

The Economic Impact of the Seafood Sector: Clogherhead

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An Roinn Talmhaíochta,
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Table of contents

Foreword

2	Foreword
---	----------

Executive summary

3	Executive summary
---	-------------------

1. Introduction

5	1.1 About the study
5	1.2 The port area
7	1.3 The key elements of the local seafood sector
7	1.4 Report structure

2. The seafood sector at Clogherhead

8	2.1 Characteristics of the seafood sector
13	2.2 Conclusion

3. The impact of seafood's sub-sectors

14	3.1 Commercial fishing
15	3.2 Fish processing
16	3.3 Conclusion

4. Total impact of the seafood sector at Clogherhead

17	4.1 Seafood sector activity at the port
17	4.2 Regional estimates
19	4.3 Taxation estimates
20	4.4 Growth since 2018
20	4.5 Conclusion

5. Conclusions

21	5.1 The seafood sector in Clogherhead
21	5.2 Commercial fishing is the main contributor
21	5.3 The fish processing sub sector remains a significant component
22	5.4 Seafood supporting peripheral economies

Appendix 1

Clogherhead's economic challenges

23	Economic activity and structure
23	Demographics
25	Summary

Appendix 2

Model approach

26	Understanding economic impact assessments
27	Estimating the direct economic contribution
28	Estimating indirect and induced impacts
29	Overcoming double-counting

Foreword

The Economic Impact of the Seafood Sector: Clogherhead

The 2024 evaluation of Clogherhead's seafood sector provides, for the first time, a five-year comparative analysis, allowing assessment of the sector's trends, resilience, and economic contributions. Building on the initial 2019 study, this report tracks changes in the industry's direct, indirect, and induced economic effects, highlighting its evolving role at the local, regional, and national levels.

Clogherhead is a significant seafood port in the northeast of Ireland, with a fleet active both locally and across the island. It is a key landing site for Dublin Bay prawns, which form a major part of its seafood economy. The port's strategic location, just 12km from Drogheda and 60km from Dublin, gives it strong transport connectivity, contributing to its role as a hub for seafood processing and export. These factors lead the economy of the Clogherhead hinterland to closely resemble the national economy, with the town acting as a commuter town to larger urban areas, yet with an above-average contribution of the seafood sector to the local economy and employment.

The findings in this report highlight the continued significance of the seafood industry in Clogherhead. In 2023, direct seafood activity at the port generated over €59 million in turnover and supported 295 direct jobs. The fish processing sector remains the primary driver of economic activity, with GVA at the port recorded at €22 million, alongside an additional €21 million generated upstream. In total, the seafood industry supports 550 jobs in the wider economy.

Over the past five years, the direct seafood sector in Clogherhead has experienced mixed trends. While direct employment has grown by 14%, GVA and wages have declined by 25% and 45%, respectively. The overall seafood economy, which includes upstream and indirect effects, recorded a 5% decrease in GVA and a 26% decline in wages. However, the multiplier effect of the sector has increased, rising from 1.86 to 2.47, driven by higher supply chain spending.

As part of the consultation process for this report, the project team engaged with seafood operators from the inshore and offshore fleets, aquaculture producers, fish processors, and other stakeholders to understand their perspectives on the seafood sector. Discussions focused on industry conditions, changes over the past five years, key challenges, and future outlooks.

Stakeholders highlighted ongoing challenges related to Brexit-related decommissioning, rising operational costs, and labour shortages. Concerns were raised about the sustainability of key fisheries, particularly razor clams, and the potential impact of Offshore Renewable Energy (ORE) developments on access to fishing grounds. Despite these pressures, stakeholders emphasised the continued importance of the seafood sector to the local economy and the need for ongoing investment and support to sustain its viability.

Executive summary

The seafood sector at the port

The seafood sector makes an important contribution to the Clogherhead economy. In 2023, the direct seafood sector at the port generated €58.7 million in turnover, supporting 295 direct jobs. Fish processing was the largest seafood sub-sector at the port in terms of turnover, generating €32.9 million, while the remaining €25.8 million is attributed to the local commercial fishing sub-sector. When translated into GVA, the overall seafood sector made a €21.9 million direct contribution to the local port economy.

The survey explores the characteristics of firms operating in this sector. In general, firms are typically well-established, having operated for more than 10 years. Almost half of all firms had invested in capital over the previous year, and those that had invested, invested relatively more than other seafood sectors across Ireland's ports. The workforce tended to come from the local area, while the end-market for seafood sales tended to be internationally focussed, with exports forming 85% of the total.

The short-term outlook for the seafood sector was fairly negative, with 38% of firms expecting turnover to decrease.

The analysis of the survey results allowed the port's seafood sector value within the regional economy to be quantified. Once the indirect and induced effects were calculated, it was estimated that the total economic contribution of the seafood sector at Clogherhead equated to €42.6 million of GVA across the Mid East economy in 2023. The seafood sector at this port also supported 550 jobs across the region and generated €17.1 million in gross wages. The port also generated a total of €5.2 million in tax revenues across all three channels. When compared to the results of the previous study in 2018, Clogherhead experienced a real terms decline in GVA and gross wages of an estimated 4.7% and 25.8%, respectively. This was accompanied by a growth in employment of 32.5%. This is due to seafood operators across commercial fishing and fish processing at Clogherhead port responding in the survey that their costs had increased since the 2018 survey. As a result, these operators had increased supply chain spending and this resulted in larger impacts in the indirect channel.



€21.9m
Direct GVA in 2023

The seafood sector makes a significant contribution within the local port economy.



€42.5m
Total GVA
contribution to the
Mid East in 2023

The seafood sector makes a significant contribution to the wider regional economy.

Table 1. The estimated benefits of the port seafood sector, Mid East, 2023

Port seafood sector	Mid East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	21.9	295	9.1
Indirect	16.5	220	6.3
Induced	4.1	35	1.7
Total	42.5	550	17.1

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

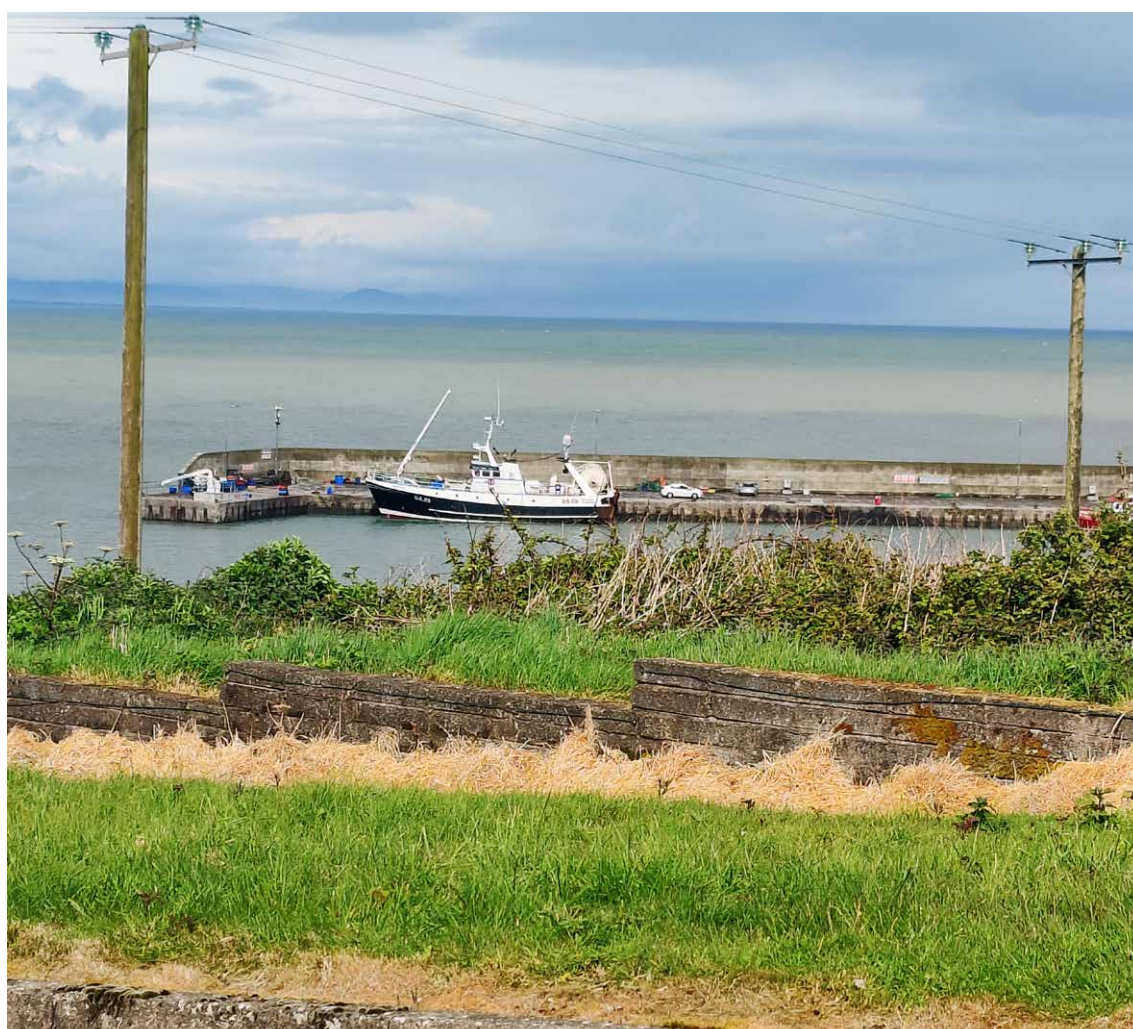
The role of the individual seafood sub-sectors

The analysis of the seafood sector at the port produced the following headline findings throughout the region (which again include the combined direct, indirect, and induced impacts).¹

- Activity in the commercial fishing sub-sector has been estimated to sustain 240 jobs, €8.8 million of gross wages and €22.6 million of GVA;
- The fish processing sub-sector has been estimated to sustain 320 jobs, €8.7 million of gross wages and €21.0 million of GVA;
- There was no aquaculture sub-sectoral activity at the port.

