The Economic Impact of the Seafood Sector: Howth

May 2025











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May 2025

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Foreword

The Economic Impact of the Seafood Sector: Howth

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 Howth hinterland, illustrating its continued significance to the local economy.

Howth, located on the northern edge of Dublin Bay, is a key fishing port and a popular tourist destination. While the local economy is shaped by tourism, manufacturing, and professional services, the seafood sector remains an integral part of Howth's heritage and economy. The port is well connected to Dublin city centre via road and rail, making it the most accessible of Ireland's top ten seafood ports. The combination of strong local demand and international exports highlights the sector's contribution to the regional economy.

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 €163 million in turnover, supporting 590 direct jobs, with the fish processing sector remaining the primary driver. Direct GVA at the port is over €60 million, while an additional €55 million is generated upstream. Alongside the 590 direct jobs, a further 620 jobs are supported in the wider economy. Direct wages total €24 million, with an additional €21 million generated through indirect effects.

Over the past five years, the seafood sector in Howth has seen substantial growth. While commercial fishing activity has declined, the processing sector has expanded significantly and is the main driver of the seafood economy in Howth. The overall GVA multiplier effect of the seafood sector has increased from 1.94 to 2.19, reflecting higher supply chain spending over this period.

As part of the consultation process for this report, BIM engaged with seafood operators, fish processors, and other industry stakeholders in Howth to discuss sectoral trends, challenges, and future prospects. The local fleet has been impacted by quota limitations and rising operational costs, particularly fuel and crew expenses. The processing sector, while experiencing growth in turnover, faces challenges in securing a consistent supply of fish, with a growing reliance on imports. Stakeholders highlighted competition for port space as a key issue, particularly given Howth's role as a tourism hub. Offshore Renewable Energy (ORE) developments in the Irish Sea were also identified as a major concern, with potential restrictions on key fishing grounds affecting long-term viability.

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 Howth.

Executive summary

The seafood sector at the port

The seafood industry makes a notable contribution to the Howth and Dublin region economies. In 2023, direct seafood activity at the port generated €163.3 million in turnover, supporting 590 direct jobs.

Fish processing is the largest seafood sub-sector activity at the port, generating \in 153.0 million in turnover, with commercial fishing generating \in 10.3 million. When translated into change to Gross Value Added (GVA), the seafood sector made a \in 60.3 million direct contribution to the local port economy.

The survey of the local seafood industry identified the key characteristics of the business environment. The sector is well established at Howth, with the majority of firms having operated for at least 10 years. Business conditions were challenging over the previous 12 months, with 61% of operators reporting a decrease in turnover over this period, and 78% making no capital investments in the year.

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 Howth equated to an estimated €115.6 million of GVA in the Dublin economy in 2023. The seafood sector at Howth supported an estimated 1,210 jobs across the region and generated €16.5 million in tax revenues. When compared to the results of the previous study in 2018, it is estimated that Howth experienced a real terms increase in GVA and gross wages of 62.9% and 59.4%, respectively. This was accompanied by a growth in employment of 72.9%. This strong

€60.3m
Direct GVA in 2023
The seafood sector makes a significant contribution within the local port economy.



growth is driven by higher numbers of companies included in the survey and larger turnover estimates in the fish processing sub-sector. Furthermore, there are more than double the fish processing firms in Howth than at the time of the previous study. This, alongside increased costs experienced by fish processing businesses led to higher supply-chain spending and, therefore, larger indirect impacts.

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

Port seafood sector		Dublin					
	GVA (€m)	Employment	Gross wages (€m)				
Direct	60.3	590	23.8				
Indirect	41.6	525	16.0				
Induced	13.7	95	5.0				
Total	115.6	1,210	44.8				

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 will include the combined direct, indirect, and induced impacts).²

- Activity in the commercial fishing sub-sector has been estimated to sustain 120 jobs, €3.5 million of gross wages and €9.1 million of GVA;
- The fish processing sub-sector has been estimated to sustain 1,095 jobs, €41.5 million of gross wages and €106.8 million of GVA;
- There is no aquaculture subsectoral activity at the port.

