to potential new entrants via career guidance counsellors and avenues such as careersportal.ie.
- 7. Engage with employers in the sector to ensure that the training courses offered are aligned with the requirements and that employers see a tangible benefit from upskilling their employees.
- 8. Explore the possibility of introducing a seaman's book for the fishing sector in Ireland to track an individual's employment history, skills, and qualifications in the sector. This would provide individuals with a professional record and facilitate the establishment of a central record of an individual's qualifications and certifications.

EMPLOYMENT PRACTICES

Widespread support remains for share fishing as a means of employment in the sector from both employers and employees. Employers generally see share fishing as the lowest cost means of employing workers for them while workers in the sector view share fishing as the most lucrative form of employment for them. However, a lack of entitlement to welfare was seen by workers in the sector as a key strength of employment on a PAYE basis.

Some stakeholders suggested the option for employment on a PAYE basis may help to attract new entrants to the sector by providing certainty on income, security of tenure, and access to welfare entitlements. Some of those consulted suggested that PAYE employment was, however, not a viable option for segments of the fishing fleet. It was also noted in the consultations that many employers in the sector are unclear on the process of becoming PAYE employers and the costs and benefits of doing so.

BIM should ensure that all employers in the sector are aware of the process
of employing people under PAYE and ensure that supports are available to
assist employers with the administrative process of becoming PAYE employers.
Additionally, consideration should be given to organising workshops possibly with
the assistance of accountancy firms, to ensure that employers in the sector are
aware of the options open to them in terms of employment practices and the
potential costs and benefits of these options based on the specifics of their
business.

2. Consideration should be given to encouraging employers in a position to do so to employ crew on a PAYE basis but with a portion of their income continuing to be contingent on a share of the overall catch. This would provide workers with the protections of PAYE employment while also continuing to provide them with the potential income benefits of the share fishing model. A hybrid model of this nature would overcome some of the challenges of share fishing in terms of lack of access to social welfare entitlements while also continuing to offer crew the potential financial benefits of a share fishing arrangement.

TAXATION

As outlined in this report, average weekly earnings in the fishing sector are typically lower than those in competing sectors of the economy. This, combined with the nature of the work and the risks involved, result in difficulties in recruitment. The cost pressures facing the sector indicate that broad based increases in wages in the segments of the sector facing the most significant recruitment challenges, are unlikely to be viable in the short to medium term. Aside from raising wages payments, the other means of increasing take-home pay for those in the sector are changes to the taxation of employment in the sector.

Employers in the sector, not surprisingly, strongly indicated that an enhanced tax allowance for those in the sector would be a very significant means of increasing the attractiveness of the sector to new entrants and improve retention. We note that a full impact assessment of tax allowances for the fishing sector is beyond the scope of this report and would require consultations with both central government and the Revenue Commissioners. However, tax policy changes merit consideration as a means of improving the attractiveness of the sector. We recommend that any reforms of this nature should be considered as a means of assisting the sector in attracting and retaining staff and continuing to target improvements in the attractiveness for new entrants and the retention of existing staff. This could contribute to enhancing the significant economic contribution to coastal economies in Ireland.

While any changes in tax treatment for the sector should be subject to a full economic appraisal to ensure that it represents an effective use of scare public resources, we believe there is merit in revisiting the introduction of a seafarer's/tax allowances/PRSI refund for the sector. With the above in mind, as part of the roadmap to improving the attractiveness of the sector to new entrants, we recommend the following:

1. BIM, the representative bodies and the Department of Agriculture, Food and the Marine should explore the possibility of engaging with the Revenue Commissioners, the Department of Finance and the Department of Social Protection to examine the possibility of reform to the tax treatment of employment in the fishing sector. These reforms should focus on establishing how employment in the sector could be facilitated with access to the social welfare system but retaining an element of the potential windfall benefits of the share fishing model under a PAYE system.

While we note that there is currently no register of those employed in the sector, which may be required to facilitate these reforms, any initial scheme could be designed as an opt-in measure to avoid the need for the development of a formal register of employment. However, the precise design of any reformed tax treatment is a matter for subsequent analysis and consultations with the relevant agencies.

This engagement process should also consider the possibility of reforming
the existing fisher tax credit to align with the allowances available under the
seafarer's allowance. Additionally, consideration should be given to the potential
benefits to the sector of instituting a separate or alternative allowance based on
days spent at sea.

A previous analysis undertaken for the Department of Finance as part of the Marine Tax Review suggested that there were economic benefits from the seafarer's tax allowance.

 Table 6.2: Summary of Economic Benefits of Seafarer's Tax Allowance and PRSI Refund Scheme

 Number of seafarers availing of scheme
 315

 Average income tax paid per seafarer (€)
 6,150

 Total income tax paid by all seafarers availing of scheme (€m)
 1.94

 Number of seafarers who would pay tax in Ireland in absence of scheme
 32

 Income tax benefit arising from scheme (€m)
 1.74

 Total Benefits adjusted for shadow price of public funds (€m)
 2.27

Source: Indecon analysis undertaken for Marine Tax Review.