Socio-economic characteristics

Clogherhead has a growing working-age population, high economic participation, and relatively low unemployment rates. This may be due to the port being relatively close to urban centres like Dublin, Drogheda, and Dundalk. The seafood sector itself is likely to benefit from the economic activity taking place in these urban centres and local growth in the population (for demand for products and workforce).



¹ Summing the benefits of both sub-sectors would overestimate the indirect and induced impacts, and as a result, overall impacts. This is because the supply chain of the processing sub-sector would likely contain a proportion of the port's commercial fishing and its supply chain. To get the direct totals (for employment, GVA, and gross wages), the sectors were added together. However, for the indirect and induced totals, those of the processing sub-sector were summed with a proportionate share of commercial fishing (according to the proportion of sales not destined for local processors and informed by the interview process). The remainder of commercial fishing's indirect and induced impacts will already be accounted for within that of the processors.

1. Introduction

1.1 About the study

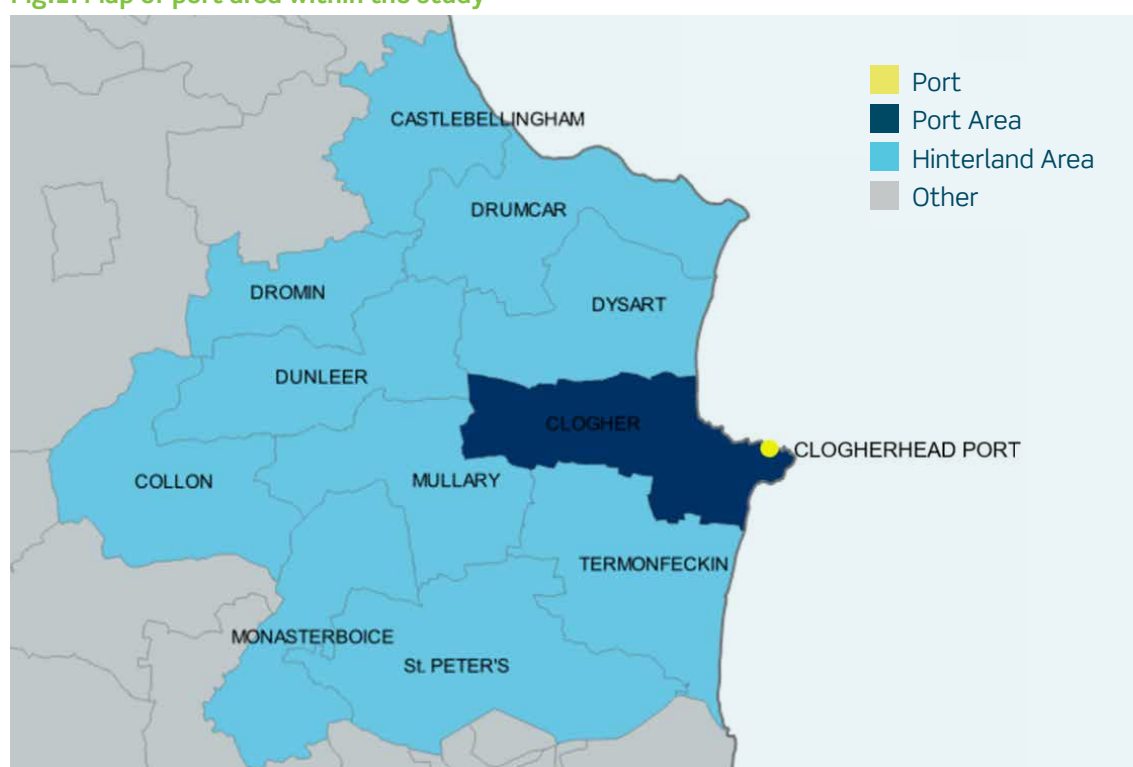
The Irish seafood sector is an important component of the Irish economy. It is particularly important to coastal communities around the country given its concentration at Ireland's ports and the relatively lower level of alternative economic activity in these economies. In addition, as economic and employment growth is increasingly driven by office-based activity which favours urban areas, the seafood sector's role in providing labour market opportunities, wages, and local demand in these local areas is arguably rising.

Against this backdrop, Bord Iascaigh Mhara (BIM) commissioned Oxford Economics and Perceptive Insights to estimate the economic contribution of the seafood sector in ten of Ireland's ports.

1.2 The port area

Clogherhead port is located on the Louth coast in the Mid East region. In this report the local port economy is defined as the District Electoral Divisions (DED) of Clogher and those surrounding it, which constitute its hinterland — informed by BIM and shown in the below figure.

Fig.1. Map of port area within the study



To inform the analysis, a comprehensive seafood-related survey exercise was carried out across Ireland's main ports. The researchers worked closely with BIM in order to, understand the seafood population at each of the 10 ports. Following this, the market research firm Perceptive Insight collected information concerning the characteristics of the local seafood sector through both telephone and electronic surveys.

Box 1: Introducing economic impact analysis

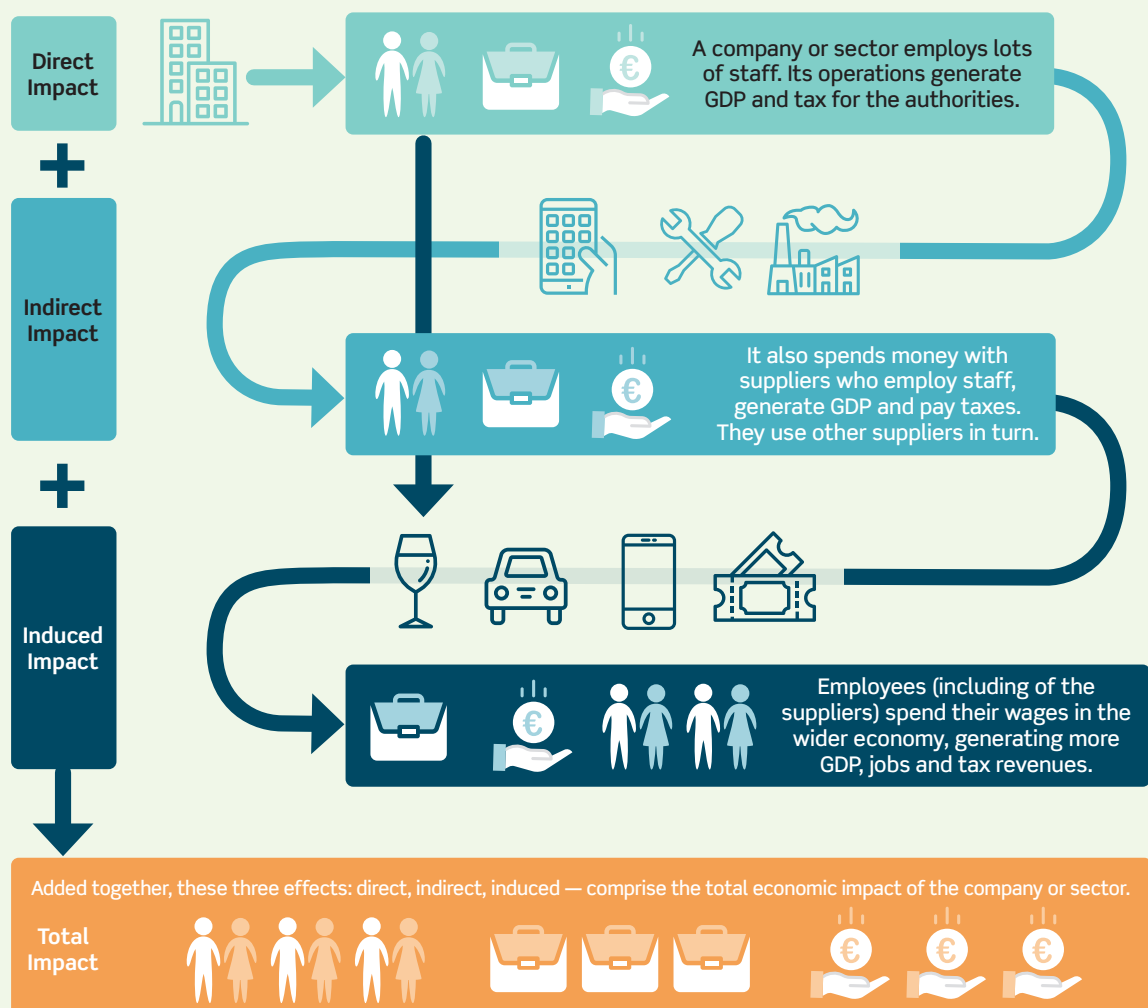
The economic impact of a sector is measured using a standard means of analysis called an economic impact assessment. The report quantifies the three 'core' channels of impact that comprise an organisation/sector's 'economic footprint':

- **Direct impact**, which is the economic activity the seafood sector generates because of its operations;
- **Indirect impact**, or supply chain impact, that occurs because the sector buys inputs of goods and services from Irish businesses;
- **Induced impact**, which relates to the wider economic benefits that arise when employees of the local seafood sector and its supply chain spend their wages in the consumer economy, for example in local retail establishments.

These channels of impact are analysed using three core metrics:

- **Employment**, measured on a Full-Time Equivalent (FTE) headcount basis. This is composed of both full-time employment and a proportion of part-time working component — where two part-time roles equate to a full-time position;
- **Gross value added (GVA)** contribution to GDP;
- **Tax receipts** generated by the Irish activity and employment supported by the seafood sector.

Fig. 2. Economic impact assessment



Source: Oxford Economics

In total there were 448 unique responses recorded from seafood operators based in the 10 port areas — a response rate of around 50%, relative to the known seafood population. For seafood businesses that did not return a response, the study relied on turnover and employment estimates which are based on survey responses of seafood businesses of a same size. The study also drew on published data where available to better understand the socioeconomic environment of coastal areas within the country. Appendix 1 of this report includes a summary discussion of the pertinent issues facing the local port economy.