Socio-economic characteristics

Howth has a highly educated workforce, nearly half of working-age residents are educated to degree level or higher, 11 percentage points above the national rate. With proximity to employment opportunities in central Dublin, the seafood industry is not a major source of employment for younger people. However, Howth has an ageing population: the share of those under 45 is considerably lower than the national average. As a northern suburb of Dublin, Howth has become a commuter area, with most residents working outside the port area and its hinterland. Therefore, the local seafood sector is important in terms of retaining economic activity and employment within the local economy.



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 would 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, however, 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 Insight to estimate the economic contribution of the seafood sector in ten of Ireland's ports.

1.2 The port area

Howth is a commercial fishing port situated on the Irish Sea in Fingal county. At just 15 km from Dublin city centre, the village has now become a northern suburb of the capital. In this report, the local port economy is defined as the District Electoral Divisions (DED) of Howth 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 was carried out across Ireland's main ports. 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

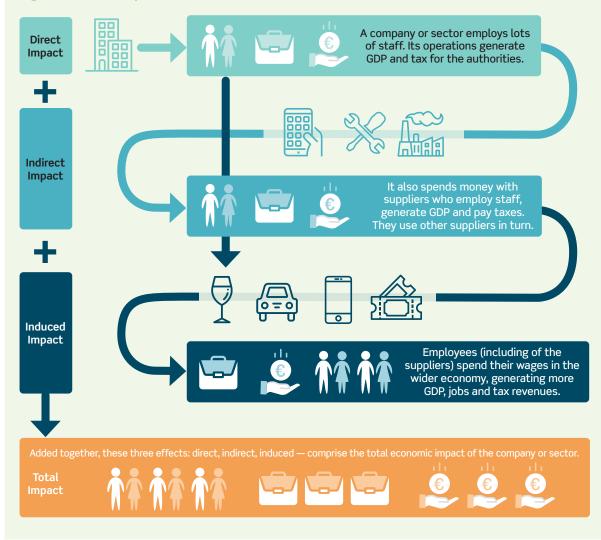
The economic impact of a sector is measured using a standard means of analysis called an economic impact assessment. The report quantifies the three 'core' channels of impact that comprise an organisation/sector's 'economic footprint':

- 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



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 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. Peripheral economies tend to face significant challenges from which Howth 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 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. 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 Dublin 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 Howth

2.1 Characteristics of the seafood sector

Fish processing is the largest seafood sub-sector in Howth generating an estimated \in 153.0 million in turnover, compared to \in 10.3 million from commercial fishing. In terms of direct employment, 505 jobs are supported by the fish processing subsector, with a further 85 supported in commercial fishing. There were no aquaculture activities present at the port.

Average gross wages tend to vary by activity, with fish processing supporting a higher average gross wage (\in 43,500) than commercial fishing (\in 22,000). The commercial fishing sector is spread across 33 operators at Howth, compared to just 16 processing firms; indicative of the exploitation of economies of scale possible in this sub-sector. Overall, processing generated the most direct value added, at \in 55.0 million in 2023.

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

	Turnover (€m)	Jobs	Gross wages (€m)	Seafood operators
Commercial fishing	10.3	85	1.9	33
Fish processing	153.0	505	21.6	16
Total	163.3	590	23.5	49

Source: Oxford Economics, Perceptive Insight, BIM

Note: May not sum due to rounding

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

Commercial fishing turnover fell around 65.5% in real terms with similar falls recorded within employment and gross wages. This was partly due to a general loss of commercial fishing seafood operators in the area (50%), but also because of falling turnover, employment, and gross wages in firms still in operation.

For fish processing, turnover grew by an estimated 129.6%, employment by 110.4%, and gross wages by 147%. This growth was driven by general growth in the local fish-processing businesses surveyed in the last study, and an increase in the number of businesses from seven to 16.

Overall, turnover has grown by 68.5%, employment by 34.1%, and gross wages by 45.2% respectively, while the number of operators has fallen by 34.7%.

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

	Turnover (€m)	Jobs	Gross wages (€m)	Seafood operators
Commercial fishing	29.8	200	7.4	66
Fish processing	66.6	240	8.9	7
Total	96.9	440	16.4	75

Source: Oxford Economics, Perceptive Insight, BIM

Note: May not sum due to rounding

The survey of local businesses has provided additional insight into the composition and profile of local seafood operators. Examining these data for Howth highlights some interesting findings.

