The Economic Impact of the Seafood Sector: Kilmore Quay

May 2025

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine

Arna chomhchistiú ag an Aontas Eorpach
Co-Funded by the European Union

BIM Ireland's Seafood Development Agency

OXFORD ECONOMICS

Oxford Economics was founded in 1981 as a commercial venture with Oxford University's business college to provide economic forecasting and modelling to UK companies and financial institutions expanding abroad. Since then, we have become one of the world's foremost independent global advisory firms, providing reports, forecasts, and analytical tools on more than 200 countries, 100 industries, and 8,000 cities and regions. Our best-in-class global economic and industry models and analytical tools give us an unparalleled ability to forecast external market trends and assess their economic, social, and business impact.

Headquartered in Oxford, England, with regional centres in New York, London, Frankfurt, and Singapore, Oxford Economics has offices across the globe in Belfast, Boston, Cape Town, Chicago, Dubai, Dublin, Hong Kong, Los Angeles, Mexico City, Milan, Paris, Philadelphia, Stockholm, Sydney, Tokyo, and Toronto. We employ 700 staff, including more than 450 professional economists, industry experts, and business editors — one of the largest teams of macroeconomists and thought leadership specialists. Our global team is highly skilled in a full range of research techniques and thought leadership capabilities from econometric modelling, scenario framing, and economic impact analysis to market surveys, case studies, expert panels, and web analytics.

Oxford Economics is a key adviser to corporate, financial, and government decision-makers and thought leaders. Our worldwide client base now comprises over 2,500 international organisations, including leading multinational companies and financial institutions; key government bodies and trade associations; and top universities, consultancies, and think tanks.

May 2025

BIM Contact:

Richard Curtin: Richard.Curtin@bim.ie

The modelling and results presented here are based on information provided by third parties, upon which Oxford Economics has relied in producing its report and forecasts in good faith. Any subsequent revision or update of those data will affect the assessments and projections shown.

To discuss the report further please contact:

Neil McCullough: nmccullough@oxfordeconomics.com

Oxford Economics
Flax House, 83-91 Adelaide Street, Belfast, BT2 8FE, UK
Tel: +44 289 263 5416

Table of contents

Foreword

The Economic Impact of the Seafood Sector: Kilmore Quay

In 2024, BIM completed its second evaluation of Ireland's top ten ports, providing a five-year comparative analysis of the economic contribution of the seafood sector. This report builds on the 2019 assessment, offering insights into the sector's evolving role at the port, regional, and national levels. It captures key economic trends and structural changes over this period, reflecting the challenges and opportunities faced by the industry. The study examines the direct, indirect, and induced effects of the seafood sector on the Kilmore Quay hinterland, illustrating its continued significance to the local economy.

Kilmore Quay, located in the southeast of Ireland, is an important whitefish port with significant fish processing activity. The local economy is shaped by seafood, tourism, and agriculture, with strong access to international markets via Rosslare port. While Kilmore Quay is relatively small, the seafood sector remains the primary economic driver, sustaining local employment and business activity.

Findings from this report highlight the significant economic impact of the seafood sector, particularly in terms of Gross Value Added (GVA), employment, and wages. Direct seafood activity at the port generates over €71 million in turnover, supporting 275 direct jobs, with the fish processing sector remaining the primary driver. Direct GVA at the port is €35 million, while an additional €19.7 million is generated upstream. Alongside the 275 direct jobs, a further 225 jobs are supported in the wider economy. Direct wages total €11 million, with an additional €8 million generated through indirect effects.

Over the past five years, the seafood sector in Kilmore Quay has faced significant declines. Direct GVA, employment, and wages have fallen by 26%, 45%, and 28%, respectively. The wider seafood economy has also contracted, with GVA declining by 17%, employment by 31%, and wages by 24%. The overall employment multiplier effect has increased slightly, from 1.94 to 2.19, reflecting shifts in supply chain spending.

As part of the consultation process for this report, BIM engaged with seafood operators, fish processors, and other industry stakeholders in Kilmore Quay to discuss sectoral trends, challenges, and future prospects. Stakeholders reported declining fish stocks, particularly in whitefish and scallop fisheries, alongside increased competition in the pot fishery as key concerns. Crew shortages and rising fuel costs were cited as major issues, with vessel owners struggling to recruit and retain staff. In the processing sector, demand for high-value seafood products has weakened, leading to price drops and financial pressure on businesses. While port infrastructure has improved in recent years, including dredging and marina upgrades, competition for space remains a challenge. The impact of Offshore Renewable Energy (ORE) developments was also raised, with stakeholders concerned about potential restrictions on key fishing grounds.

This report provides a detailed analysis of these economic trends, offering valuable insights to support industry stakeholders and inform policy discussions for the continued development of the seafood sector in Kilmore Quay.

Executive summary

The seafood sector at the port

The seafood industry makes a significant contribution to the economy of Kilmore Quay and the South East region. In 2023, direct seafood activity at the port generated €71.5 million in turnover, supporting 275 direct jobs. Fish processing is the largest sub-sector at the port, generating €43.3 million in turnover, followed by commercial fishing (€26 million) and aquaculture (€2.3 million). When translated into GVA, the seafood sector made a €35.1 million direct contribution to the local port economy.[1]

The survey of the local seafood industry identified the key characteristics of the business environment. There is a less mature seafood sector at Kilmore Quay relative to the other ports, and operators typically report a highly local workforce. Only 16% of operators reported an increase in sales in the previous year, while only 13% thought their sales would increase in the future. This uncertainty and poor outlook meant there was little capital investment in 2023; Kilmore Quay had the largest share of respondents from the ten ports surveyed who had not invested in capital. In terms of performance, turnover has typically been unstable.

The seafood sector's workforce at Kilmore Quay tends to be very local, with 86% originating from the port hinterland. Most seafood sales go overseas, with just 31% sold within the port hinterland.

Analysis of the survey results allows the port's seafood sector value within the regional economy to be quantified. Once the indirect and induced effects are calculated, the total economic contribution of the seafood sector at Kilmore Quay equated to an estimated €54.8 million of value added across the South East in 2023. The port's seafood sector supported an estimated 500 jobs across the region, and generated €19.1 million in gross wages. This activity was associated with a net fiscal surplus of €7.0 million. When compared to the results of the last study in 2018, it was estimated that Kilmore Quay experienced a real terms decline in GVA, employment and gross wages of 17.2%, 30.6% and 24.4%, respectively. The only channel that experienced growth in GVA and in employment terms was the indirect channel due to increased costs across seafood operators surveyed, resulting in larger impacts in the supply chain.

€35.1m
Direct GVA in 2023
The seafood sector makes a significant contribution within the port economy.

€54.8m
Total GVA contribution to the South East in 2023
The seafood sector makes an even larger contribution to the wider regional economy.

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

Ports seafood sector	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	35.1	275	11.5
Indirect	14.5	185	5.6
Induced	5.2	40	1.9
Total	**54.8**	**500**	**19.1**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not sum due to rounding*

1 Gross Value Added (GVA) is the difference between the value of goods and services produced by a business or a sector, and the cost of raw materials and other inputs which are used in production. It is essentially a measure of the value added to the services or products provided by a sector or firm.

The role of the individual seafood sub-sectors

The analysis of the seafood sector at the port produces the following headline findings throughout the region (which again includes the combined direct, indirect and induced impacts).[2]

- Activity in the commercial fishing sub-sector has been estimated to sustain 200 jobs, €8.1 million of gross wages and €18.6 million of GVA;
- Activity in the aquaculture sub-sector has been estimated to sustain 20 jobs, €0.4 million of gross wages and €1.9 million of GVA;
- The fish processing sub-sector has been estimated to sustain 320 jobs, €12.3 million of gross wages and €34.2 million of GVA.

Socio-economic characteristics

Sectors which are closely aligned with the seafood sector are important employers within the Kilmore Quay economy. Furthermore, educational attainment trends suggest that local skills more closely match employment opportunities in these sectors.

Linked to this, employment rates are below the national average, and economic inactivity is relatively high. As a result, the seafood sector is likely to play a significant role in the local port economy through its provision of direct jobs, supply-chain spending in local businesses, and the consumer spending it supports. Looking forward, a vibrant and growing local seafood sector will be important for the economic and demographic health of the local area.