1.3 The key elements of the local seafood sector

This paper presents estimates of the size of the local seafood sector and how it impacts the regional economy. The analysis therefore estimates the direct activity associated with the commercial fishing and fish processing subsectors at the port by drawing on the survey findings and information held by BIM. Their wider impacts within the local NUTS3 region are then estimated. These wider impacts include those associated with the seafood sector's supply chain and the consumer spending of those employed as a result of the direct and indirect activity — see Box 1 for more detail of the methodology.

The analysis is also careful to identify where the different seafood sub-sectors appear in the supply chains of the other subsectors. The most obvious example is commercial fishing appearing within the supply chain of fish processing. This analysis has isolated the benefits to avoid instances of double counting (see Appendix 2 for further information concerning the model approach).

1.4 Report structure

This report breaks down the characteristics of the collective seafood sector within the port area. It then goes on to show the economic impact this activity creates across the Mid East economy.

The report takes the following structure:

- An analysis of the seafood sector within the local port economy;
- A breakdown of the economic benefits associated with the port's seafood sector across the regional economy;
- A summary of the overall benefit associated with the port's seafood sector at the regional level;
- The conclusions.

2. The seafood sector at Clogherhead

2.1 Characteristics of the seafood sector

Fish processing forms the largest direct contribution to the seafood sector at Clogherhead. In 2023, it accounted for €32.9 million of turnover, or 56% of the local seafood sector total, ahead of commercial fishing (€25.8 million). Commercial fishing, however, provided more direct employment than processing, with its 175 jobs accounting for 59% of the total. There were no aquaculture activities present at the port.

Fish processing firms were larger on average than their commercial fishing counterparts. The five operators in fish processing generated an average turnover of over €6.6 million each, eight times larger than commercial fishing operators, which averaged €807,000 of turnover per firm. This highlights the ability of fish processors operating in Clogherhead to better exploit the economies of scale associated with industrialised processes.

Table 2. Headline direct economic contribution of the seafood sector, Clogherhead, 2023

	Turnover (€m)	Jobs	Gross wages (€m)	Seafood operators
Commercial fishing	25.8	175	5.4	32
Fish processing	32.9	120	3.7	5
Total	58.7	295	9.1	37

Source: Oxford Economics, Perceptive Insight, BIM

Note: May not sum due to rounding

To allow a comparison with the 2018 study, the result of that study have been inflated to 2023 prices (see Table 3).

Commercial fishing turnover increased by around 10.6% in real terms with a similar growth recorded within gross wages. Employment was down 2.8%.

For fish processing, turnover fell by an estimated 0.7% and wages by 67.2% while employment was up 50%. These unexpected and deviating changes are attributable to significant changes in the modelling inputs for one large business at the port. The survey results in 2018 were vastly different to the data held by BIM on that company. A sense check of both sets of data revealed that the input data for the current year is likely to be a more accurate representation of the company's performance.

Overall, turnover and employment increased by 4.0% and 13.5% respectively, while gross wages declined by 44.7%. The number of operators at the port was down 5.1%.

Table 3. Headline direct economic contribution of the seafood sector (2023 prices), Clogherhead, 2018

	Turnover (€m)	Jobs	Gross wages (€m)	Seafood operators
Commercial Fishing	23.4	180	5.1	32
Fish processing	33.1	80	11.3	7
Total	56.5	260	16.4	39

Source: Oxford Economics, Perceptive Insight, BIM

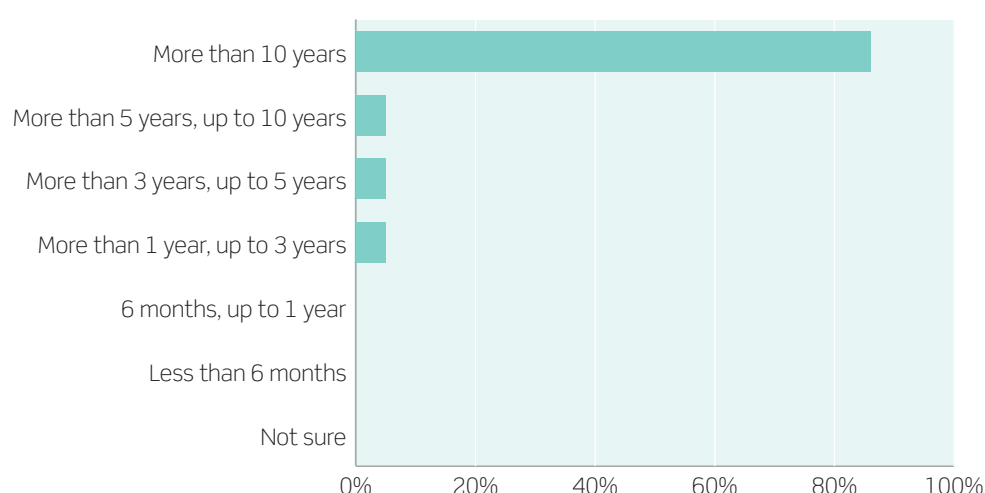
Note: May not sum due to rounding

The survey also provides insight into the profile of businesses operating at the port. Some 21 operators in Clogherhead were surveyed, 57% of the population of local seafood businesses. While the sample size for Clogherhead is somewhat smaller than for the ten ports as a whole — the results for which are detailed within the main report — the findings of respondents from the port are still explored.

The survey results show that seafood businesses within the port tended to be relatively mature and well established. A significant majority (86%) of respondents had operated for more than 10 years in the port area, above the aggregate figure for the ten ports (83%). A further 5% of respondents were at least five years old.

Fig. 3. Seafood sector maturity, Clogherhead, 2023

Share of port respondents



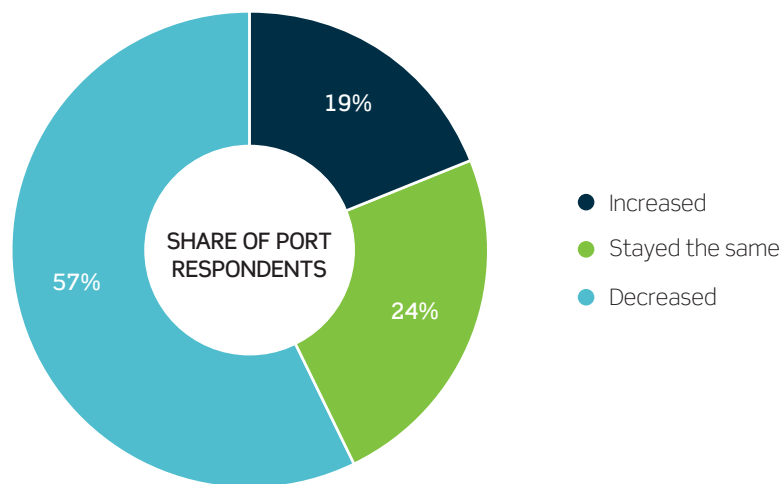
Source: Oxford Economics, Perceptive Insight

The survey also explored the recent performance of firms operating in the seafood sector. On balance, turnover declined over the previous 12 months; more than half (57%) of respondents indicated that it had decreased over this period, a share slightly above the aggregate rate for all ten ports (52%). A further 24% saw no change in turnover over this period, with less than one in five (19%) reporting an increase in turnover.

Turnover in 2018 was more stable; three-quarters of respondents at the time indicated that it had neither increased nor decreased over the period. The same proportion (13%) of firms saw turnover increase as decrease over this period.

While the sample size of respondents was not sufficient to provide an accurate breakdown of turnover performance by all activities, the survey does indicate that declining turnover was more prominent for commercial fishing operators than for fish processing at the port.

Fig. 4. Changes to turnover in the past 12 months, Clogherhead, 2023

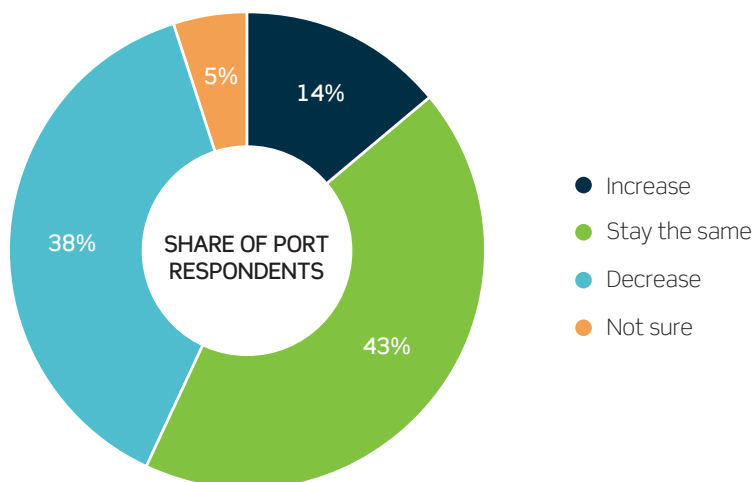


Source: Oxford Economics, Perceptive Insight

The outlook for turnover over the following 12 months was similarly pessimistic. Only 14% of respondents expected turnover to increase over this period, marginally below the average for the ten ports surveyed (16%). Although 38% expected turnover to decrease over the next year, 43% anticipated turnover would stay the same. This is the third highest of all surveyed ports, although this may in part reflect the relatively low sample size for this port.

The outlook for turnover in 2019 was more optimistic. Almost one-in-five respondents (19%) expected turnover to increase over this period, and similarly, none of the respondents expected turnover to decrease in 2019.