Seeking to better understand the role of Howth in a broader context, the survey examined the employment supported by the seafood sector. It found that four in five jobs were taken by people from the port hinterland. The remaining jobs were taken by foreign nationals, 7% from within the European Union, and 13% from outside the EU.

In the previous study, close to a quarter of jobs were found to have been held by those originating in the port hinterland. Given the proximity to Dublin and a large pool of labour, the wider county represented 25% of the total workforce. Interestingly, one in four jobs were taken by migrants from the EU, while 1% of workers hailed from outside the European Union.

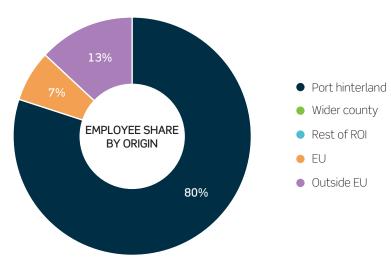


Fig. 3. Origins of the workforce, Howth, 2023

Source: Oxford Economics, Perceptive Insight

More than half (59%) of the fish-processing workforce originated from within the hinterland, while 98% of commercial fishing crews came from within the hinterland. EU workers were more prevalent in fish processing, making up 13% of all employees, with a further 28% from outside the EU.

In the previous study, more than half of the fish-processing workforce and around 44% of commercial fishing crew members originated from the rest of Ireland and the EU, while 100% of the workforce for aquaculture originated from the port hinterland.

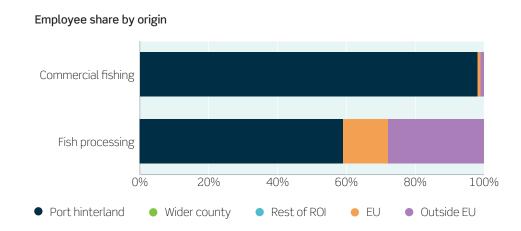


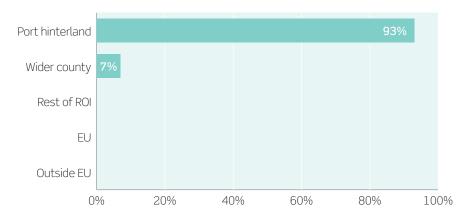
Fig. 4. Workforce origin by sub-sector, Howth, 2023

Source: Oxford Economics, Perceptive Insight

Of those employed in seafood at Howth, 93% lived within the port hinterland, the second highest rate seen for any of the ports in the survey. Another 7% lived within the wider county and commuted to Howth.

Fig. 5. Workforce residency, Howth, 2023

Employee share by residency



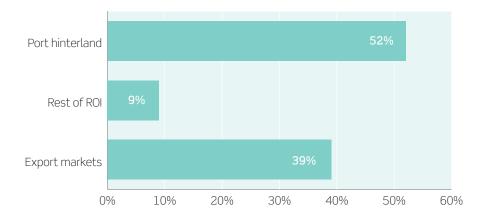
Source: Oxford Economics, Perceptive Insight

The survey also explored the key markets for the sale of goods. Sales to the immediate hinterland accounted for 52% of all Howth sales, a relatively high share compared with sales from other ports covered in the analysis. While sales to the rest of Ireland accounted for another 9%, the export market represented 39% of all sales in 2023. The proportion of exports is lower than that for many other ports but may reflect the existence of a large urban market on the doorstep of Howth, reducing the need to rely on overseas sales.

In the previous study, sales to the immediate hinterland accounted for just 44% of all Howth sales while the rest of Ireland accounted for another 19%. The export market represented 37% of all sales in 2018.

Fig. 6. Sales by destination, Howth, 2023

Share of sales by destination



Source: Oxford Economics, Perceptive Insight

Of the 39% of sales heading to export markets, 69% went to the European Union (not including the UK). Another 27% went to the UK in 2023, and the remaining 4% of export sales were destined for Asian markets.

27%

SHARE OF EXPORT SALES BY DESTINATION

Asia
Africa
Middle East
Rest of the world

Fig. 7. Export sales by destination, Howth, 2023

All operators who responded to the survey had been in operation for at least three years as of 2023, with 89% of these having been established for at least a decade. The remaining firms had been operating for between three and 10 years. This indicates that the industry has a strong heritage at Howth, with most businesses operating for many years. While the survey samples for Howth were small at the sectoral level, the results show that the maturity level was broadly the same across fishing and processing.