2 Summing the benefits of all three elements within the definition of the seafood sector (fishing, aquaculture and processing) would overestimate the indirect and induced impacts, and as a result, overall impacts. This is because the supply chain of the processing sub-sector will likely contain a proportion of the port's fishing sub-sector and its supply chain. To get the direct totals (for employment, GVA and gross wages), all the three sub-sectors are added. However, for the indirect and induced totals, those of the processing sub-sector are summed with a proportionate share of the fishing and aquaculture (according to the proportion of sales not destined for local processors and informed by the interview process). The remainder of the fishing and aquaculture 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 even more important to coastal communities, 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 coastal 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

Kilmore Quay is a small village centred around a fishing port and marina. Located in Co. Wexford, the village is close to the county town, Wexford. In this report, the local port economy is defined as the District Electoral Division (DED) of Kilmore 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 authors 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

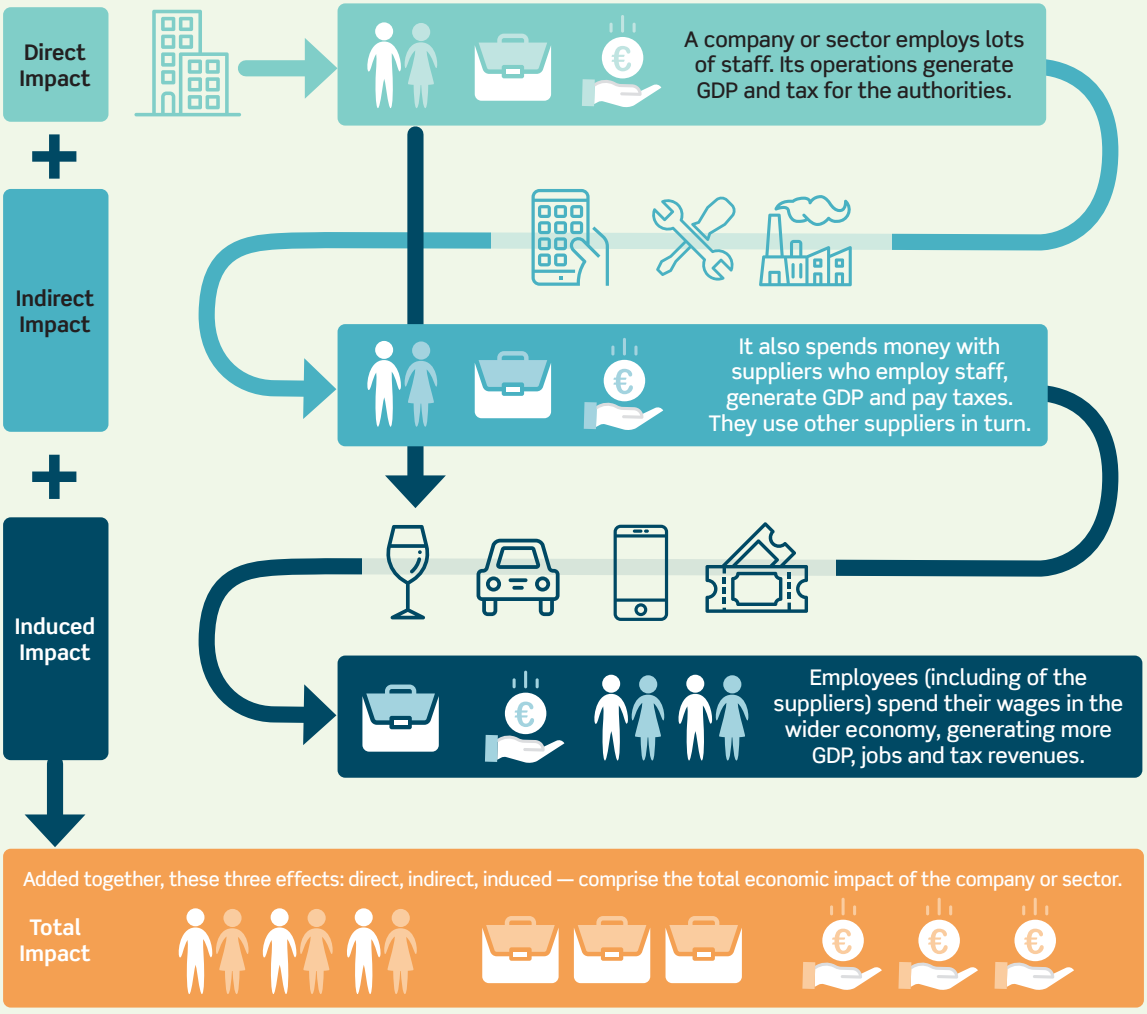
The economic impact of a sector is measured using a standard means of analysis called an economic impact assessment. The report quantifies the three 'core' channels of impact that comprise an organisation/sector's 'economic footprint':

- **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



A total of 448 unique responses were 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 from seafood businesses sharing similar characteristics. The study also drew on published data, where available, to better understand the socioeconomic environment of coastal areas within the country. Peripheral economies tend to face significant challenges from which Kilmore Quay is not exempt. 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

Estimates of the size of the local seafood sector and how it impacts the regional economy are presented in this paper. The analysis therefore estimates the direct activity associated with the commercial fishing, aquaculture and fish processing sub-sectors 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 concerning the methodology.

The analysis is also careful to identify where the three different seafood sub-sectors appear in the supply chains of the other sub-sectors. The most obvious example is commercial fishing appearing within the supply chain of fish processing. The 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 South 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 Kilmore Quay

2.1 Characteristics of the seafood sector

Within the local seafood industry, fish processing is the largest direct contributor to the local port economy. In 2023, this sector generated €19.7 million in GVA to the local economy, more than commercial fishing (€13.9 million) and aquaculture (€1.6 million) combined.

Fish processing also made the largest contribution to employment, supporting 135 full-time equivalent roles across three separate firms. Commercial fishing employed 120 people across 47 operators, highlighting the small number of average employees for fishing vessels compared to employee numbers for processing plants. Aquaculture supported an additional 20 direct jobs. Turnover was highest for fish processing; at €43.3 million, it accounted for over half of the seafood turnover total, and generated €6.8 million in gross wages to Kilmore Quay workers. By contrast, the gross wage bill for commercial fishing was lower (€4.5 million) despite similar number of jobs on offer, highlighting the gross wage differential between the different sub-sectors in 2023.

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

	Turnover (€m)	Jobs	Gross wages (€m)	Seafood operators
Commercial fishing	26.0	120	4.5	47
Aquaculture	2.3	20	0.3	2
Fish processing	43.3	135	6.8	3
Total	**71.5**	**275**	**11.5**	**52**

Source: *Oxford Economics, Perceptive Insight, BIM*
Note: *May not sum due to rounding*

To allow comparison with the last study, the results of the 2018 study have been inflated and are presented here in 2023 prices (see Table 3).

Commercial fishing turnover fell around 37.4% in real terms with similar falls recorded in employment and gross wages, despite growth in the number of operators.

Similarly, the aquaculture sub-sector experienced significant falls across all metrics with turnover, employment and gross wages all falling, by 46.9%, 60% and 72.2%, respectively. This is in line with the number of operators in this sub-sector in Kilmore Quay falling by 71.4%.

For fish processing, turnover and employment fell by an estimated 7.6% and 35.7% while gross wages increased by 8.4%. These results appear highly variable but are accurate as survey responses were received from all three operators within this sub-sector.

Overall, turnover, employment and gross wages are down, by 22.8%, 45% and 27.6%, respectively, while the number of operators has fallen by 7.1%.

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

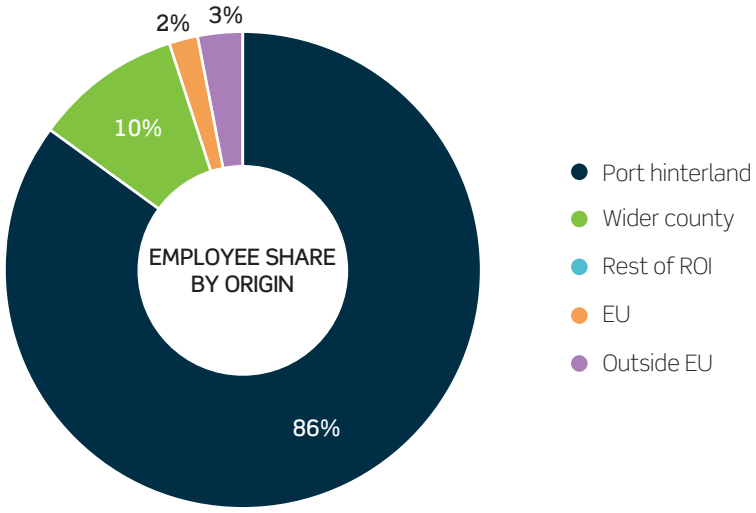
	Turnover (€m)	Jobs	Gross wages (€m)	Seafood operators
Commercial fishing	41.4	240	8.7	43
Aquaculture	4.2	50	1.0	7
Fish processing	46.8	210	6.3	6
Total	**92.5**	**500**	**16.0**	**56**

Source: *Oxford Economics, Perceptive Insight, BIM*
Note: *May not sum due to rounding*

In addition to the headline figures, the survey of the local seafood sector sought to gain insight into the business environment in which these seafood firms were operating. Seeking to better understand the role of Kilmore Quay in the context of regional, national and wider economies, the survey examined the employment supported by the local seafood sector. It looked first at where employees came from, and found that 86% hailed from the port area and its hinterland, the second highest rate of local workforce among the 10 ports studied. This reinforces the importance of the seafood industry for the local people. Of the remaining workforce, 10% came from elsewhere in the county, and 5% were international workers, both EU (2%) and Non-EU (3%).

In the last study, the exact same (86%) share of employees were found to have originated from the port area and its hinterland. Of the rest, 8% came from the wider county and 6% from the EU.