Fig. 5. Anticipated changes to seafood turnover, Clogherhead, 2023

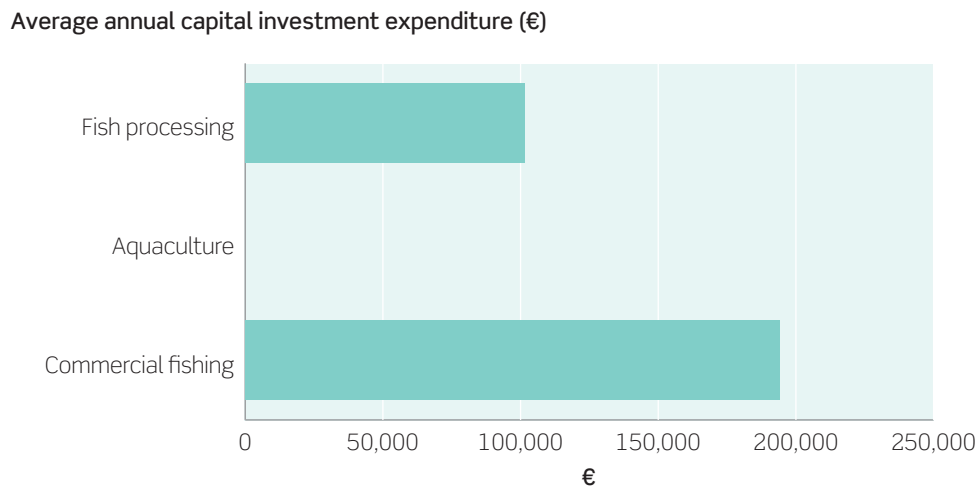


Source: Oxford Economics, Perceptive Insight

Improving turnover is often linked to investment: improving the quality and/or quantity of capital available to the workforce can enable improved productivity and turnover. The survey indicates that almost half (48%) of firms at Clogherhead spent money on capital investment in the previous year. This is a rate above the average for all ports (37%) and is the highest rate of all ports.

Not only did more firms engage in capital investment, their average spend also tended to be relatively high. Respondents at Clogherhead spent on average €166,500 each on capital investment in 2023, compared to €203,700 across the ten ports as a whole. Despite being below the ten-port average, Clogherhead had the third highest average capital investment (as the majority of spending occurred in two ports). Average investment by fish processing and commercial fishing operators at the port was €101,700 and €194,300, respectively.

Fig. 6. Average capital investment by firm, Clogherhead, 2023



Source: Oxford Economics, Perceptive Insight

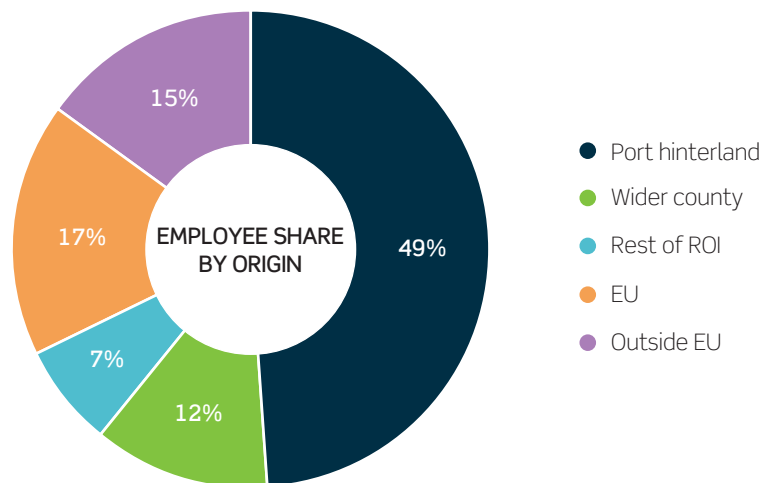
Alongside demonstrating the importance of the seafood sector in providing local job opportunities, the survey also sought to further understand the characteristics of this workforce — including where the seafood sector's employees came from. The results showed that almost half (49%) of workers in the seafood sector originate from the port hinterland, underlining the value of the seafood sector at Clogherhead to the local population. A further 12% of workers originate from elsewhere in the county. Almost a third (32%) were foreign nationals, mostly originating from the EU (17%).

The profile of the workforce is different across the commercial fishing and fish processing subsectors, with the latter having a higher share of workers from the port hinterland (63%, compared to 42% in the former). More than a third (36%) of the port's commercial fishing workforce are foreign nationals, with 23% having come from outside the EU. For the fish processing subsector, all 24% of their foreign national workforce came from within the EU.

The workforce was broadly similar across each of the three seafood sub-sectors in 2018, with a similar share of workers originating from the port hinterland across both commercial fishing (61%) and aquaculture (54%). While fish processing (35%) and commercial fishing (30%) employed a broadly similar proportion of foreign nationals, the composition was somewhat different; 14% of commercial fishing employees originated from the EU, and 17% from elsewhere, compared to 32% of workers in fish processing.

Given that almost half of the workforce originate from the port hinterland, it is not surprising that most workers tended to also live locally. A majority of the workforce resided within the port hinterland (61%), while a further 20% lived elsewhere in Co. Louth.

Fig. 7. Origins of the workforce, Clogherhead, 2023

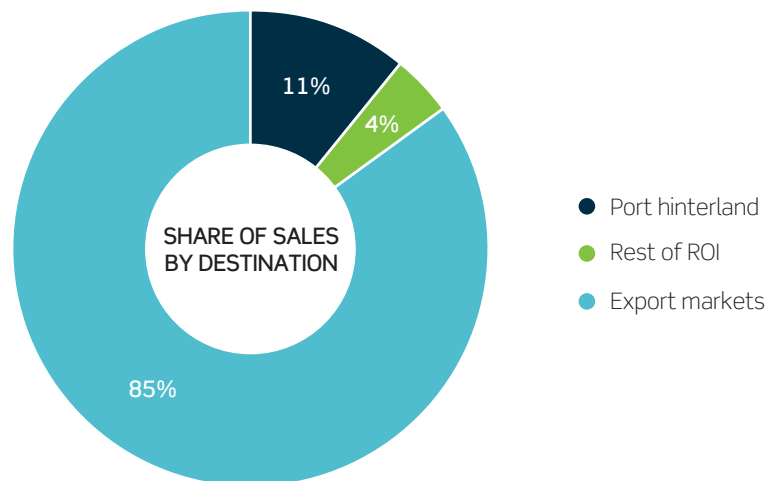


Source: Oxford Economics, Perceptive Insight

The survey also explored the destinations of sales made by seafood sector firms. Exports accounted for 85% of the total in Clogherhead, significantly above the ten ports combined (56%). Only 11% of sales were made within the port hinterland, the third lowest share across the ten ports, and ten percentage points below the ten ports average, while the remaining 4% of sales were made elsewhere in Ireland. Fish processors were more likely to export foods abroad (87%) than commercial fishing operators (79%), with the latter selling more within the port hinterland (16%) than the former (9%).

In the 2018 study, exports accounted for 48% of the total in Clogherhead. Only 16% of sales were made within the port hinterland while the remaining 36% of sales were made elsewhere in Ireland. Commercial fishing operators were both more likely to export foods abroad (59%) than fish processors (40%), and to sell within the port hinterland (34%) than this group (4%).

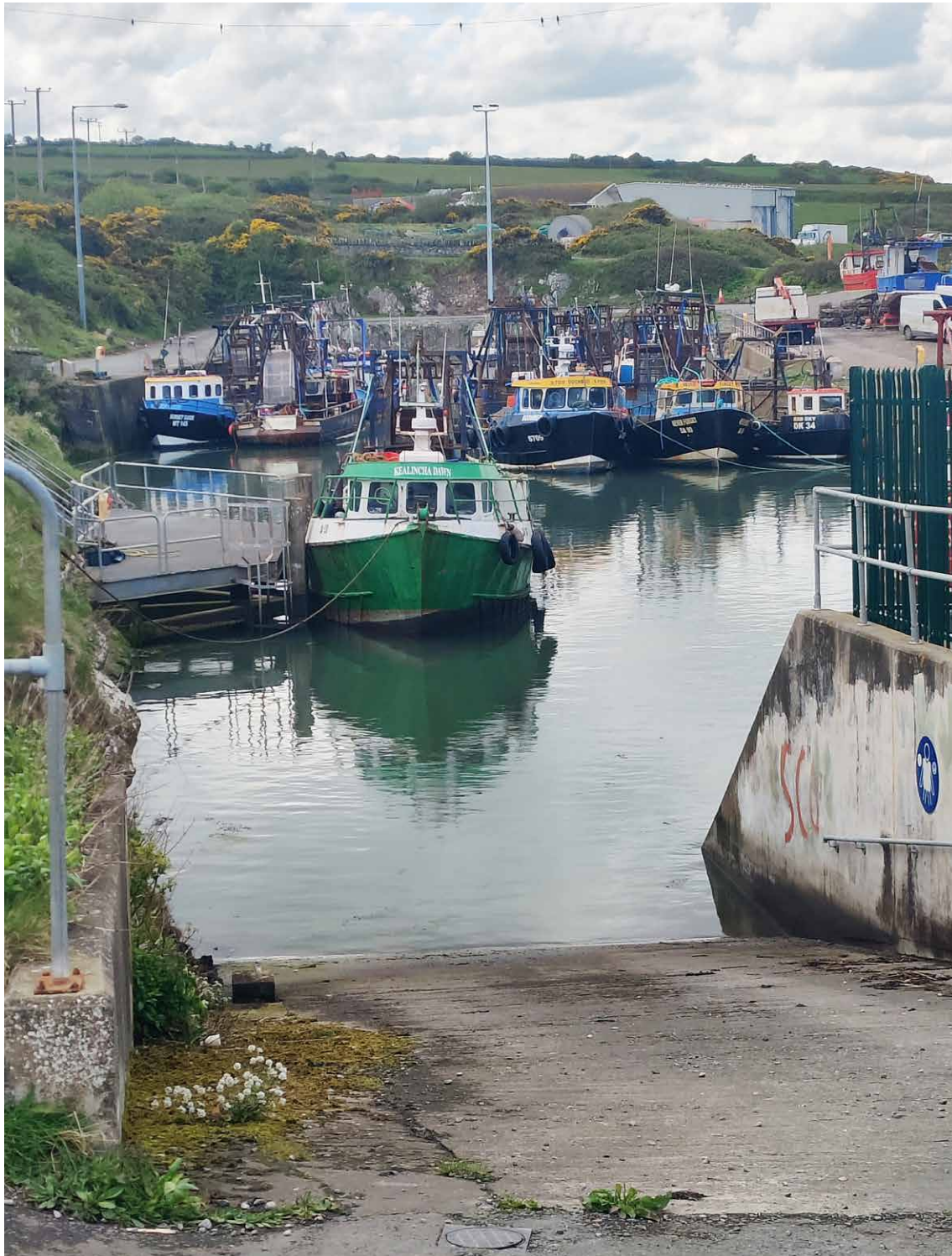
Fig. 8. Seafood sales by destination, Clogherhead, 2023



Source: Oxford Economics, Perceptive Insight

2.2 Conclusion

The survey explored the characteristics of firms operating in this sector. In general, firms were typically well-established, having operated for more than 10 years. The short-term outlook for the seafood sector is challenging, with more firms expecting turnover to decrease than increase over the following year, on the back of falling turnover for the previous 12 months. Almost half of firms invested in capital over the previous year, and those that did tended to invest relatively more than other seafood industries across Ireland's ports. The workforce tended to originate from the local area, while the endmarket for seafood sales was predominantly internationally focused, with exports accounting for 85% of the total.