Fig. 8. Seafood sector maturity, Howth, 2023

More than 10 years More than 5 years, up to 10 years More than 3 years, up to 5 years More than 1 year, up to 3 years 6 months, up to 1 year Less than 6 months Not sure 0% 20% 40% 60% 80% 100%

Share of port respondents

Source: Oxford Economics, Perceptive Insight

Looking at the performance of these firms, the survey questioned respondents on their levels of turnover and investment. Turnover was reported to have decreased over the previous 12 months for 61% of respondents in 2023. Almost two in five (39%) reported turnover had stayed the same over the same time period, with no firms reporting an increase in turnover. It is hard to break down these numbers at the sub-sectoral level due to the small sample sizes for some of these questions.

In the previous study, 63% of respondents reported that turnover had neither increased nor decreased over the previous 12 months. Another one in five (21%) reported increases in turnover over the previous 12 months.

0% Increased Stayed the same Decreased 0% Not sure 10% 20% 30% 50% 60% 70% 0% 40%

Fig. 9. Turnover in the past 12 months, Howth, 2023

Respondents were also asked about their expectations for future turnover. The outlook in Howth was slightly more positive, with 17% of firms expecting turnover to increase in the following 12 months. Nearly half of respondents expected turnover to stay the same over the same period, while 28% percent believed it would decrease, though again, the sample sizes are small.

In the previous study, the outlook in Howth moving into 2019 was broadly in line with historic turnover. Almost two-thirds of respondents (63%) expected turnover to stay the same over the following 12 months, while 11% believed it would grow.

Improving turnover is often linked with investment: improving the quality and/or quantity of capital available to the workforce can enable improved productivity and turnover. On the one hand, the willingness of firms to engage in capital investment may, in itself, signal a positive outlook for the future; on the other, it may reflect the deterioration of existing capital stocks. The survey results hint at the predominance of the latter factor, as 22% had spent money on capital investment in the last financial year, the second lowest of the ports in the survey behind Kilmore Quay, but only 17% of respondents expected turnover to increase in the next 12 months.

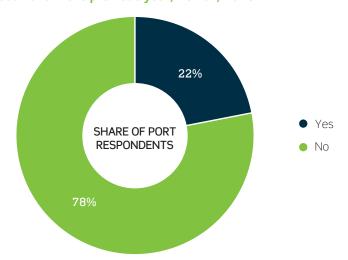
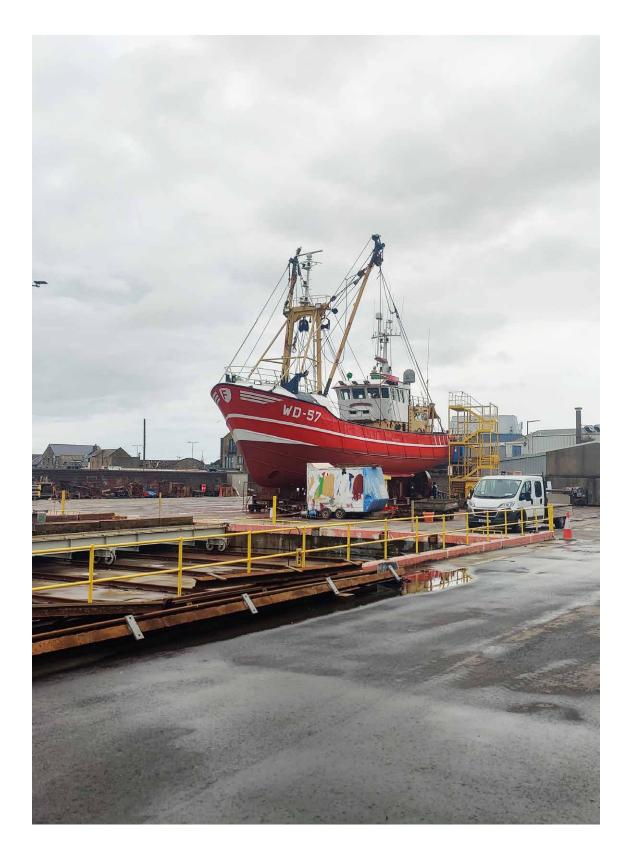