Fig. 3. Workforce origin, Kilmore Quay, 2023

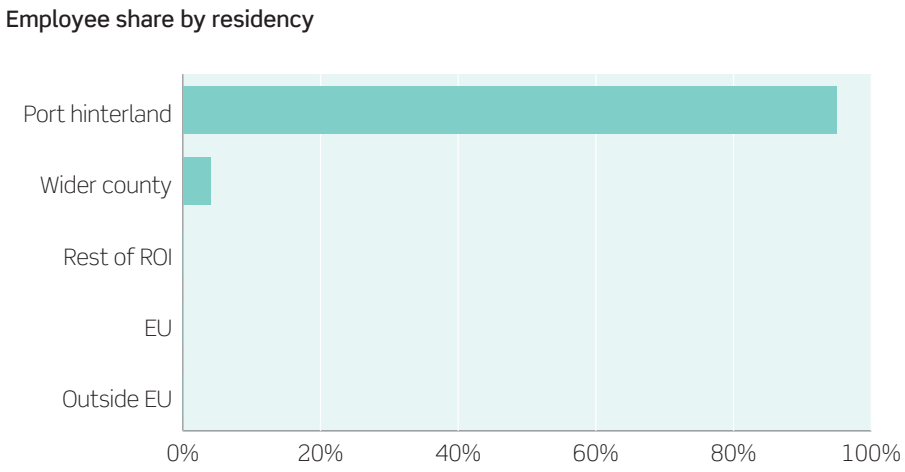


Source: *Oxford Economics, Perceptive Insight*

This picture was broadly replicated across the three seafood sub-sectors, with at least 95% of workers in each sector originating from the county, the vast majority from the port hinterland. One hundred percent of fish processing businesses surveyed claimed their workforce was local to the Kilmore Quay area.

Unsurprisingly, given the high concentration of locals in the Kilmore Quay seafood sector, 95% of employees also lived within the port hinterland.

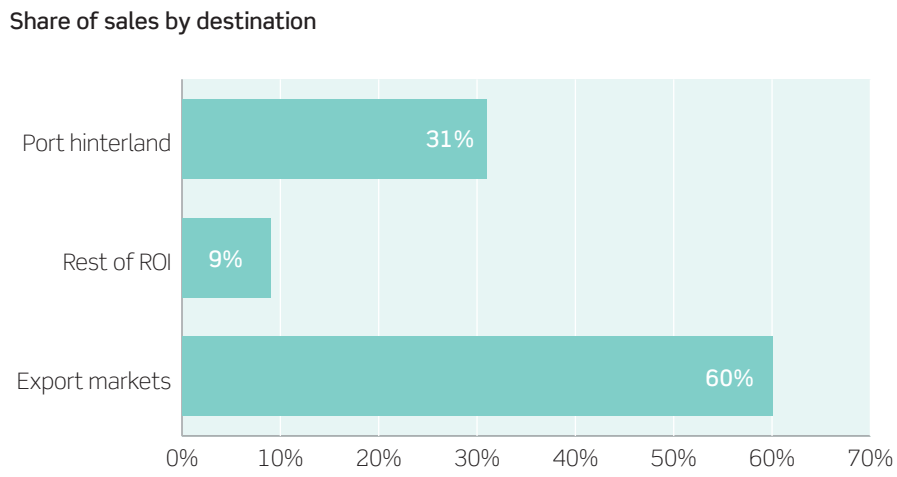
Fig. 4. Workforce residency, Kilmore Quay, 2023



Source: *Oxford Economics, Perceptive Insight*

The survey also explored the key markets for sale of goods. Sales to the immediate hinterland made up close to a third of total seafood-related sales (31%). Sales to the rest of Ireland made up just 9%. However, the largest share by far was the export market at 60%, the fifth largest for any of the ports, and four percentage points above the study's collective ports average.

Fig. 5. Sales by destination, Kilmore Quay, 2023

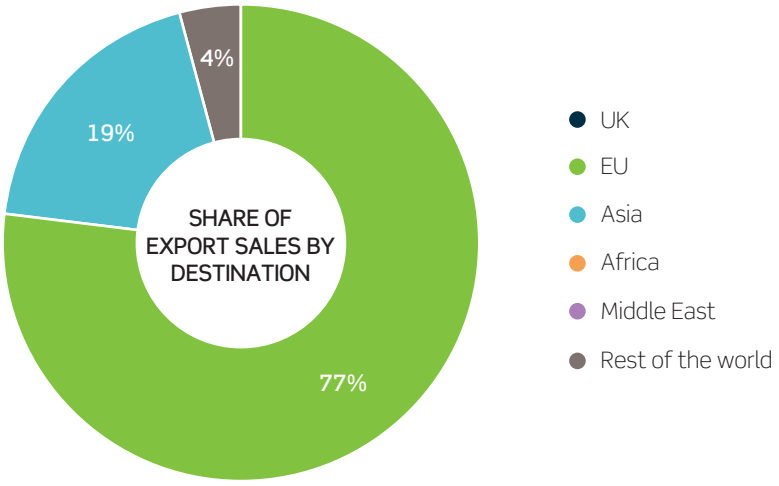


Source: *Oxford Economics, Perceptive Insight*

The share of exports to total sales was biggest for aquaculture with 100% of sales heading abroad in 2023. This compares with 78% for fish processing. These numbers are based on limited sample size but reflect the general pattern of exports between sub-sectors.

The largest export market was the continental EU which was the destination for 77% of exported sales in 2023. This was followed by Asia which took an additional 19%.

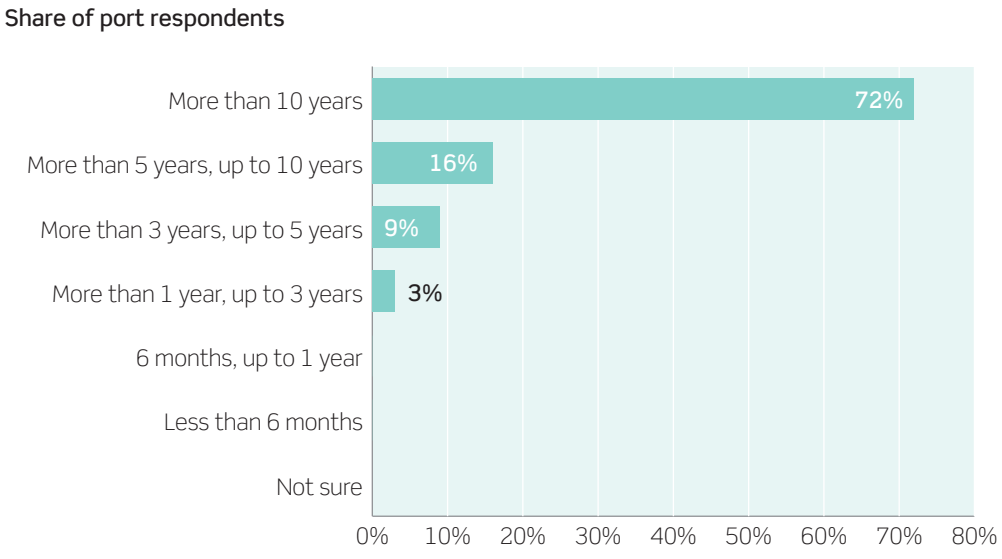
Fig. 6. Export sales by destination, Kilmore Quay, 2023



Source: *Oxford Economics, Perceptive Insight*

As well as looking at the current state of the seafood industry, the survey looked to understand the profile of businesses that operated from the port. Within Kilmore Quay, 72% of respondents reported their business had been operating for at least a decade in 2023, 11% lower than the average across the ten ports. Another 16% had been around for at least five years, while another 9% were between three and five years old. While the survey samples for Kilmore Quay were small at the sectoral level, the results show that the maturity level is broadly the same across fishing, processing and aquaculture industries.

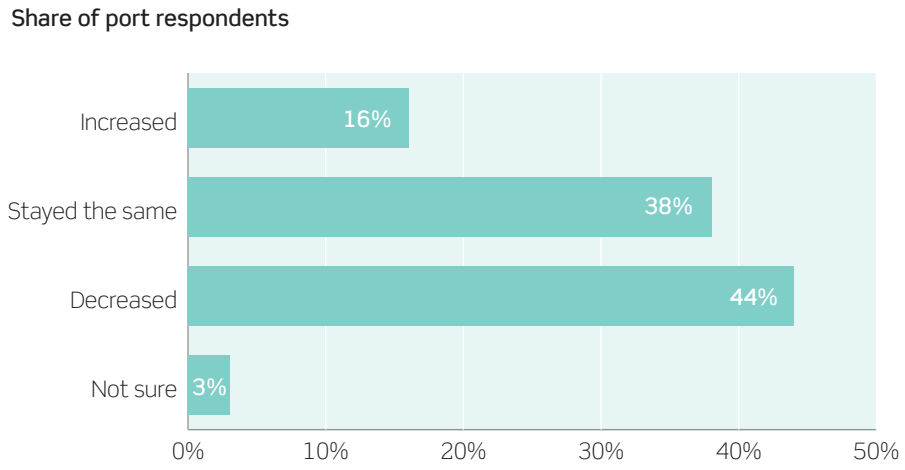
Fig. 7. Seafood sector maturity, Kilmore Quay, 2023



Source: *Oxford Economics, Perceptive Insight*

Looking at the individual performance of these operating firms, the survey addressed turnover and investment in the seafood industry. Overall, the operators look to have had varying results at Kilmore Quay; 54% reported their turnover had either stayed the same in 2023 or had increased on the year before. However, this left 44%, or more than two in every five respondents, reporting a fall in turnover on levels seen the year before, the second lowest rate in the sample. Turnover performance was relatively similar across the three sub-sectors based on the sample.