3. The impact of seafood's subsectors

3.1 Commercial fishing

Commercial fishing at Clogherhead generated €22.6 million of GVA across the Mid East economy in 2023. Over a third of this GVA total (€8.5 million) was not directly generated by commercial fishing activities at the port itself, but resulted from the sub-sector's procurement activities (€6.3 million) and the wider consumer spending it supported in the regional economy (€2.2 million).

The 240 jobs supported by commercial fishing activity largely originated from commercial fishing activity itself, and supported €8.8 million in gross wages. The indirect and induced effects tended to occur in relatively higher value-added sectors, generating more GVA per worker on average — and higher average gross wages — when compared to the direct commercial fishing activity at the port. The commercial fishing activity at the port created an employment multiplier of 1.37 which was slightly higher than the employment multiplier of 1.34 in 2018.

Table 4. Benefits of the commercial fishing sub-sector, Mid East, 2023

Port commercial fishing	Mid East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	14.2	175	5.4
Indirect	6.3	45	2.5
Induced	2.2	20	0.9
Total	22.7	240	8.8

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

The agriculture, forestry and fishing sector accounted for just under two thirds of the GVA total generated by the port's commercial fishing activities, equivalent to €14.3 million in 2023. This sector's overall GVA contribution (including the indirect and induced) was only slightly above the direct contribution (€14.2 million), implying that the sector received relatively few of the indirect or induced benefits that resulted from the fishing activity. It was, however, remains the main beneficiary in employment terms, supporting 180 jobs in 2023, or 75% of the regional total.

Of the impact commercial fishing had on other sectors, wholesale and retail received the largest GVA benefit (€2.8 million) — linked largely to the sector's procurement spending throughout the Mid East economy — while manufacturing (€2.1 million) received the next largest contribution, as a result of both local spending and its role in the commercial fishing supply chain.

Table 5. Total benefits of commercial fishing by sector, Mid East, 2023

Port commercial fishing	Mid-East		
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	14.3	180	5.5
Mining and quarrying	0.0	0	0.0
Manufacturing	2.1	<5	0.6
Electricity, gas, steam and air conditioning supply	0.1	0	0.0
Construction	0.0	0	0.0
Wholesale and retail trade; repair of motor vehicles	2.8	30	1.4
Transportation and storage	0.4	5	0.2
Accommodation and food service activities	0.1	5	0.1
Information and communication	0.1	0	0.0
Financial and insurance activities	0.5	5	0.2
Real estate activities	0.8	0	0.0
Other business services	0.7	5	0.3
Public administration and defence	0.0	0	0.0
Education	0.1	<5	0.1
Human health and social work activities	0.4	10	0.4
Arts, entertainment and recreation & other services	0.1	<5	0.0
Total	22.5	240	8.8

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

3.2 Fish processing

Fish processing at Clogherhead supported 320 jobs, €21.0 million of GVA and €8.7 million in gross wages across the Mid East in 2023. Around 200 of these jobs were within either the fish processor's supply chain (180) or sectors which benefit from the resulting consumer spend that the direct activity supports (20). The fish processing employment multiplier therefore stood at 2.65 — meaning that every 10 direct fish processing jobs within the port supported an additional 16 jobs elsewhere within the regional economy. This multiplier effect was significantly stronger than that of the commercial fishing element of the local seafood sector (1.37). The employment multiplier was also higher than the employment multiplier from the 2018 study (2.41).

Table 6. Benefits of the fish processing sub-sector, Mid East, 2023

Port fish processing	Mid East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	7.8	120	3.7
Indirect	11.0	180	4.1
Induced	2.2	20	0.9
Total	21.0	320	8.7

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

The Mid East's manufacturing sector experienced the strongest benefit resulting from fish processing activity at Clogherhead. In 2023, it generated €9.4 million of GVA, equivalent to 45% of the total, and supported 120 jobs. Manufacturing also received a high share of the total gross wages (48%), representing €4.2 million. Meanwhile, the agriculture sector received around 25% of the gross wages benefit (€2.2 million) although it supported almost half (46%) of the total number of jobs (150).

The total gross wages associated with the port's fish processing subsector declined substantially on the previous iteration of this report. However, this was as a result of more accurate responses in the latest survey rather than a reflection of a decline in gross wages.

Table 7. Total benefits of fish processing by sector, Mid East, 2023

Ports processing	Mid-East		
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	6.1	150	2.2
Mining and quarrying	0.0	0	0.0
Manufacturing	9.4	120	4.2
Electricity, gas, steam and air conditioning supply	0.2	<5	0.1
Construction	0.0	0	0.0
Wholesale and retail trade; repair of motor vehicles	1.6	15	0.8
Transportation and storage	0.6	5	0.3
Accommodation and food service activities	0.1	5	0.1
Information and communication	0.1	0	0.0
Financial and insurance activities	0.5	5	0.2
Real estate activities	1.0	<5	0.0
Other business services	0.6	5	0.2
Public administration and defence	0.0	0	0.0
Education	0.1	<5	0.1
Human health and social work activities	0.5	10	0.4
Arts, entertainment and recreation & other services	0.1	5	0.1
Total	21.0	320	8.7

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

3.3 Conclusion

Both subsectors within Clogherhead had a significant economic impact. Commercial fishing supported an estimated 240 jobs, €8.8 million in gross wages, and €22.6 million in GVA throughout the Mid-East economy in 2023. Although the port's fish processing sub-sector supported less GVA and gross wages, its employment impact was larger, supporting 320 jobs across the region in comparison to the 195 jobs it supported in the last study in 2018.

4. Total impact of the seafood sector at Clogherhead

4.1 Seafood sector activity at the port

This section takes the estimates presented in the preceding sections of the report and calculates the total economic impact resulting from the activities of the seafood sector within the port area.

However, simply summing the respective benefits of both sub-sectors (commercial fishing and fish processing) would inevitably overestimate the indirect, induced and, as a result, total impacts. This is because the supply chains of the fish processing element contain a proportion of the commercial fishing sub-sector and its supply chains. Therefore, adding everything together would result in double counting some of the impacts. See Appendix 2 for further detail on our approach.

To avoid this double counting, the following approach has been taken to calculate total impacts for GVA, employment, gross wages, and tax:

Direct impacts

- Calculated by summing the direct impacts from the three elements of the seafood sector for GVA, employment, gross wages, and tax.

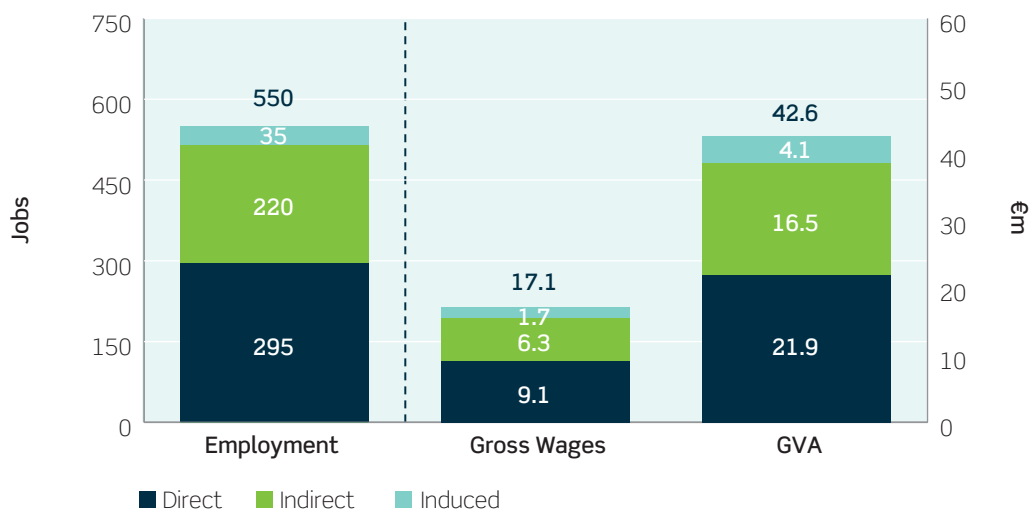
Indirect and induced impacts

- For GVA, employment, gross wages, and taxes, the total indirect and induced impacts are calculated by summing the indirect and induced impacts of fish processing and an 87% share of the indirect and induced impacts associated with the commercial fishing sub-sector. This is because information from the survey interviewees suggested that exports and domestic sales outside the port area's own processors account for 87% of commercial fishing's production. The remainder of the commercial fishing sub-sector's indirect and induced impacts will already be accounted for in the indirect and induced impacts from the fish processing sub-sector.

4.2 Regional estimates

It is estimated that the seafood sector at Clogherhead contributed €42.6 million of GVA to the Mid East economy in 2023. The port's seafood sector supported 550 jobs across the region, supporting €17.1 million in gross wages for those in employment.

Fig. 9. Benefits of the seafood sector, Mid East, 2023



Source: Oxford Economics, Perceptive Insight, CSO

Almost half (48%) of the total GVA figure (approximately €20.6 million) was generated either via indirect activities supporting the seafood sector (€16.5 million) or through additional induced spending that resulted from the employment supported by this sector and its supply chain (€4.1 million). This resulted in a GVA multiplier of 1.93 meaning that every €1 spent directly generated an additional €0.93 throughout the Mid-East. For comparison, the GVA multiplier for Clogherhead was 1.52 in the last study.