Fig. 10. Capital investment in the previous year, Howth, 2023

Source: Oxford Economics, Perceptive Insight

2.2 Conclusion

Given its proximity to Dublin, the Howth Port area is in many ways different to the relatively more rural ports covered by the study. The seafood sector in Howth directly employed an estimated 590 people. Almost all employees (93%) lived within the port hinterland, the second highest rate for any of the ports surveyed, with the remaining 7% commuting from within the wider county. In addition, seafood businesses at the port exported less than businesses in the other ports, probably given the high levels of demand from Dublin.



3. The impact of seafood's subsectors

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

3.1 Commercial fishing

The commercial fishing industry contributed $\[\in \]$ 1 million to the Dublin regional economy in 2023. Of this contribution, 58% ($\[\in \]$ 5.3 million) was a direct impact from fishing activities themselves, while 30% ($\[\in \]$ 2.8 million) of value added came indirectly along the regional supply chain. Another $\[\in \]$ 1.1 million of the GVA gains were generated from consumer spending from those employed, both directly and indirectly, by the commercial fishing sector.

Commercial fishing firms directly supported 85 jobs in Howth in 2023, paying out €1.9 million in gross wages. An estimated additional 25 full-time equivalent jobs were created along the supply chain in the Dublin area, and 10 were estimated to have been supported by induced spending. These results indicate that those jobs created along the supply chain are typically more productive than the fishing roles themselves. The employment multiplier for the direct commercial fishing activity that takes place at Howth is 1.36 which is lower than the employment multiplier from the previous study of 1.47.

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

Port commercial fishing	Dublin					
	GVA (€m)	Employment	Gross wages (€m)			
Direct	5.3	85	1.9			
Indirect	2.8	25	1.1			
Induced	1.1	10	0.4			
Total	9.1	120	3.5			

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

The bulk of the economic benefits from commercial fishing accrued within the agriculture, forestry and fishing sector, with \in 5.5 million in GVA, 95 jobs and \in 2.0 million in gross wage payments. The sector, therefore, accounted for almost 80% of all the regional employment impact supported by Howth's commercial fishing.

After agriculture, forestry and fishing, the wholesale and retail sector benefited the most, with €1.3 million in value added in 2023 and 15 jobs supported across the Dublin region. Over two-thirds of this sector's boost came through supply-chain links, with the remainder from consumer spending. The manufacturing sector also saw relatively strong benefits from fishing, generating €800,000 in GVA.

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

Port commercial fishing		Dublin	
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	5.5	95	2.0
Mining and quarrying	0.0	0	0.0
Manufacturing	0.8	<5	0.2
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	1.3	15	0.6
Transportation and storage	0.2	<5	0.1
Accommodation and food service activities	0.1	<5	0.0
Information and communication	0.1	0	0.0
Financial and insurance activities	0.2	<5	0.1
Real estate activities	0.4	0	0.0
Other business services	0.3	<5	0.1
Public administration and defence	0.0	0	0.0
Education	0.0	<5	0.0
Human health and social work activities	0.2	5	0.1
Arts, entertainment and recreation & other services	0.0	<5	0.0
Total	9.1	120	3.5

Note: May not add due to rounding

3.2 Fish processing

The fish processing sector supported a total of 1,095 jobs across the Dublin region, alongside an associated €41.5 million in gross wages. The sub-sector is estimated to have generated a total GVA impact of €106.8 million, €55 million directly by local fish processing businesses and €51.7 million non-directly from the supply chain or induced spending.

Just under half (505) of the estimated total employment benefit was generated directly by fish processing. The supply-chain impacts supported an additional 500 jobs, \in 39.0 million in GVA, and \in 14.9 million in gross wages within the regional supply chain. Spending linked to the direct and indirect activity are estimated to have supported another \in 12.7 million in GVA, \in 4.7 million in gross wages and a further 90 jobs. The employment multiplier for the direct fish-processing activity that takes place at Howth was 2.17, higher than the employment multiplier from the previous study of 1.70. This is likely down to the increased costs in the fish processing subsector which has turned into increased supply chain spending which boosts the indirect impacts.