Fig. 8. Turnover in the past 12 months, Kilmore Quay, 2023



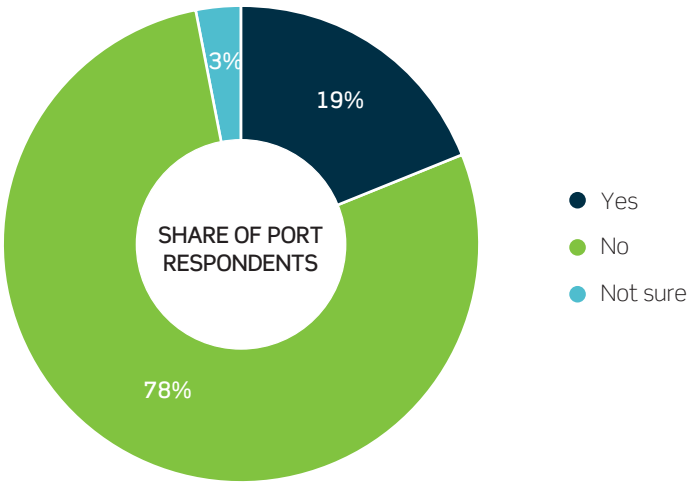
Source: *Oxford Economics, Perceptive Insight*

Turning from the past to future expectations, respondents were asked how they thought their turnover might change over the following 12 months. The responses were varied; 38% of respondents expected their turnover to remain unchanged while another 38% expected their turnover to decrease and 13% expected to see increased turnover in 2024. The remaining 13% were not sure.

This contrasts with the previous study when the outlook going into 2019 was quite optimistic, 69% of respondents expected their turnover to remain unchanged with a further 19% expected to see increased turnover.

Improving turnover is often linked with investment: improving the quality and/or quantity of capital available to the workforce can enable improved productivity and future sales. On the one hand, the willingness of firms to engage in capital investment may signal a positive outlook for the future; on the other, it may reflect the deterioration of existing capital stocks. The survey results suggest that the timid outlook within the sector (with 38% expecting their turnover to decrease) contributed to less investment taking place with 78% of operators not investing in capital in the last year.

Fig. 9. Capital investment in the previous year, Kilmore Quay, 2023



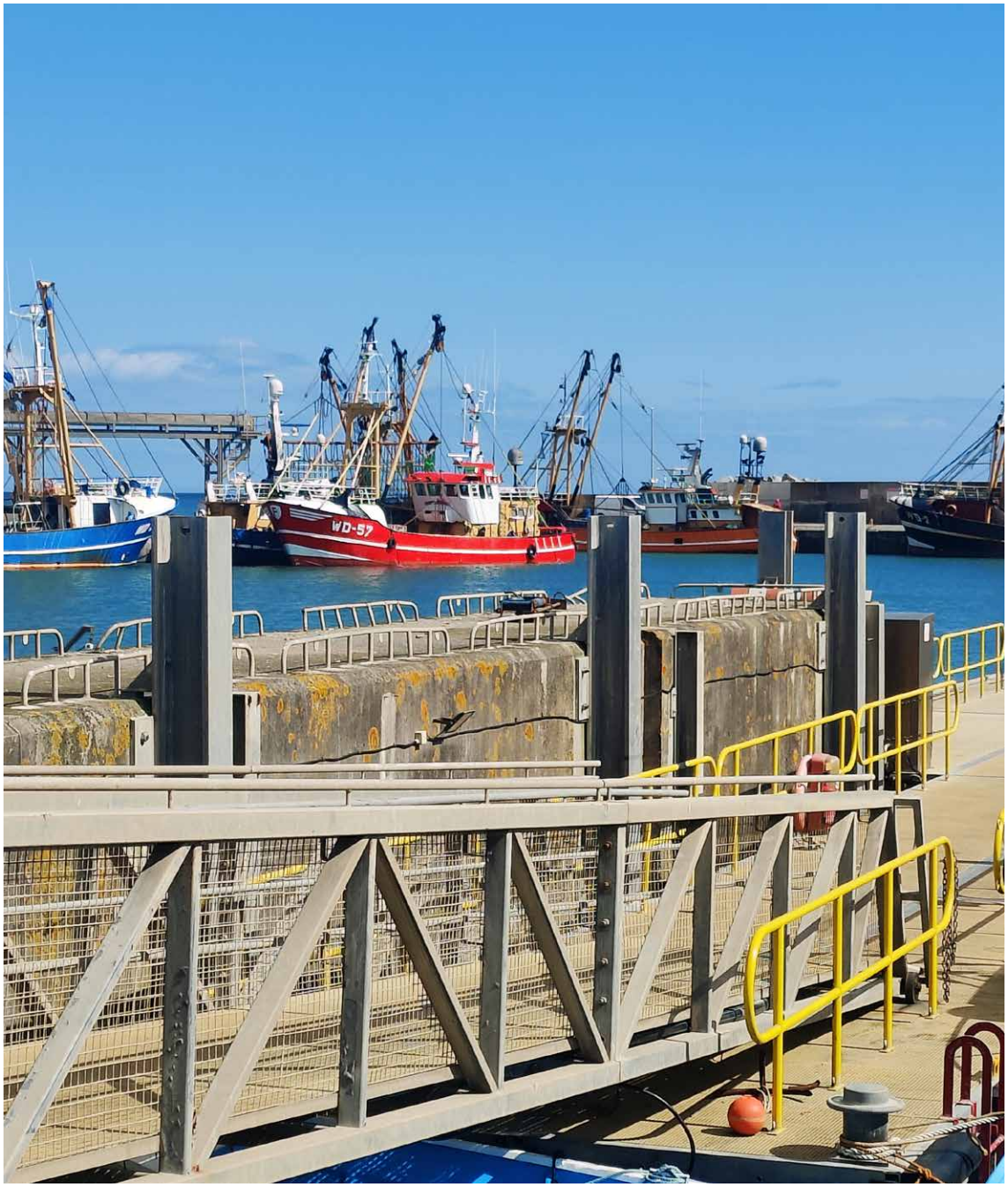
Source: *Oxford Economics, Perceptive Insight*

From the survey, it appeared that most of the operators who did not invest in capital in the last year were in the commercial fishing sub-sector, though limited sample sizes make it difficult to give an accurate view on investment levels at the disaggregated level.

2.2 Conclusion

The survey of the local seafood industry identified the key characteristics of the business environment. With a below-average maturity seafood sector at Kilmore Quay, operators typically reported unstable turnover and a highly local workforce. There is concern around sales growth in the future and this could be reflection of the lack of capital investment in 2023.

The seafood-related workforce at Kilmore Quay tends to be very local with 86% originating from the port hinterland and most living there now. Most seafood sales go overseas, with just 31% sold within the port hinterland.



3. The impact of seafood's sub-sectors

The wider economic footprint of Kilmore Quay's seafood sector on the regional economy is estimated in this section.

3.1 Commercial fishing

The commercial fishing industry contributed €23.0 million to the South East regional economy in 2023, the second largest GVA contribution among the seafood sub-sectors at Kilmore Quay. Almost two thirds of this total contribution (€13.9 million) was directly associated with fishing activities themselves, while €6.7 million of GVA came through the supply chain, with a further €2.5 million being generated through the spending power of those employed both directly and indirectly by the local commercial fishing sector.

It is estimated that commercial fishing supported 200 jobs throughout the region in 2023. Of this total, 120 were directly employed in commercial fishing in the port area, with an additional 60 jobs being reliant on the sector via supply-chain links across the South East region. These indirect/supply chain-related jobs appear, on average, to be more productive than those in commercial fishing, generating higher GVA per worker than the direct workforce. These combined direct and indirect jobs supported an additional 20 jobs across the regional economy through their consumer spending impacts.

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

Port commercial fishing	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	13.9	120	4.5
Indirect	6.7	60	2.7
Induced	2.5	20	0.9
Total	**23.0**	**200**	**8.1**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not sum due to rounding*

The agriculture, forestry and fishing sector is the main beneficiary of commercial fishing activity at the port. This sector was home to €14.5 million of the total GVA impacts across the regional economy. This was only €0.6 million more than the direct impact, showing the sector received limited benefit from the subsequent multiplier impacts. The sector did however enjoy a significant share of the total employment (135 jobs) and gross wages (€4.7 million) benefits, representing 69% and 58% of the respective totals.

The wholesale and retail sector received the next largest benefit from commercial fishing activity, €2.9 million in GVA and 30 jobs. These benefits originated predominantly from local fisheries' procurement spending, in addition to the spending of those both directly and indirectly employed as a result. Manufacturing and real estate also saw boosts to GVA of €1.7 million and €1.2 million respectively.