Table 8. Total seafood sector benefits, Mid East, 2023

Port seafood sector	Mid East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	21.9	295	9.1
Indirect	16.5	220	6.3
Induced	4.1	35	1.7
Total	42.5	550	17.1

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

Given commercial fishing's significant presence at the port, in addition to substantial supply chain impacts, the agriculture, forestry and fishing sector benefitted most from Clogherhead's seafood sector. The agriculture sector accounted for 330 jobs (59% of the total) and €20.4 million in GVA (48% of the total). The manufacturing sector also supported a significant portion of the total jobs (22%), with 125 jobs in this sector. This sector also generated €11.2 million in GVA, and €4.8 million in gross wages.

Wholesale and retail was the next largest beneficiary in GVA terms (€4.1 million), supporting an estimated 40 jobs, followed by real estate (€1.7 million).

Table 9. Total benefits by sector, Mid East, 2023

Local seafood sector	Mid-East		
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	20.4	330	7.7
Mining and quarrying	0.0	0	0.0
Manufacturing	11.2	125	4.8
Electricity, gas, steam and air conditioning supply	0.3	<5	0.1
Construction	0.0	0	0.0
Wholesale and retail trade; repair of motor vehicles	4.1	40	2.0
Transportation and storage	0.9	10	0.5
Accommodation and food service activities	0.2	5	0.2
Information and communication	0.3	0	0.1
Financial and insurance activities	0.9	5	0.4
Real estate activities	1.7	<5	0.1
Other business services	1.3	5	0.5
Public administration and defence	0.0	0	0.0
Education	0.2	5	0.2
Human health and social work activities	0.8	15	0.7
Arts, entertainment and recreation & other services	0.2	5	0.1
Total	42.5	550	17.4

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

4.3 Taxation estimates

Seafood activity at the port provides further benefits through the generation of tax revenues to the Revenue Commissioners. These fiscal impacts can again be split into their direct, indirect, and induced components depending on what channel of activity gave rise to them. The port seafood sector's direct tax contribution equated to a direct net fiscal surplus of an estimated €3.4 million in 2023, consisting of both the labour-based tax paid by the sector's employees (income tax, PRSI etc.) and corporation tax receipts.

The indirect fiscal benefits represent the same taxation components as above but are generated within the sector's wider supply chain, in addition to net taxes on input purchases and sectoral taxation on production less subsidies. Combined, these represented a tax deficit of €1.5 million. As those employed in the sector and within its supply chain spent their wages, this supported further jobs and activity within the Irish economy. This induced activity supported an estimated further €3.3 million in tax revenue.

Therefore, in total (i.e. direct, indirect, and induced), Clogherhead's seafood sector is estimated to have had a fiscal surplus of €5.2 million in 2023. This total was made up of €5.8 million in employment/labour related tax, €1.6 million in corporation tax, €1.8 million in taxation associated with the spending of wages, and a net tax deficit of €4.1 million through taxation on inputs and production.²

It was estimated that the Clogherhead seafood sector generated €6.9 million in taxes in 2018. This was made up of €3.9 million in employment/labour related tax, €1.3 million in corporation tax, €2.6 million in taxation associated with the spending of wages, and a net tax deficit of €0.9 million through taxation on inputs and production.³

² Net tax position refers to taxes less subsidies.

³ Tax figures related to the 2018 study are in 2023 prices.

Table 10. Fiscal impact by taxation type, Ireland, 2023

Ports seafood sector	Total tax estimates (€m)				
	Labour tax	Corporation tax	Production tax	Input purchases tax	Tax on consumption
Agriculture, forestry and fishing	2.0	0.7	-5.1	0.4	0.0
Mining and quarrying	0.0	0.0	0.0	0.0	0.0
Manufacturing	1.9	0.4	0.0	0.1	1.6
Electricity, gas, steam and air conditioning supply	0.1	0.0	0.1	0.0	0.0
Construction	0.0	0.0	0.0	0.0	0.0
Wholesale and retail trade; repair of motor vehicles	0.6	0.1	0.0	0.0	0.0
Transportation and storage	0.2	0.0	0.1	0.1	0.0
Accommodation and food service activities	0.1	0.0	0.0	0.0	0.2
Information and communication	0.1	0.0	0.0	0.0	0.1
Financial and insurance activities	0.2	0.0	0.0	0.0	0.0
Real estate activities	0.0	0.1	0.1	0.0	0.0
Other business services	0.2	0.1	0.0	0.0	0.0
Public administration and defence	0.0	0.0	0.0	0.0	0.0
Education	0.1	0.0	0.0	0.0	-0.1
Human health and social work activities	0.3	0.0	0.0	0.0	-0.1
Arts, entertainment and recreation & other services	0.0	0.0	0.0	0.0	0.0
Total	5.8	1.6	-4.8	0.7	1.8

Source: Oxford Economics, Perceptive Insight, CSO

4.4 Growth since 2018

Over the period 2018 to 2023, in real terms, Clogherhead had mixed results across all channels in GVA, employment, and gross wages. In the direct channel, GVA fell by 25.4% and gross wages by 44.7%, while employment grew by 13.5%. In the indirect channel, GVA increased by 98.8%, employment by 175%, and gross wages by 93.3%. In the induced channel, GVA, employment, and gross wages also fell by 41.1%, 50.0%, and 48.0%, respectively.

Overall, it's estimated Clogherhead experienced a real-term decline in GVA and gross wages of 4.7% and 25.8%, respectively. This was accompanied by growth in employment of 32.5%. This was due to seafood operators across commercial fishing and fish processing at Clogherhead port responding in the survey that their costs had increased since the last survey. As a result, these operators had increased supply chain spending and this resulted in larger impacts in the indirect channel.

4.5 Conclusion

In calculating the overall impact of the local seafood sector, the degree to which output from commercial fishing can appear in the supply chain of local fish processors was considered.

The analysis shows that the seafood sector at Clogherhead supported 550 jobs, €42.6 million in GVA, and €17.1 million in gross wages. Furthermore, this activity was estimated to have created a fiscal surplus of €5.2 million.

5. Conclusions

5.1 The seafood sector in Clogherhead

The seafood sector makes an important contribution to the Clogherhead economy. In 2023, the direct seafood sector at the port generated €58.7 million in turnover, supporting 295 direct jobs. Fish processing was the largest seafood sub-sector at the port, generating €32.9 million in turnover, while the remaining €25.8 million belonged to the commercial fishing component. When translated into GVA, the overall seafood sector made a €21.9 million direct contribution to the local port economy.

The survey explored the characteristics of firms operating in this sector. In general, firms were typically well-established, having operated for more than 10 years. The short-term outlook for the seafood sector was challenging, with 38% of firms expecting turnover to decrease over the following 12 months. Almost half of firms had invested in capital over the previous year, and those that had, invested relatively more compared to other seafood sectors across Ireland's ports. The workforce tended to originate from the local area, while the endmarket for seafood sales tended to be internationally focussed, with exports forming 85% of the total.

5.2 Commercial fishing is the main contributor

The commercial fishing sub-sector made the strongest contribution to the Mid East economy in GVA terms. In 2023, it generated €25.8 million in turnover, which translated into €14.2 million of direct GVA. This GVA total increases to €22.6 million when both the indirect and induced impacts across the rest of the regional economy were accounted for. The commercial fishing subsector is estimated to provide benefits of the following size:

- 175 direct jobs and €5.4 million of gross wages, producing €14.2 million of GVA;
- 45 indirect jobs and €2.5 million of gross wages, producing €6.3 million of GVA;
- 20 induced jobs and €900,000 of gross wages, producing €2.2 million of GVA.

Fishing			
	GVA	Employment	Wages
	Direct +8% since 2018	Direct -3% since 2018	Direct +6% since 2018
	Total +12% since 2018	Total -2% since 2018	Total +10% since 2018

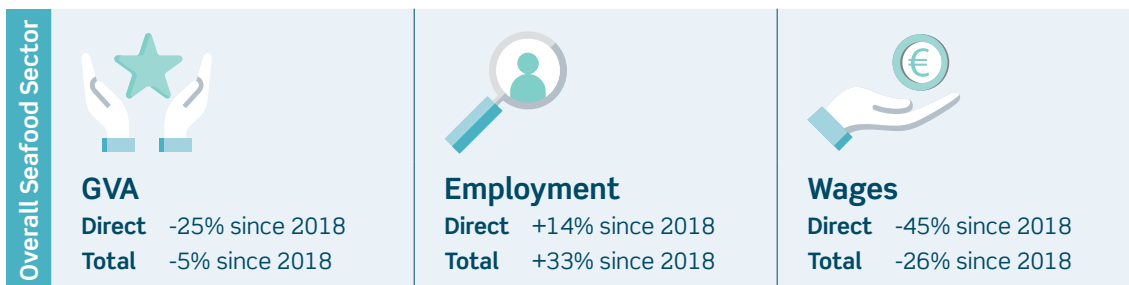
5.3 The fish processing subsector remains a significant component

Although the fish processing sub-sector's economic footprint is smaller than that of the local commercial fishing element in GVA terms, it remains an equally important part of the local seafood sector. Accordingly, the analysis shows the economic impact of the fish processing element was of the following size in 2023:

- 120 direct jobs and €3.7 million of gross wages, producing €7.8 million of GVA;
- 180 indirect jobs and €4.1 million of gross wages, producing €11.0 million of GVA;
- 20 induced jobs and €900,000 of gross wages, producing €2.2 million of GVA.



Therefore, it is estimated that the port's collective seafood sector supported 550 jobs, €17.1 million in gross wages and €42.5 million in GVA within the regional economy in 2023. This activity created a net fiscal surplus of €5.2 million. In comparison, once the results from the 2018 study are converted to 2023 prices, there was a decline in GVA and gross wages of 4.7% and 25.8%, respectively, while employment increased by 32.5%. This was due to seafood operators across commercial fishing and fish processing at Clogherhead port responding in the survey that their costs had increased since the previous survey. As a result, these operators had increased supply chain spending and this resulted in larger impacts in the indirect channel.