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

Port fish processing	Dublin				
	GVA (€m)	Employment	Gross wages (€m)		
Direct	55.0	505	21.9		
Indirect	39.0	500	14.9		
Induced	12.7	90	4.7		
Total	106.8	1,095	41.5		

Note: May not sum due to rounding

The region's manufacturing sector accrued most of the benefits, as fish processing sits within the manufacturing of food sector. The sector accrued €61.4 million in value added as a result, supporting 510 jobs, alongside €23.8 million in gross wages. The manufacturing benefits broadly match those of the direct processing activity, suggesting that the subsequent indirect and induced impacts are less prevalent for this sector.

Agriculture, forestry and fishing gained the most from the multiplier effects, supporting 315 jobs and €12.8 million in GVA across the Dublin region. This was predominantly due to the supply chain links between commercial fishing and fish processing works. Outside of this, the direct fish processing activity also realised notable GVA benefits for the wholesale and retail (€10.0 million) and real estate (€6.5 million) sectors in 2023.

The total gross wages associated with the port's fish processing subsector declined substantially since the previous report. However, this is 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, Dublin, 2023

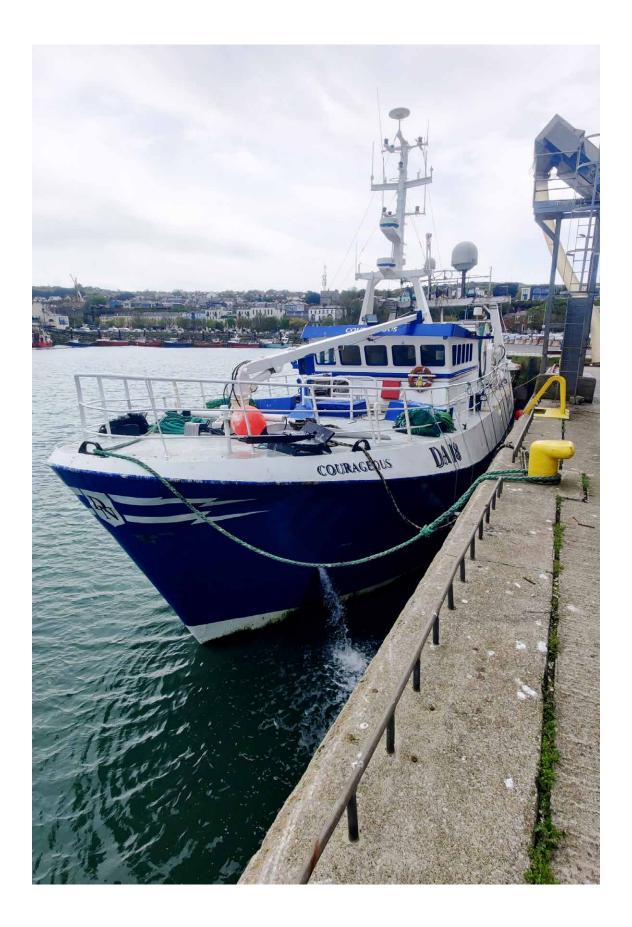
Ports processing		Dublin	
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	12.8	315	4.7
Mining and quarrying	0.0	0	0.0
Manufacturing	61.4	510	23.8
Electricity, gas, steam and air conditioning supply	0.8	5	0.2
Construction	0.0	<5	0.0
Wholesale and retail trade; repair of motor vehicles	10.0	100	4.9
Transportation and storage	3.4	45	1.7
Accommodation and food service activities	0.7	15	0.5
Information and communication	1.0	<5	0.3
Financial and insurance activities	3.0	20	1.3
Real estate activities	6.5	5	0.2
Other business services	3.9	20	1.4
Public administration and defence	0.0	0	0.0
Education	0.5	10	0.4
Human health and social work activities	2.2	35	1.8
Arts, entertainment and recreation & other services	0.5	10	0.2
Total	106.8	1,095	41.5

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

3.3 Conclusion

In conclusion, Howth's fish processing sector has the larger economic footprint of the port's two seafood subsectors. It supported an estimated 1,095 jobs and €106.8 million in GVA contributions through the region in 2023. Commercial fishing was also important, supporting an additional 120 jobs and €9.1 million in GVA contributions.