Table 5. Total benefits by sector, South East, 2023

Port commercial fishing	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	14.5	135	4.7
Mining and quarrying	0.0	0	0.0
Manufacturing	1.9	<5	0.6
Electricity, gas, steam and air conditioning supply	0.1	<5	0.0
Construction	0.0	0	0.0
Wholesale and retail trade; repair of motor vehicles	2.9	30	1.4
Transportation and storage	0.5	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	0.4	5	0.2
Real estate activities	1.2	<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	0.4	5	0.3
Arts, entertainment and recreation & other services	0.1	<5	0.0
Total	**23.0**	**200**	**8.1**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not add due to rounding*

3.2 Aquaculture

The aquaculture industry at Kilmore Quay contributed a total of €1.9 million in value added to the South East region in 2023. Close to 85% of this GVA total was directly generated by aquaculture activity within the local port economy, with the additional €0.3 million coming via indirect and induced impacts. Together, this activity supported 20 jobs across the South East economy, all of which were directly employed in the aquaculture industry at the port. In total, this employment generated €0.3 million in gross wages in 2023. The indirect and induced jobs accounted for a relatively low proportion of the earnings total, due to their increased GVA per head and higher average gross wages.

Table 6. Benefits of the aquaculture sub-sector, South East, 2023

Port aquaculture	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	1.6	20	0.3
Indirect	0.2	0	0.1
Induced	0.1	0	0.0
Total	**1.9**	**20**	**0.4**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not sum due to rounding*

The agriculture, forestry and fishing sector absorbed almost 90% of aquaculture's subsequent GVA impact across the regional economy. Most of this total was attributed to aquaculture's direct activity taking place within the port area. Of the remaining impacts, the wholesale and retail sector experienced the largest benefit — including €0.1 million in GVA, less than five jobs, and €0.03 million in associated earnings. Smaller benefits were also found in manufacturing.

Table 7. Total benefits by sector, South East, 2023

Port aquaculture	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	1.6	20	0.3
Mining and quarrying	0.0	0	0.0
Manufacturing	0.1	0	0.0
Electricity, gas, steam and air conditioning supply	0.0	0	0.0
Construction	0.0	0	0.0
Wholesale and retail trade; repair of motor vehicles	0.1	<5	0.0
Transportation and storage	0.0	0	0.0
Accommodation and food service activities	0.0	0	0.0
Information and communication	0.0	0	0.0
Financial and insurance activities	0.0	0	0.0
Real estate activities	0.1	0	0.0
Other business services	0.0	0	0.0
Public administration and defence	0.0	0	0.0
Education	0.0	0	0.0
Human health and social work activities	0.0	0	0.0
Arts, entertainment and recreation & other services	0.0	0	0.0
Total	**1.9**	**20**	**0.4**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not add due to rounding*

3.3 Fish processing

The port's fish processing sector sustained a total of 320 jobs across the South East, supporting an estimated €12.3 million in gross wages in 2023. This seafood sub-sector also provided a total GVA contribution of €34.2 million across the regional economy, with around 60% of this total (€19.7 million) originating directly from the port's own fish processing activity. The remaining GVA impact was supported through the resulting supply-chain spending (€10.8 million) and the associated consumer spending the direct and indirect activity supports (€3.7 million). The fish processing sector had the strongest employment multiplier of the three seafood sub-sectors at the port (2.4), meaning that each direct fish processing job supported 1.4 additional jobs elsewhere within the regional economy. This represented an increase since the previous study when, the fish processing sub-sector had an employment multiplier of 1.7 meaning that each direct fish processing job supported 0.7 of an additional job elsewhere within the regional economy.

Table 8. Benefits of the processing sub-sector, South East, 2023

Fish processing	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	19.7	135	6.8
Indirect	10.8	155	4.2
Induced	3.7	30	1.4
Total	**34.2**	**320**	**12.3**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not sum due to rounding*

In contrast with the benefits from the commercial fishing and aquaculture elements, the majority of the benefits from fish processing accrued to the manufacturing sector, in line with the nature of its food processing operations. The regional manufacturing sector saw a boost to value added of €22.2 million in 2023, supporting 135 jobs and €7.5 million in gross wages.

The next largest benefit accrued within the agriculture, forestry and fishing sector — due in part to processing's procurement relationship with this sector. Fish processing supported 110 jobs and €4.6 million of GVA within the sector — representing 35% and 13% of the respective totals. The higher employment share relative to GVA is a consequence of lower output per job in comparison to the manufacturing sector. Wholesale and retail was the next largest beneficiary, with a GVA impact of €1.8 million and 20 jobs supported across the region.

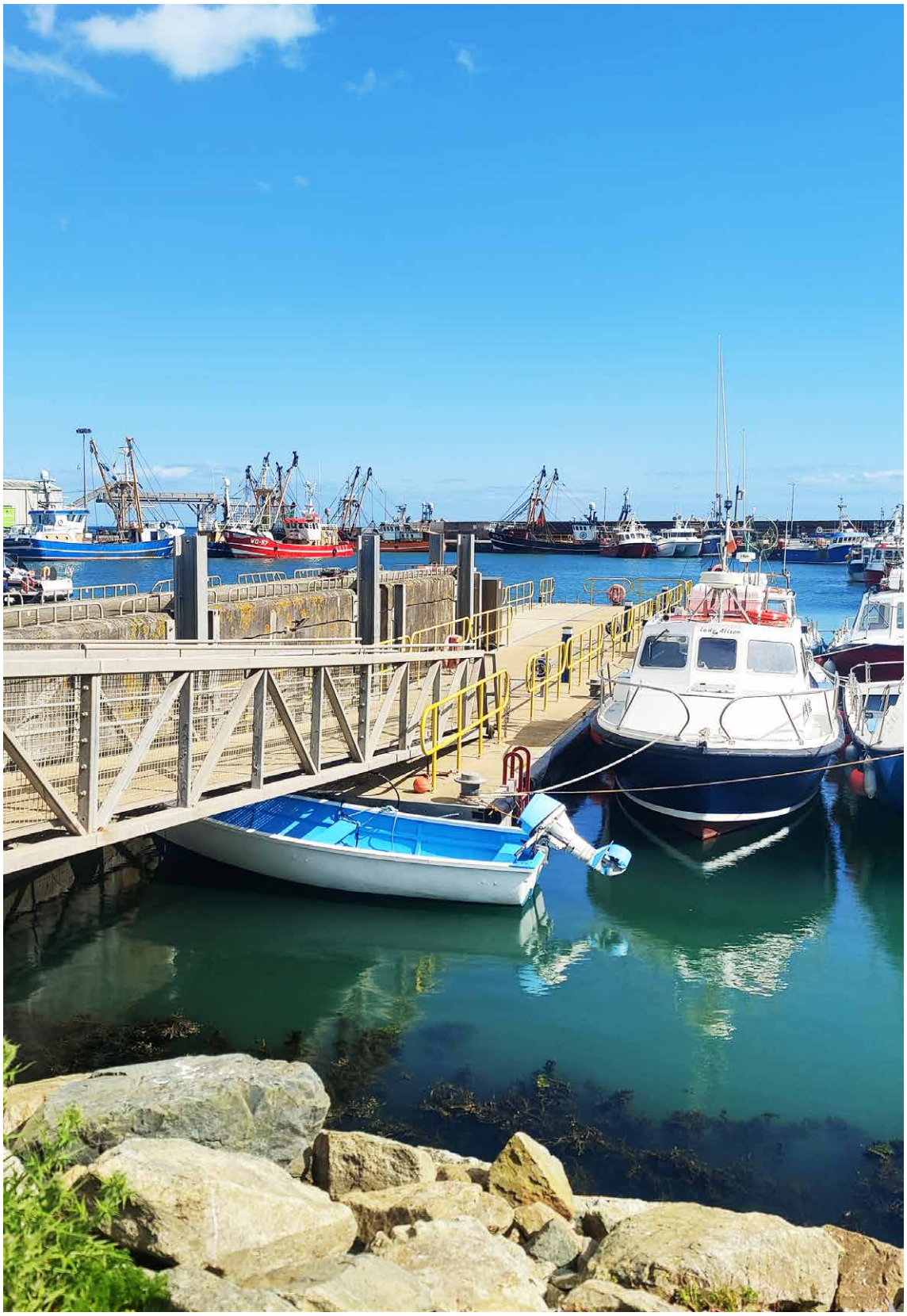
Table 9. Total benefits by sector, South East, 2023

Ports processing	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	4.6	110	1.7
Mining and quarrying	0.0	0	0.0
Manufacturing	22.2	135	7.5
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	1.8	20	0.9
Transportation and storage	1.2	15	0.6
Accommodation and food service activities	0.2	5	0.2
Information and communication	0.2	0	0.0
Financial and insurance activities	0.6	5	0.3
Real estate activities	1.4	<5	0.0
Other business services	0.9	5	0.3
Public administration and defence	0.0	0	0.0
Education	0.2	5	0.1
Human health and social work activities	0.7	10	0.5
Arts, entertainment and recreation & other services	0.2	5	0.1
Total	**34.2**	**320**	**12.3**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not sum due to rounding*

3.4 Conclusion

In conclusion, Kilmore Quay's fish processing sub-sector has the largest economic footprint of the three seafood-related sub-sectors. It is estimated that it supported 320 jobs, €12.3 million in gross wages and more than €34.2 million in GVA throughout the South East economy in 2023.



4. Total impact of the seafood sector at Kilmore Quay

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 hinterlands.

However, simply summing the respective benefits of all three elements (commercial fishing, aquaculture 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/aquaculture sub-sectors and their supply chains. Therefore, adding everything together would result in double counting some of the impacts. See Appendix 2 for further detail on the approach.