5.4 Seafood supporting peripheral economies

Clogherhead had a growing working-age population, high economic participation, and relatively low unemployment rates. This may be due to the port being relatively close to urban centres like Dublin, Drogheda, and Dundalk. The seafood sector itself is likely to benefit from the economic activity taking place in these urban centres and local growth in the population (for demand for products and workforce).

Appendix 1: Clogherhead's economic challenges

Economic activity and structure

The latest available data indicates that Clogherhead's labour market is performing relatively strongly. The local unemployment rate within the port area and its hinterland was relatively low at 7.9% in 2022, compared to the Mid-East region (8.2%) and Ireland overall (8.3%).⁴ At 57%, the local employment rate was also relatively strong, being slightly less than the Mid-East but larger than the national rate (see Table 11). Census data also reveals that the economic inactivity rate⁵ among those residents aged 15 and over was 38.1%, slightly higher than the Mid-East (37.5%) while lower than the national rate (38.8%).

Table 11. Headline economic indicator comparisons, 2022

	Unemployment rate	Employment rate	Economic inactivity
Clogherhead	7.9%	57.0%	38.1%
Mid-East	8.2%	57.4%	37.5%
Ireland	8.3%	56.1%	38.8%

Source: CSO

Demographics

The port area and hinterland's population grew by 11.9% in the six years between 2016 and 2022. Recent population growth was stronger than the national average (8.1%), but weaker than the significant growth experienced across the Mid-East region (32.8%). The working-age component of the population sat at 65.8%, above the regional and national shares. Clogherhead was the only port and hinterland with a working-age population share higher than that of Ireland.

Table 12. Population indicators, 2022

	Growth (2016-2022)		2022	
	Population	Working age	Population	Working age share
Clogherhead	11.9%	15.2%	32,500	65.8%
Mid-East	32.8%	33.1%	743,700	65.2%
Ireland	8.1%	7.8%	5,149,100	65.3%

Source: CSO

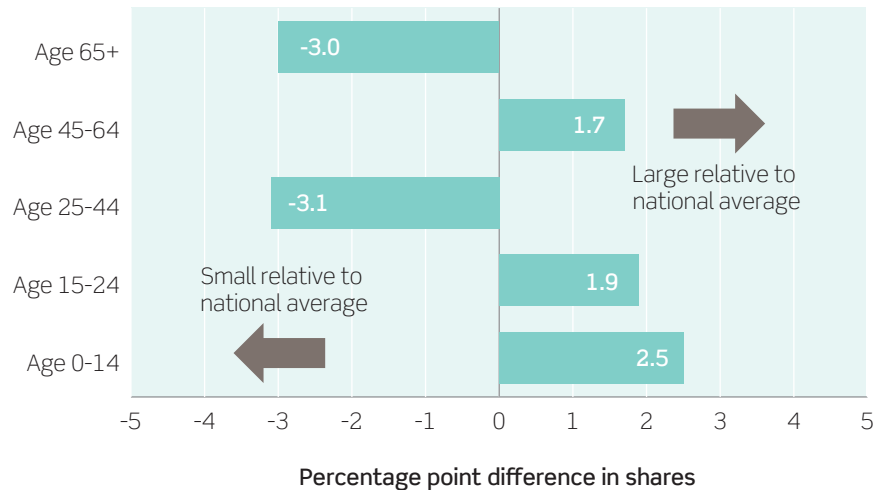
Note: Working age is defined as those aged between 15 and 64

⁴ Defined as a share of the labour force aged 15 years and over.

⁵ Economic inactivity represents the share of the population aged 15 and over who were neither employed nor looking for employment.

An analysis of port area's population by age cohorts relative to the national picture shows that the distribution was skewed at both the younger and older ends. Those aged 65 and over accounted for 12% of all residents — three percentage points below the national average in 2022. Those aged 25-44 were also under-represented within the local population. However, the share of young people under the age of 15 (22%) was somewhat higher than the national equivalent, indicating that recent growth in the working-age population is likely to continue into the future.

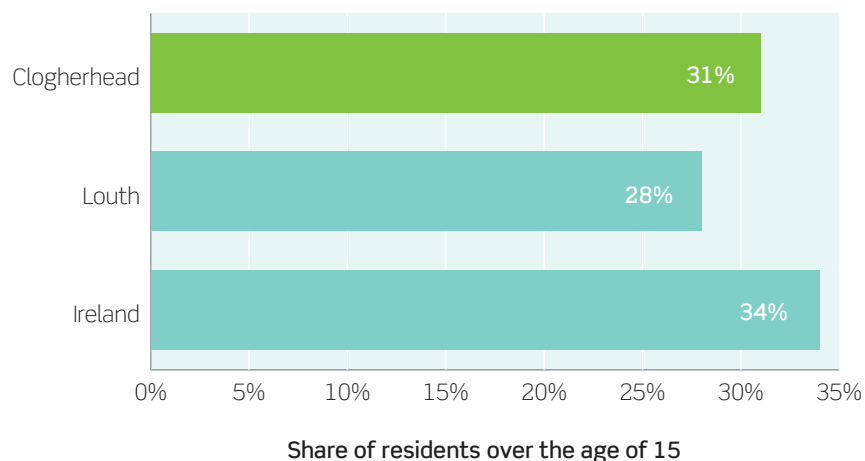
Fig 10. Age group comparisons, Port area vs Ireland, 2022



Source: CSO Ireland

Qualification attainment within the port area tended to be broadly similar to the pattern observed at the national level. Those with no formal qualifications or, at most, primary level education represented 10% of residents aged 15 and over in 2022, the same as the national rate. Higher level attainment among the port and its hinterland's residents was only marginally weaker than the national average. Those educated to degree level or above accounted for 31% of those age 15 and over in Clogherhead, compared to 34% on average across Ireland.

Fig. 11. Degree level or above attainment, 2022



Source: CSO

Summary

Clogherhead has a growing working-age population, high economic participation, and relatively low unemployment rates. This may be due to the port being relatively close to urban centres like Dublin, Drogheda, and Dundalk. The seafood sector itself is likely to benefit from the economic activity taking place in these urban centres and local growth in the population (for demand for products and workforce).

In comparison to the previous study, the unemployment rate had fallen from 12.1% in 2016 to 7.9% in 2022 while the employment rate had grown from 55.3% in 2016 to 57% in 2022. The working-age share rose from 63.9% in 2016 to 65.8% in 2022. The age group comparisons with the national average are slightly different to what they were in 2016 with the 15-24 years old and 45-64 years old groups being larger relative to the national average while in 2016 they were both slightly smaller. Clogherhead had also improved its educational attainment as those with a degree level qualification or above made up 26% in 2016 and 31% in 2022.

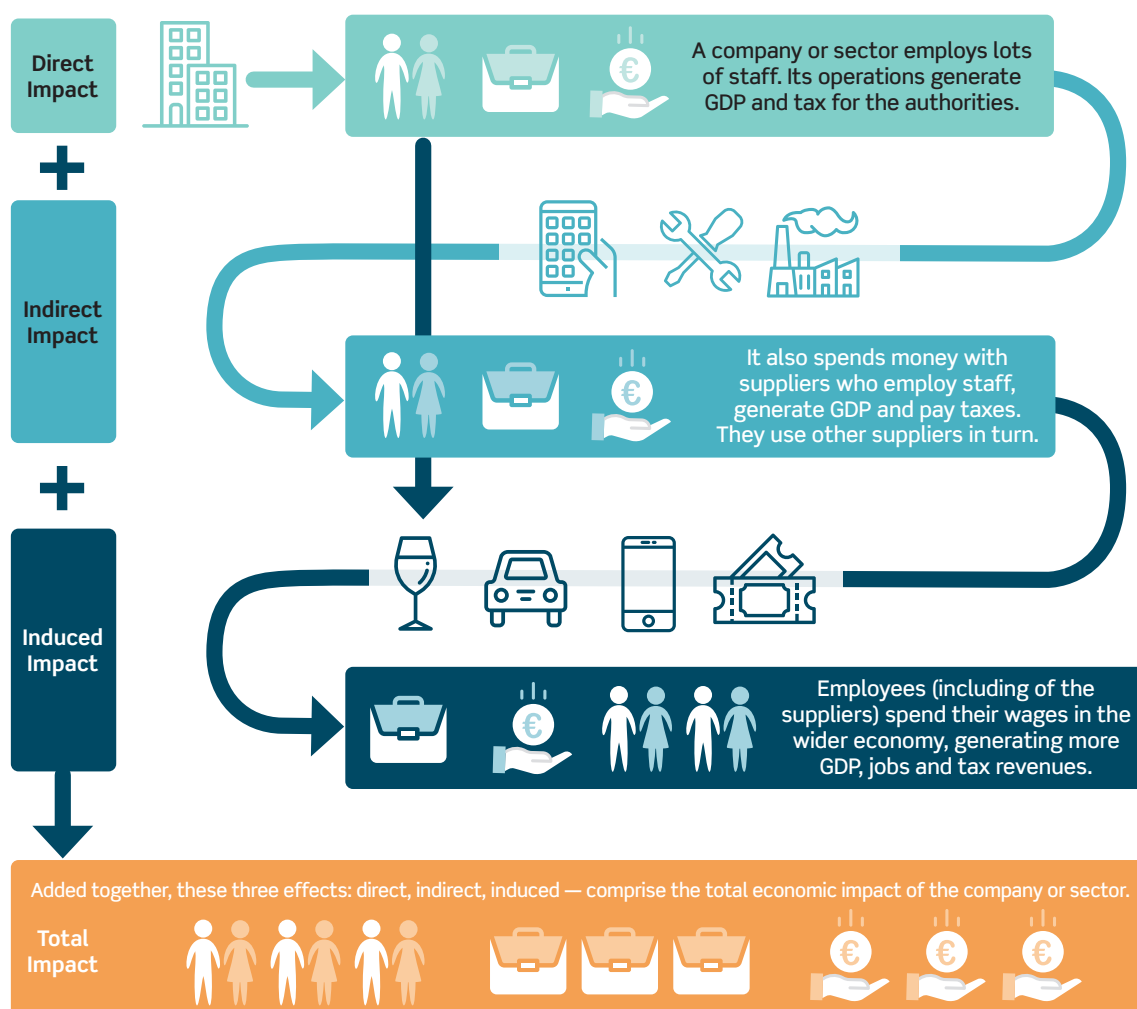


Appendix 2: Model approach

Understanding economic impact assessments

An economic impact assessment quantifies the total economic benefit created by a sector through a range of different channels. For the seafood sector at the ports this arises in four main ways. The first three are the standard channels through which economic impact is usually quantified: direct operational effects, supply chain effects, and the impact of employees spending their wages in the wider consumer economy. The fourth channel, known as 'catalytic' or 'dynamic' benefits represent the wider benefits that society and/or other industries derive from the original economic activity.