4. Total impact of the overall port seafood sector

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.

Simply summing the respective benefits of both subsectors (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 subsector and its supply chain. 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, total indirect and induced impacts are calculated by summing
the indirect and induced impacts of fish processing and a 92% share of the indirect and induced impacts
from the commercial fishing sub-sector. This is because information from the survey interviewees suggests
that exports and domestic sales outside the port area's own processors account for 92% of the commercial
fishing sub-sector'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

Overall, it is estimated that the Howth seafood sector generated €115.6 million in GVA for the Dublin region economy in 2023. This activity supported 1,210 jobs across the whole economy and generated €44.8 million in gross wages to those employed.

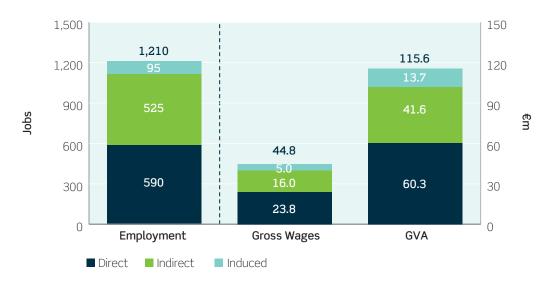


Fig. 11. Benefits of the seafood sector, Dublin, 2023

Direct seafood activity accounted for almost half (49%) of the total employment benefits, less than its relative share for earnings (53%) and GVA (52%). This reflects higher levels of productivity and average gross wage levels in the seafood sector relative to the activity within its wider supply chain. The employment multiplier for the direct seafood activity that takes place at Howth is 2.05, higher than the employment multiplier from the previous study of 1.59.

Table 8. Total seafood sector benefits, Dublin, 2023

Port seafood sector	Dublin				
	GVA (€m)	Employment	Gross wages (€m)		
Direct	60.3	590	23.8		
Indirect	41.6	525	16.0		
Induced	13.7	95	5.0		
Total	115.6	1,210	44.8		

Source: Oxford Economics, Perceptive Insight, CSO

Note: May not sum due to rounding

Given their importance to the fish processing and commercial fishing subsectors, the manufacturing sector and the agriculture, forestry and fishing sector accounted for the majority of the subsequent economic benefits. Collectively, they accounted for €80.5 million of GVA across the Dublin region in 2023, equivalent to 70% of the total regional impact. They also accounted for over three quarters (76%) of the estimated employment impacts. Manufacturing generated the larger GVA impact due to higher output per head on average. However, manufacturing's strong average productivity levels mean it supported fewer jobs, relative to GVA, than the agriculture, forestry and fishing sector.

The presence and activity of the seafood sector in Howth has positive economic impacts across various sectors of the Dublin economy, with benefits seen from real estate to arts and entertainment. It is estimated that the local seafood sector had GVA and employment multipliers of 1.92 and 2.05, respectively, across the regional economy. Therefore, for every €100 of direct value added, another €90 was generated elsewhere in the economy due to wage spending and supply-chain linkages. Additionally, for every 10 direct jobs at the port, an additional 11 jobs were supported elsewhere in the economy.

Table 9. Total benefits by sector, Dublin, 2023

Local seafood sector		Dublin	
	GVA (€m)	Employment	Gross wages (€m)
Agriculture, forestry and fishing	18.3	410	6.7
Mining and quarrying	0.0	0	0.0
Manufacturing	62.2	510	24.1
Electricity, gas, steam and air conditioning supply	0.8	5	0.2
Construction	0.0	<5	0.0
Wholesale and retail trade; repair of motor vehicles	11.1	115	5.4
Transportation and storage	3.5	45	1.8
Accommodation and food service activities	0.7	15	0.6
Information and communication	1.1	<5	0.3
Financial and insurance activities	3.2	20	1.4
Real estate activities	7.0	5	0.2
Other business services	4.2	20	1.5
Public administration and defence	0.1	0	0.0
Education	0.5	10	0.4
Human health and social work activities	2.3	40	1.9
Arts, entertainment and recreation & other services	0.5	10	0.3
Total	115.6	1,210	44.8

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 the port seafood sector's direct tax contribution equated to &10.1 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 $\[\in \]$ 2.2 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 that this induced activity supported a further $\[\in \]$ 8.6 million in tax revenue.