To avoid 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 processing impacts from the three elements of the seafood sector for GVA, employment, gross wages and tax.

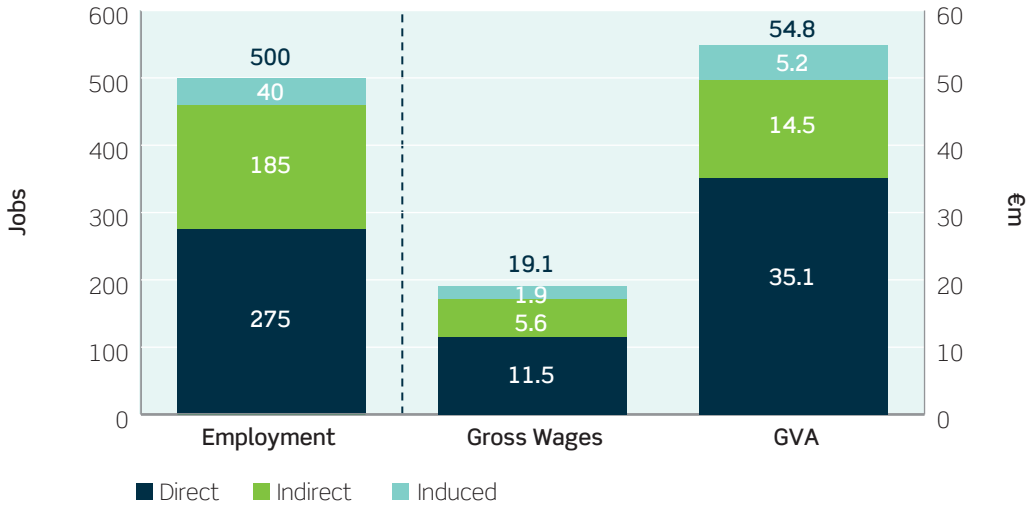
Indirect and induced impacts

- 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 a 100% and 51.9% share of the indirect and induced impacts from the respective aquaculture and commercial fishing sub-sectors (as information from the survey interviewees suggests that exports and domestic sales outside the port area's own processors account for 100% and 51.9% of the respective aquaculture and fishing production). The remainder of the commercial fishing/aquaculture sub-sectors' 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

Overall, it is estimated that the Kilmore Quay seafood industry generated €54.8 million in GVA for the South East economy in 2023. This activity supported 500 jobs across a range of sectors and generated €19.1 million in gross wages to employees.

Fig. 10. Benefits of the seafood sector, South East, 2023



Source: *Oxford Economics, Perceptive Insight, CSO*

While the bulk of the total economic impacts belonged to seafood's direct activities, 36% of the GVA impact resulted from the associated supply chain and/or consumer spending. More than 45% of the sector's total employment impact was supported within seafood's regional supply chain (185) or through the consumer spending that the direct activity supports (40). The port's seafood sector therefore had an employment multiplier of 1.82 — meaning that every direct seafood job within the port area supported nearly one additional job within the South East. At the time of the last study, the port's seafood sector had an employment multiplier of 1.45.

Table 10. Total seafood sector benefits, South East, 2023

Ports seafood sector	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Direct	35.1	275	11.5
Indirect	14.5	185	5.6
Induced	5.2	40	1.9
Total	**54.8**	**500**	**19.1**

Source: *Oxford Economics, Perceptive Insight, CSO*
Note: *May not sum due to rounding*

The analysis shows that the regional manufacturing sector gained the most from the port's seafood activity, reflective of both the size of its local fish processors and the supply-chain relationship with local commercial fisheries. This sector accounted for €23.2 million of the total regional GVA benefits, 42.4% of the total. It also accounted for 135 jobs which is just over a quarter of the employment benefits. This is due to the relative productivity of manufacturing roles which tend to generate higher levels of output for each unit of labour when compared to the likes of the agriculture, forestry, and fishing sector. That said, the agriculture, forestry and fishing sector also experienced considerable benefit, mainly due to the operations of the commercial fishing and aquaculture sub-sectors which sit within its sector. This sector represents just over a third of the total GVA impact (€20.4 million), alongside 260 jobs and €6.6 million in gross wages.

Outside of these two sectors, the wholesale and retail sector recorded the next highest economic benefit. It enjoyed 6.2% of the overall GVA impact across the region (€3.4 million), alongside 35 jobs and €1.7 million in gross wages. Some, €7.8 million in GVA was shared across the remaining sectors through local seafood's spillover effects.

Table 11. Total benefits by sector, South East, 2023

Local seafood sector	South-East		
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	20.4	260	6.6
Mining and quarrying	0.0	0	0.0
Manufacturing	23.2	135	7.8
Electricity, gas, steam and air conditioning supply	0.4	<5	0.1
Construction	0.0	0	0.0
Wholesale and retail trade; repair of motor vehicles	3.4	35	1.7
Transportation and storage	1.5	20	0.7
Accommodation and food service activities	0.3	10	0.2
Information and communication	0.2	0	0.1
Financial and insurance activities	0.8	5	0.4
Real estate activities	2.1	<5	0.1
Other business services	1.2	5	0.4
Public administration and defence	0.0	0	0.0
Education	0.2	5	0.2
Human health and social work activities	0.9	15	0.7
Arts, entertainment and recreation & other services	0.2	5	0.1
Total	**54.8**	**500**	**19.1**

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 the channel of activity from which they arise. It is estimated that the port seafood sector's direct tax contribution was a net fiscal surplus of €4.8 million in 2023, consisting of the labour-based tax paid by the sector's employees (income tax, PRSI etc.), corporation tax receipts and sectoral taxation on production less subsidies.

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. Combined, these represented a net fiscal deficit of €1 million, As those employed in the sector and within its supply chain spend their wages, this supports further jobs and activity within the Irish economy. It is estimated this induced activity supported a further €3.2 million in tax revenue.

Therefore, in total (i.e. direct, indirect and induced), Kilmore Quay's seafood sector is estimated to have had a fiscal surplus of €7.0 million in 2023. This total was made up of €6.4 million in employment/labour-related tax, €1.9 million in corporation tax, €1.8 million in taxation associated with the spending of wages, and a net tax deficit of €3.1 million through taxation on inputs and production.[3]

In comparison, the Kilmore Quay seafood sector generated an estimated €8.0 million in taxes in 2018. This was made up of €6.4 million in employment/labour-related tax, €1.6 million in corporation tax, €2.5 million in taxation associated with the spending of wages, and a net tax deficit of €2.5 million through taxation on inputs and production.[4]

3 Net tax position refers to taxes less subsidies.
4 Tax figures related to the 2018 study are in 2023 prices.

Table 12. Fiscal impacts 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	1.8	0.7	-4.1	0.3	0.0
Mining and quarrying	0.0	0.0	0.0	0.0	0.0
Manufacturing	2.9	0.8	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	0.5	0.1	0.0	0.0	0.0
Transportation and storage	0.3	0.1	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	**6.4**	**1.9**	**-3.7**	**0.6**	**1.8**

Source: *Oxford Economics, Perceptive Insight, CSO*

4.4 Growth since 2018

Over the period 2018 to 2023, in real terms, Kilmore Quay had mixed results across all channels in GVA, employment and gross wages. In the direct channel, GVA fell by 26.1%, employment by 45%, and gross wages by 27.6%. In the indirect channel, GVA and employment increased by 16.9% and 23.3%, respectively, and gross wages fell by 4.1%. In the induced channel, GVA fell by 17.5%, employment by 46.7%, and gross wages by 44.4%.

Overall, it is estimated that Kilmore Quay experienced a real terms decline in GVA, employment and gross wages of 17.2%, 30.6% and 24.4%, respectively.

4.5 Conclusion

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

The analysis shows the Kilmore Quay's overall seafood sector supported 500 jobs and €54.8 million in GVA throughout the regional economy. Furthermore, this activity is estimated to have created a fiscal surplus of €7.0 million.

5. Conclusions

5.1 The seafood sector in Kilmore Quay

The seafood industry plays an important role in Kilmore Quay's economy. In 2023, the direct seafood activity within the port area generated an estimated €71.5 million in turnover and supported 275 jobs. Fish processing is the largest seafood related activity at the port, generating €43.3 million in turnover, followed by commercial fishing (€26 million) and aquaculture (€2.3 million). When translated into GVA, the seafood sector directly contributing €35.1 million to the local port economy in 2023.

The survey of the local seafood industry also identified the key characteristics of the business environment. With a less mature seafood sector at Kilmore Quay relative to the other ports, operators typically report a highly local workforce. Within the previous year, only 16% of operators reported an increase in sales while only 13% thought their sales would increase in the future. This uncertainty and poor outlook meant there was little capital investment in 2023; Kilmore Quay had the largest share of respondents from the survey who did not invest in capital among the ten ports. In terms of performance, turnover has typically been unstable.

The seafood workforce at Kilmore Quay tend to be very local with almost 9 out of every 10 originating from the port hinterland, and most living there. Most seafood sales go overseas, with just 31% sold within the port hinterland.