The above estimates assumed there are two different groups of individuals, and this may not be correct. Therefore, in our previous CBA we only included income tax benefits for the seafarer tax allowance group but included the cost of both groups. The net benefit of the schemes, when accounting for the shadow price of public funds, was estimated previously to be $\{0.36\ \text{million}\ (\text{see table below}).$ If alternative assumptions were made, the schemes would have a small net cost. Since our previous review the Fishery Tax Credit has been introduced and while this will impact on previous estimates of additional net costs, it is not significant in the context of the overall merits of a Seafarer's Tax Allowance.

Table 6.3: Cost and Benefits of Seafarer's Tax Allo Scheme	owance and PRSI Refund
Annual Costs of Measure (€m)	0.82
Quantified Benefits of Measure (€m) (income tax benefit arising from the scheme)	1.44
Non-Quantified Benefits	Assists competitiveness of shipping sector
Net Benefit (€m)	0.36
Source: Indecon analysis undertaken for Marine Tax Review.	

7. Conclusions

This report has completed a labour force analysis of the Irish fishing fleet using new primary research of crew and employers in the sector, consultations with key stakeholders and representative bodies in the sector, as well as labour market data from the CSO. The new primary research has provided insights into employment practices within the sector, as well as insights into the key challenges facing the sector in terms of recruitment and retention in the sector. Potential policy solutions have been suggested.

The analysis in this report has confirmed the widely held view that the fishing sector faces significant recruitment challenges. Issues within the sector which were identified as limiting the attractiveness of the sector to new entrants include:

- The average earnings in the sector.
- The lack of welfare entitlements under the share fishing model.
- A lack of a demonstrable path to career progression in the sector.
- · The length of time at sea required; and
- The perception that the sector is one in decline.

In a wider labour market context, the sector is facing challenges caused by the relatively slower growth in the labour force in rural and coastal areas and that the demographics of these areas are seeing the population age more quickly than urban areas of the country. Additionally, several sectors with which the fishing sector is competing intensively for workers, have been experiencing significant growth in recent years. The number of people in the labour force without higher education qualifications has been steadily decreasing in recent years, leading to a smaller share of the labour force that are likely to be seeking employment in sectors predominantly employing those without higher education qualifications, such as fishing. The increasing returns for higher education graduates in the Irish labour force are continuing to draw younger people into further and higher education rather than entering the labour force as a relatively unskilled worker.

This focus on the return to higher skilled employment highlights the importance of ensuring that potential new entrants are aware of the training and qualifications available to those in the fishing sector, as well as the supports for workers pursuing these, and the pathways to skilled employment in the fishing sector, and the wider marine economy, that these qualifications can open up.

The primary research completed for this study demonstrates that, outside of the RSW pelagic segment, wages in the fishing sector are lower than those on offer in sectors of the wider economy, particularly construction, a sector which also attracts a similar cohort of the labour force to that of the fishing sector. Consultations for this study have indicated that employers in many segments of the fishing fleet do not see any scope for wage increases, in light of rising costs and decreasing profitability.

Given the challenges facing recruitment to the sector, this report has outlined a number of recommendations with regards to increasing engagement with young people, improving the perceptions of the sector as a viable choice for new entrants as well as developing an apprenticeship programme for the sector, and giving consideration to the development of a wider qualification facilitating employment in both the fishing and wider maritime economy. The availability of a transferable qualification within the marine sector has the potential to be an important means of attracting new entrants to the fishing sector by providing the opportunity for future career development within the wider blue economy.

While recognising that share fishing is likely to remain the means of employment most beneficial for smaller employers in the sector, employers should be encouraged to consider the merits of offering PAYE employment to new entrants in order to provide access to social welfare entitlements and additional certainty with regards to income and job security. Consideration should be given to encouraging employment on a PAYE basis with a portion of the total income remaining contingent on the overall catch. Supports should be in place to ensure that employers are aware of the process of hiring via PAYE.

Finally, while the assessment of the ultimate costs and benefits of changes to taxation policy are beyond the scope of this research document, changes in the tax allowances for the fishing sector have the potential to increase the attractiveness of the sector to new entrants by increasing the take-home pay of crew in the sector. Consideration of any policy interventions outlined require consultations with both central government and the Revenue Commissioners if they were to be progressed.



Annex: List of Stakeholders Consulted

- Art Kavanagh (Marine Finance Consultant)
- Doran's Skippers Mate (Provision of support to Fishing vessel owners)
- International Transport Workers Federation (ITWF)
- Irish South and East Fishermen's Producer Organisation (ISEFPO)
- Irish South and West Fishermen's Producer Organisation (ISWFPO)
- Killybegs Fishermen's Organisation (KFO)
- National Fishermen's Development Group (NFDG)
- National Inshore Fishermen's Forum (NIFA)