Fig. 12. Overview of economic impact methodology



Source: Oxford Economics

This report uses three main metrics to quantify each of the channels by which the seafood sector could contribute to the regional⁶ and national economy:

- **Gross value-added (GVA)** contribution to Gross Domestic Product (GDP):⁷ This measures the value of goods and services produced in an area, industry or sector of an economy and is equal to output minus intermediate consumption;
- **Employment:** Employment is presented in terms of full-time equivalent (FTE) jobs as defined in the report, the combination of workplace employment by full time and part time status;
- **Gross wages** is the total value of salary, bonus, and benefits offered to the workers associated with the local seafood sector.

All the data used was either provided by BIM (for example recent seafood operator registrations/industry data), the seafood sector survey carried out by Perceptive Insight, or published government website data and industry standards from the likes of CSO Ireland and Oxford's own economic databases. In the absence of data, reasonable assumptions based on best judgement are clearly rationalised in the study. For example, in the absence of port-specific data, published sources for comparator geographies are used as a proxy estimate where appropriate.

Estimating the direct economic contribution

The first step was to understand the direct activity associated with the local seafood sector at each of the 10 ports in 2023.

The survey

The seafood survey was designed to provide the evidence base from which to estimate the local seafood sector's contribution to the regional/national economy. Responses from the sector were analysed according to common characteristics (sub-sector, turnover band, main port area etc.) and cross referenced with the most recent full snapshot of the local seafood sector population.⁸

Sample estimates were then 'grossed' up to that of the total population. This was done by drawing on the BIM database of the seafood sector population in each port which contained fields on sector and turnover bands. Knowing indicative turnover levels for seafood businesses not captured in the survey, researchers were able to apply the average ratio of jobs to turnover level in that sector and apply average sectoral gross wages, etc. In other words, researchers utilised knowledge of the sectors and turnover of the missing companies and applied the ratios and averages of those covered in the survey to estimate their activity. The resulting total seafood-related turnover estimate was then split into the different sectors of the economy ('agriculture, forestry and fishing' and 'manufacture of food products').

This turnover figure is essentially the value of output within the local seafood sector and encompasses intermediary demand, gross wages, and profits. Using the sectoral ratios of output to GVA in the Irish input-output tables researchers estimated the direct sectoral GVA contributions to GDP in the local economy. Both direct employment and gross wages paid within the local port seafood sector were again informed by the survey findings, and grossed to the population total based on shared characteristics.

With this estimate of direct output and gross wages, sectoral taxation assumptions were then applied and the resulting fiscal benefits that would likely be collected by the Revenue Commissioners were calculated.

6 Ideally, the impacts of the seafood sector on the port area would be calculated, but there was not enough published sectoral employment, GDP and gross wage data. Sufficient data was only available at regional level to produce sub-national impacts.

7 GDP is the main summary indicator of economic activity in Ireland. GDP can be defined as GVA plus taxes on products less subsidies on products. References to economic growth (or when the economy enters recession) typically relate to the rate of change of GDP. All references in this report relate to GVA; also known as GDP at 'basic prices'; and they exclude taxes and subsidies.

8 Provided by BIM and informed by the most recent fishery registrations and activity listings in the aquaculture and processing sectors. Turnover bands were also assigned to the local seafood population based on returns when available, and when not, estimated by BIM based on shared characteristics.

An input-output model was used to estimate the indirect and induced impacts. Fig. 13 presents a stylised version (showing just three sectors for presentation purposes) of the input-output model, which is a model that traces how economic activity flows through an economy as one sector makes purchases from another sector.

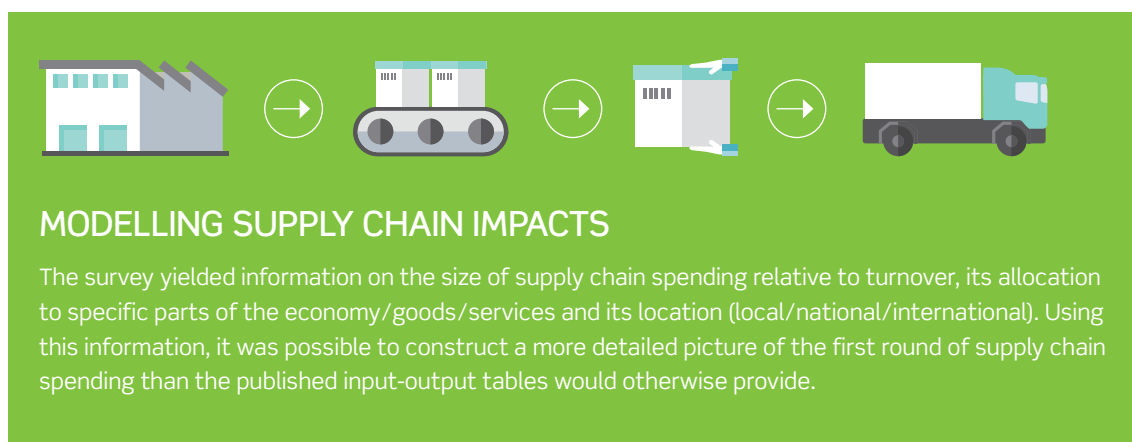
The diagram illustrates the circular flow of income and products between three industries, consumer spending, other final demand, and total outputs/inputs. The flows are as follows:

- Industry 1, 2, 3** (Light Blue Box):
 - Industry 1: C 1,1
 - Industry 2: C 2,1
 - Industry 3: C 3,1
- Consumer Spending** (Dark Blue Box):
 - C 4,1
- Other Final Demand** (Dark Blue Box):
 - C 5,6,7,1
- Total Outputs** (Light Blue Box):
 - C 8,1
- Employment** (Dark Blue Box):
 - C 1,4
- Incomes** (Dark Blue Box):
 - C 1,5
- Leakages** (Dark Blue Box):
 - C 1,6,7
- Total Inputs** (Light Blue Box):
 - C 1,8

The flows are represented by arrows:

- From **Industry 1, 2, 3** to **Employment** (Light Blue Arrow).
- From **Employment** to **Incomes** (Dark Blue Arrow).
- From **Incomes** to **Consumer Spending** (Dark Blue Arrow).
- From **Consumer Spending** to **Other Final Demand** (Dark Blue Arrow).
- From **Other Final Demand** to **Total Outputs** (Dark Blue Arrow).
- From **Total Outputs** to **Industry 1, 2, 3** (Dark Blue Arrow).

The latest Irish input-output tables were used for the analysis, but were adjusted in line with academic guidelines (Flegg, A. T. and Tohmo, T. (2013) “Regional input-output tables and the FLQ formula: A case study of Finland”) to account for the size and structure of the local economy.⁹ The technique involves constructing sub-national input-output models by applying Location Quotients (LQs) and sub-national size adjustments to the standard Ireland input-output tables. The result is that geographies with higher concentrations of industries receiving procurement or household expenditure have larger impacts. In addition, information gathered from the survey was used to further isolate the procurement spend locally, thereby strengthening the overall modelling assumptions.



28

The impact model was then used to estimate all the **rounds of supply chain or indirect spending** of the local seafood sector. The input-output tables provided an estimate of indirect output by sector. This output was converted back into sectoral GVA and into sectoral jobs to provide a range of sectoral impact measurements. The application of average sectoral salaries allowed the income effect to be estimated.

The induced impact is economic activity and employment supported by those directly or indirectly employed spending their income on goods and services in the wider economy. This helps to support jobs in the industries that supply these purchases, and typically includes jobs in retail and leisure outlets, companies producing consumer goods and in a range of service industries. Again, the input-output model was used to estimate the induced impacts.

Overcoming double-counting

Throughout the analysis the impact estimates are presented for the core elements of the seafood sector — commercial fishing, aquaculture, and fish processing. However, when estimating the total impact of the overall ports seafood sector, simply summing the respective benefits of all three sub-sectors would inevitably over-estimate the indirect and induced and as a result, total impacts. This is because the supply chains of the processing element contain a proportion of the fishing/aquaculture sub-sectors and their supply chains. Therefore, adding everything together would result in double counting some of the impacts.

To avoid this double counting, the following approach was taken to calculate total impacts for GVA, employment, gross wages, and tax:

Direct impacts:

- Calculated by summing the direct impacts from the three elements of the seafood sector for GVA, employment and gross wages.

Indirect impacts:

- For GVA, employment, and gross wages, total indirect impacts are calculated by summing the indirect impacts of processing and a share of the indirect impacts from the fishing and aquaculture sub-sectors (as indicated by survey responses showing the extent to which local processors account for their total sales). The remainder of the fishing/aquaculture sub-sectors' indirect impacts will already be accounted for in the indirect impacts from the processing sub-sector.

Induced impacts:

- For GVA, employment, and gross wages, total induced impacts are calculated by summing the induced impacts of the local processing sector and a share of the induced impacts from the commercial fishing and aquaculture sub-sectors (as indicated by survey responses showing the extent to which local processors account for their total sales). The remainder of the fishing and aquaculture sub-sectors' induced impacts will already be accounted for within the induced impacts from the fish processing sub-sector.





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