5.2 The Fish Processing sub-sector is the main contributor

The fish processing sub-sector makes the strongest contribution to the South East economy. In 2023, it generated €32.9 million of GVA, of which €13.3 million was linked to indirect (€10.8 million) and induced (€2.5 million) effects. It also had the strongest employment multiplier among the three sub-sectors. The fish processing sub-sector is estimated to have provided benefits of the following size:

- 135 direct jobs and €6.8 million of gross wages, producing €19.7 million of GVA;
- 155 indirect jobs and €4.2 million of gross wages, producing €10.8 million of GVA;
- 30 induced jobs and €1.4 million of gross wages, producing €3.7 million of GVA.

Fish Processing

GVA
Direct -12% since 2018
Total +1% since 2018

Employment
Direct -36% since 2018
Total -11% since 2018

Wages
Direct +8% since 2018
Total 0% since 2018

5.3 Though the other components remain significant

The economic impact of the commercial fishing sub-sector was of the following size in 2023:

- 120 direct jobs and €4.5 million of gross wages, producing €13.9 million of GVA;
- 60 indirect jobs and €2.7 million of gross wages, producing €6.7 million of GVA;
- 20 induced jobs and €0.9 million of gross wages, producing €2.5 million of GVA.

Fishing

GVA
Direct -39% since 2018
Total -24% since 2018

Employment
Direct -50% since 2018
Total -44% since 2018

Wages
Direct -48% since 2018
Total -34% since 2018

The economic impact of the port's aquaculture sector equates to the following benefits across the South East economy:

- 20 direct jobs and €0.3 million of gross wages, producing €1.6 million of GVA;
- 0 indirect jobs and €0.1 million of gross wages, producing €0.2 million of GVA;
- 0 induced jobs and €0.03 million of gross wages, producing €0.1 million of GVA.

Aquaculture

GVA
Direct -33% since 2018
Total -51% since 2018

Employment
Direct -60% since 2018
Total -70% since 2018

Wages
Direct -70% since 2018
Total -72% since 2018

Therefore, it is estimated that the port's collective seafood sector supported 500 jobs, €19.1 million in gross wages and €54.8 million in GVA within the regional economy in 2023. This activity created a net fiscal surplus of €7.0 million. In comparison, once the results from the 2018 study are converted to 2023 prices, there was a decline in GVA, employment and gross wages of 17.2%, 30.6% and 24.4%, respectively. The only channel that experienced growth in GVA and employment terms was the indirect channel due to increased costs across seafood operators surveyed, resulting in larger impacts in the supply chain.

Overall Seafood Sector

GVA
Direct -26% since 2018
Total -17% since 2018

Employment
Direct -45% since 2018
Total -31% since 2018

Wages
Direct -28% since 2018
Total -24% since 2018

5.4 Findings from the socio-economic analysis

Sectors which are closely aligned with the seafood sector are important employers within the Kilmore Quay economy. Furthermore, educational attainment trends suggest that local skills more closely match employment opportunities in these sectors.

Linked to this, employment rates are below the national average and economic inactivity is relatively high. As a result, the seafood sector is likely to play a significant role in the local port economy through its provision of direct jobs, supply-chain spending in local businesses and the consumer spending it supports. Looking forward, a vibrant and growing local seafood sector will be important for the economic and demographic health of the local area.

Appendix 1: Kilmore Quay's economic challenges

Economic activity and structure

The latest available data indicates that although Kilmore Quay's unemployment rate is relatively low, the working-age population is in decline and economic inactivity is high. The unemployment rate within the local port economy, at 7.4%, was almost one percentage point lower than the national rate in 2022.[5] Furthermore, the employment rate was low (54.5%) relative to the national average (56.1%). This is compounded by relatively high rates of economic inactivity — 41.1% of residents aged 15 and over were either not in employment or not actively looking for a job.

Table 13. Headline economic indicator comparisons, 2022

	Unemployment rate	Employment rate	Economic inactivity
Kilmore Quay	7.4%	54.5%	41.1%
South-East	9.2%	53.9%	40.7%
Ireland	**8.3%**	**56.1%**	**38.8%**

Source: *CSO*

Demographics

Kilmore Quay's population contracted by 6.4% in the six years between 2016 and 2022. In comparison, the population in the South-East region declined by 11.8% over the same period. This contrasts with Ireland as a whole, where the population level increased by 8.1%. Furthermore, the working-age population of Kilmore Quay contracted by 4.7% over this period, leaving the working-age share of the total population (63.9%) slightly above the regional average but below the average for Ireland.

Table 14. Population indicators, 2022

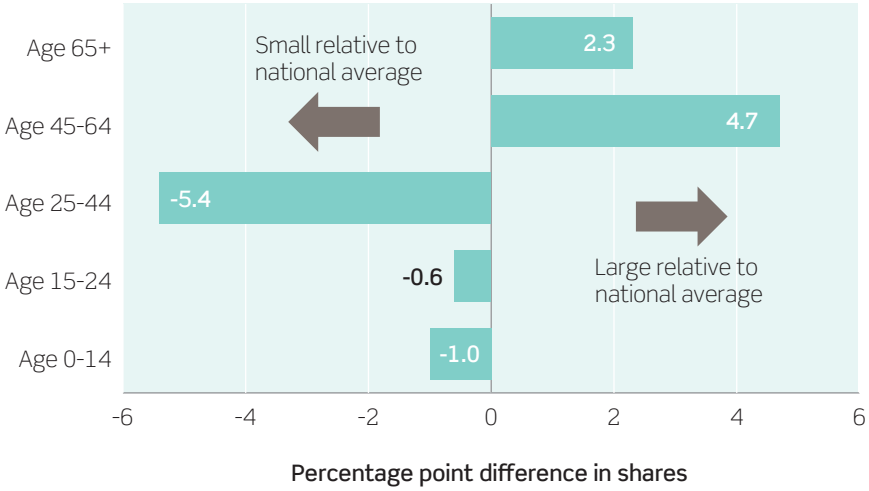
	Growth (2016-2022)		2022	
	Population	Working age	Population	Working age share
Kilmore Quay	-6.4%	-4.7%	12,100	63.9%
South-East	-11.8%	-12.4%	448,400	63.6%
Ireland	**8.1%**	**7.8%**	**5,149,100**	**65.3%**

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

An analysis of the port area's population by age cohorts relative to the national picture shows that the distribution is skewed towards older demographics. Those aged 65 and over accounted for close to 17% of all residents — 2 percentage points above the national average in 2022. However, younger working-age people (aged 25-44) were relatively under-represented within the local population.

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

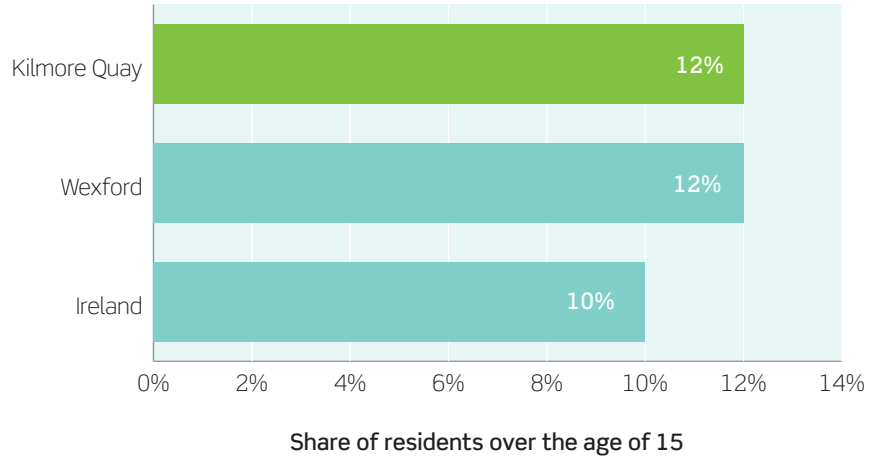
Fig. 11. Age group comparisons, port area vs Ireland, 2022



Source: *CSO Ireland*

Qualification attainment tends to be weaker among Kilmore Quay residents relative to national rates. Those with higher-level attainment represented only 26% of residents aged 15 and over, compared to 34% across Ireland. Similarly, lower-level educational attainment was relatively more common in the port area relative to the national average. Those with no formal qualifications or, at most, primary-level education accounted for 12% of those aged 15 and over in Kilmore Quay, compared to 10% on average across Ireland.

Fig. 12. No formal or primary level attainment, 2022



Source: *CSO*

Summary

Based on previous census data which looked into workplace-based employment by port, sectors which are closely aligned with the seafood sector are important employers within the Kilmore Quay economy. Furthermore, educational attainment trends suggest that local skills more closely match employment opportunities available in the seafood sectors.

Linked to this, employment rates are below the national average, and economic inactivity is relatively high. As a result, the seafood sector is likely to play a significant role in the local port economy through its provision of direct jobs, supply-chain spending in local businesses and the consumer spending it supports. Looking forward, a vibrant and growing local seafood sector will be important for the economic and demographic health of the local area.