Tables

Table 2.1:	Respondents to Indecon Survey of Crew by Fleet Segment	ΤŢ
Table 2.2	Size of Vessels Among Survey Respondents	12
Table 2.3:	Employer Respondents to Survey by Crew Size	13
Table 2.4:	Permissions for the Atypical Working Scheme for non-EEA crew members in the Irish fishing fleet	14
Table 2.5:	Employment Contract Type by Fleet Segment	15
Table 2.6:	Working time contract by segment	15
Table 2.7:	Average years of experience among workers	16
Table 2.8:	Age of crew by segment	18
Table 5.1:	Mean Weekly Earnings by Region	55
Table 5.2:	Share of Non-Tertiary Educated Individuals in the Labour Force, Employed and Unemployed (2002-2020)	56
Table 5.3:	Unemployment by sector over time (1998-2020)	58
Table 6.1:	Fisher Tax Credit and Seafarers Allowance	81
Table 6.2:	Summary of Economic Benefits of Seafarer's Tax Allowance and PRSI Refund Scheme	86
Table 6.3:	Cost and Benefits of Seafarer's Tax Allowance and PRSI Refund Scheme	86
Figu	res	
Figure 2.1:	Irish Fleet Size by Segment (2008-2019)	8
Figure 2.2:	Share of Total Crew by Segment	9
Figure 2.3:	Number of crew members by employer fishing segment	9
Figure 2.3b:	Number of crew members by length class of polyvalent general segment	10
Figure 2.4:	Number of average people working on owners vessels	12
Figure 2.5:	Weekly income by segment	16
Figure 2.6:	Annual income by segment	17
Figure 2.7:	Weekly income by age group	18
Figure 2.8	Weekly income by level of experience	19
Figure 2.9:	Weekly income by Employment Type	20
Figure 2.10:	Employer Weekly Earnings	21
Figure 3.1:	Crew Views on Income, Taxation, and Welfare Entitlements Under Different Employment Types	24
Figure 3.2:	Employer Views on Income, Taxation, and Welfare Entitlements Under Different Employment Types	24
Figure 3.3:	Crew Views on Working Conditions, Flexibility, and Security Under Different Employment Types	26
Figure 3.4:	Employer Views on Working Conditions, Flexibility, and Security Under Different Employment Types	26
Figure 3.5:	Pelagic segment Crew Views on Different Employment Types	28
Figure 3.6:	Polyvalent Sector Crew Views on Different Employment Types	28
Figure 3.7:	Employer Views on Different Employment Types, Pelagic and other segments only	29
Figure 3.8:	Employer Views on Different Employment Types, Other segments only	30
Figure 4.1:	Employer opinion on whether the attraction of new employees and the retention of existing employees is a challenge for their business	34
Figure 4.2	Segment differences in whether workers will work in the fishing sector in the medium to long term	34
Figure 4.3:	Challenges to Recruitment to the Sector - Welfare Entitlements	36
Figure 4.4:	Challenges to Recruitment to the Sector - Training and Career Progression	37
Figure 4.5:	Importance of Career Progression in Career Choice	38

Figure 4.6:	Views of Young People on Career Progression in the Seafood Sector	39
Figure 4.7:	Challenges to Recruitment to the Sector - Working Conditions	40
Figure 4.8:	Images associated with career in seafood sector	41
Figure 4.9:	Challenges to Recruitment to the Sector - Competition and Perpection	41
Figure 4.10:	Views on the performance of the seafood sector	42
Figure 4.11:	Likelihood to recommend industries for a young person	43
Figure 4.12:	Worker Views on Challenges to Recruitment in the Sector - Pelagic segment	44
Figure 4.13:	Worker Views on Challenges to Recruitment in the Sector - Polyvalent Sector	45
Figure 4.14:	Views of Young People on Important Factors in Career Choices*	46
Figure 5.1:	National employment rate (1998-2020)	50
Figure 5.2:	Regional employment rates (2012-2020)	50
Figure 5.3:	National unemployment rate (1998-2020)	51
Figure 5.4:	Regional unemployment rates (2012-2020)	52
Figure 5.5:	Employment, Total	52
Figure 5.6:	Employment Growth 2011-2019, Selected Sectors	53
Figure 5.7:	Employment, Construction Sector	54
Figure 5.8:	National Weekly Mean and Median Earnings	54
Figure 5.9:	Change in population's education (2000-2020)	57
Figure 5.10:	Employment Percentage Change, Construction and Fishing Sectors	59
Figure 5.11:	Job Vacancy Rate, All NACE Economic Sectors	60
Figure 5.12:	Job Vacancy Rate, Fishing Sectors Main Competetors for Labour	61
Figure 5.13:	Job Mobility Over Time	62
Figure 5.14:	Job Mobility by Education	63
Figure 5.15:	Median Sectoral Weekly Earnings, 2020	64
Figure 5.16:	Total Numer of Graduates at all Educational Levels	65
Figure 5.17:	Percentage of Working Age Population Living in Rural Areas by County Working Age Population Change from 2011 to 2016	66
Figure 5.18:	Percentage Change in Rural-Urban Population	67
Figure 5.19:	Comparison of Demographic Profile of Areas Near Fishing Ports, Urban Centres and the National Level	67
Figure 6.1:	Views of Crew and Employers on Improving Perceptions and Awareness of the Sector	72
Figure 6.2:	Views of Crew and Employers on Improving Training and Career Progression in the Fishing Sector	73
Figure 6.3:	Views of Crew and Employers on Changes to the Means of Employment in the Fishing Sector	79