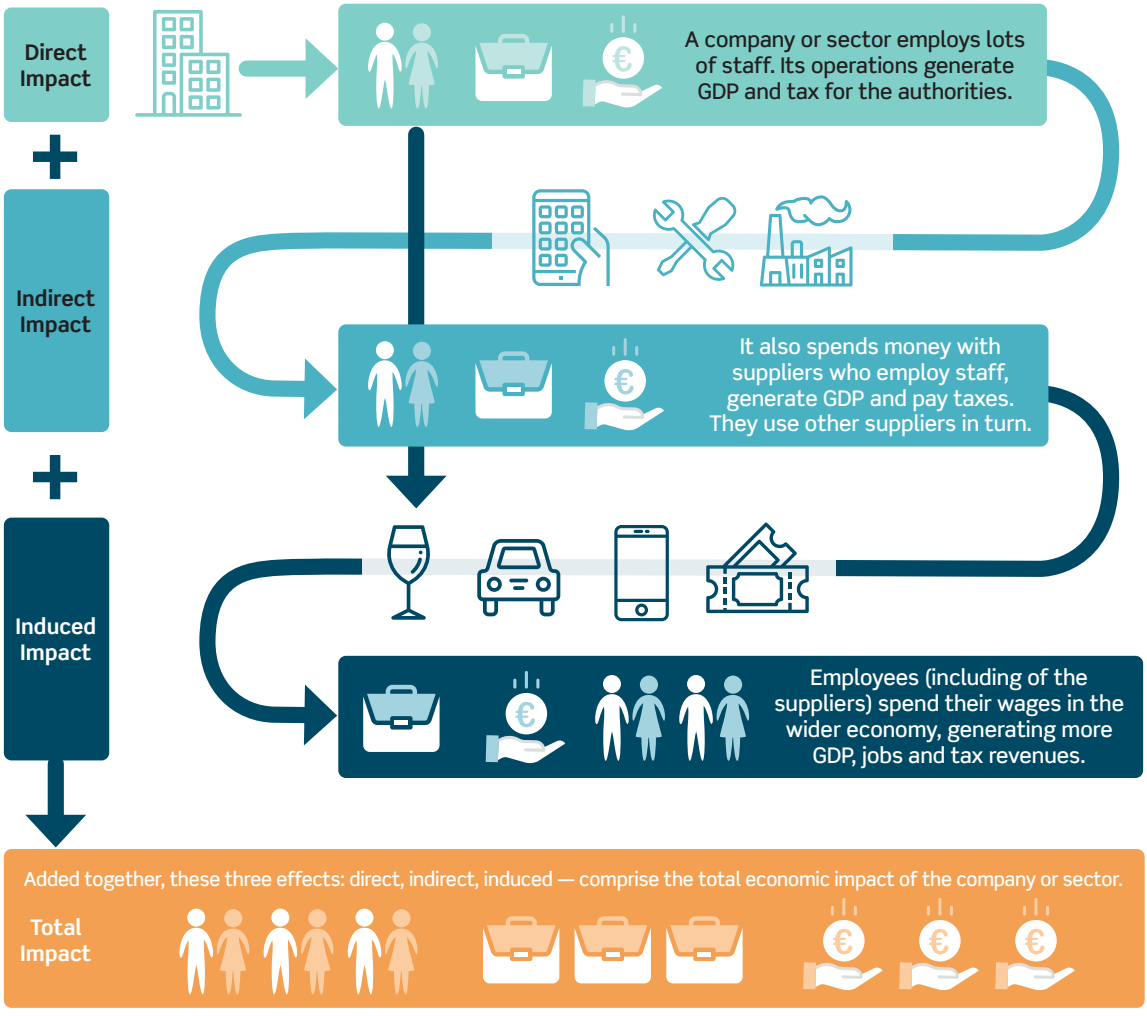
There have been some improvements since the last study. In 2016, 17% of the Kilmore Quay population had no formal or only primary-level education, but that figure fell to 12% in 2022. However, this is still higher than the national average. The age group comparisons are similar to the last study with the only difference being that those aged 0-14 declined by 1% while it grew by 1% in 2016. The unemployment rate fell from 13.8% in 2016 to 7.4% in 2022, and the employment rate grew from 50.9% in 2016 to 54.5% 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. 13. Overview of economic impact methodology



This report uses three main metrics to quantify each of the channels by which the seafood sector could contribute to the regional[6] 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 persons in employment 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. Finally, 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 proxy estimates 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 band. Knowing indicative turnover levels for firms not captured in the survey, enabled the authors to apply the average ratio of jobs to turnover level in that sector and apply average sectoral gross wages, etc. In other words, knowledge of the sectors and turnover of the missing companies was used and the ratios and averages of those covered in the survey were applied to estimate their activity. The resulting total seafood-related turnover estimate was then split into the different sectors of the economy ('Agri, 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 an estimate of direct gross wages, researchers then applied income tax rates and estimated the income tax that will be collected by the Revenue Commissioners.

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

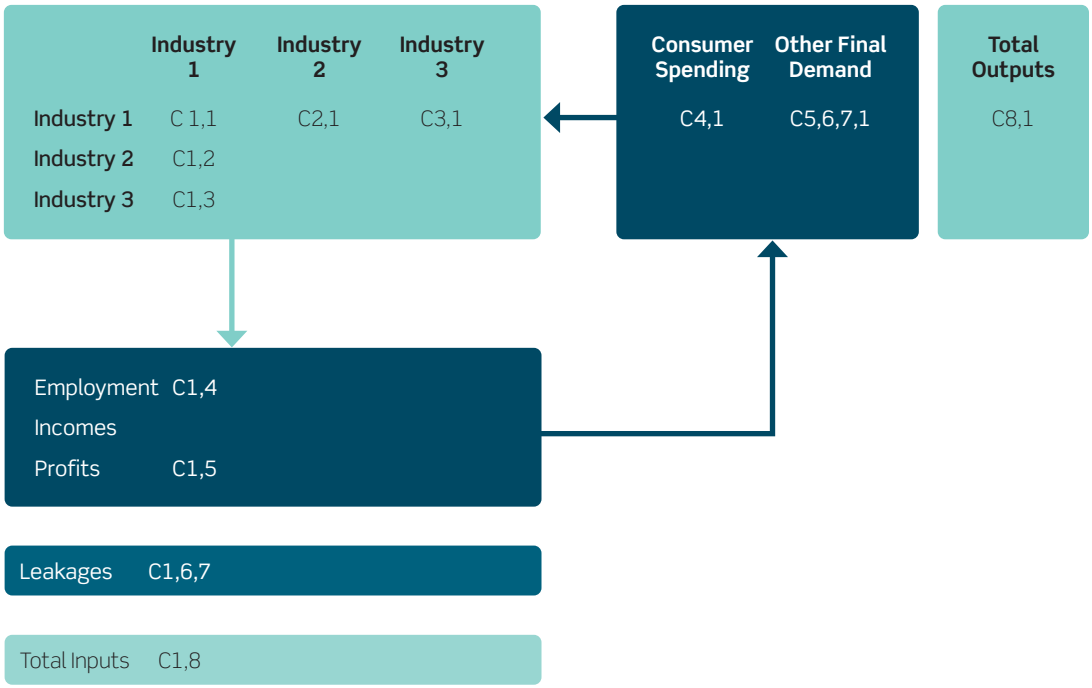
7 GDP is the main summary indicator of economic activity in Ireland. GDP can be defined as GVA plus taxes on products less subsidies on products. References to economic growth (or when the economy enters recession) typically relate to the rate of change of GDP. All references in this report relate to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

Estimating indirect and induced impacts

An input-output model was built to estimate the indirect and induced impacts. Fig. 14 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.

Fig. 14. Stylised input-output model



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.

MODELLING SUPPLY CHAIN IMPACTS

The survey provided information on the size of supply-chain spending relative to turnover, its allocation to specific parts of the economy/goods/services and its location (local/national/international). Using this information, it was possible to construct a more detailed picture of the first round of supply-chain spending than the published input-output tables would otherwise provide.

9 Due to data availability, the local seafood sector's economic impact can only be localised to the regional level (NUTS 3).

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 then 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 processing. However, when estimating the total impact of the overall port seafood sector, simply summing the respective benefits of all three elements 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 the 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. Furthermore, at this stage a proportional share of fishing and aquaculture direct impacts were also removed as they fall within the local processing supply chain.

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 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 processing sub-sector.


WD-57

OXFORD ECONOMICS

Global headquarters
Oxford Economics Ltd
Abbey House
121 St Aldates
Oxford, OX1 1H B
UK
T +44 (0)1865 268900

London
4 Millbank
London, SW1P 3JA
UK
T +44 (0)203 910 8000

Frankfurt
Marienstr. 15
60329 Frankfurt am Main
Germany
T +49 69 96 758 658

New York
5 Hanover Square, 8th Floor
New York, NY 10004
USA
T +1 (646) 786 1879

Singapore
6 Battery Road
#38-05
Singapore 049909
T +65 6850 0110

Europe, Middle East and Africa
Oxford
London
Belfast
Dublin
Frankfurt
Paris
Milan
Stockholm
Cape Town
Dubai

Americas
New York
Philadelphia
Boston
Chicago
Los Angeles
Toronto
Mexico City

Asia Pacific
Singapore
Hong Kong
Tokyo
Sydney

E mailbox@oxfordeconomics.com

www.oxfordeconomics.com

Further contact details:
www.oxfordeconomics.com/about-us/worldwide-offices

BIM Ireland's Seafood Development Agency

Irish Sea Fisheries Board
Head Office, Crofton Road,
Dun Laoghaire, Co. Dublin, A96 E5A0

T +353 1 214 4100 | **E** info@bim.ie | **www.bim.ie**