Therefore, in total (i.e. direct, indirect, and induced), Howth's seafood sector is estimated to have supported €16.5 million in fiscal benefits in 2023. This total was made up of €15.9 million in employment/labour-related tax, €4.1 million in corporation tax, €4.8 million in taxation associated with the spending of wages, and a net tax deficit of €8.3 million through taxation on inputs and production.³

In comparison, it was estimated that the Howth seafood sector generated \in 9.8 million in taxes in 2018. This was made up of \in 6.9 million in employment/labour-related tax, \in 1.8 million in corporation tax, \in 3.3 million in taxation associated with the spending of wages, and a net tax deficit of \in 2.2 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 10. Fiscal impacts by taxation type, Ireland, 2023

Ports seafood sector		Tot	al tax estimat	es (€m)	
	Labour tax	Corporation tax	Production tax	Input purchases tax	Tax on consumption
Agriculture, forestry and fishing	1.8	0.6	-11.1	0.9	0.0
Mining and quarrying	0.0	0.0	0.0	0.0	0.0
Manufacturing	8.9	2.2	0.1	0.3	4.1
Electricity, gas, steam and air conditioning supply	0.1	0.0	0.2	0.0	0.0
Construction	0.0	0.0	0.0	0.0	0.1
Wholesale and retail trade; repair of motor vehicles	1.6	0.4	0.1	0.0	0.0
Transportation and storage	0.6	0.1	0.2	0.2	0.0
Accommodation and food service activities	0.2	0.0	0.0	0.1	0.5
Information and communication	0.2	0.0	0.0	0.0	0.2
Financial and insurance activities	0.6	0.1	0.1	0.0	0.1
Real estate activities	0.1	0.3	0.4	0.0	0.1
Other business services	0.6	0.2	0.0	0.0	0.1
Public administration and defence	0.0	0.0	0.0	0.0	0.0
Education	0.2	0.0	0.0	0.0	-0.2
Human health and social work activities	0.8	0.1	0.0	0.0	-0.2
Arts, entertainment and recreation & other services	0.1	0.0	0.0	0.0	0.0
Total	15.9	4.1	-10.1	1.7	4.8

4.4 Growth from 2018

Over the period 2018 to 2023, in real terms, Howth had mixed results across all channels in GVA, employment, and gross wages. In the direct channel, GVA grew by 40.0%, employment by 34.1% and gross wages by 45.2%. In the indirect channel, GVA increased by 135.6%, employment by 200.0%, and gross wages by 110.7%. In the induced channel, GVA, employment, and gross wages rose by 33.6%, 11.8% and 21.8%, respectively.

Overall, it is estimated that Howth experienced a real terms increase in GVA and gross wages of 62.9% and 59.4%, respectively. This was accompanied by a growth in employment of 72.9%. This strong growth was driven by more survey results and larger turnover estimates in the fish processing sub-sector. Furthermore, there were more than double the fish processing firms in Howth than at the time of the previous study. This, alongside increased costs experienced by fish processing businesses led to higher supply-chain spending and, therefore, larger indirect impacts.

4.5 Conclusion

In conclusion, it is estimated that the Howth seafood sector generated €115.6 million in GVA for the Dublin region economy in 2023. This activity supported 1,210 jobs across the whole economy and generated €44.8 million in gross wages to those employed. Furthermore, this activity is estimated to have generated €16.5 million in tax revenues.

5. Conclusions

5.1 The seafood sector in Howth

The seafood sector at Howth constitutes an important part of the local and regional economies. Commercial fishing and processing activities generated $\[\in \]$ 60.3 million in direct value added within the local port economy. The port's 49 seafood-related businesses supported 590 full-time equivalent jobs and paid its employees an estimated $\[\in \]$ 23.8 million in gross wages. These businesses had a combined total turnover of $\[\in \]$ 163.3 million in 2023.

The survey of the local seafood industry also identified the key characteristics of the business environment. The sector is well established at Howth, with a majority of firms operating for at least 10 years. Business conditions have been challenging over the previous 12 months, with 61% of operators reporting a decrease in turnover over this period, and 78% making no capital investments in the year.

The seafood sector at Howth has a very local workforce, with 80% originating from the port's hinterland. The majority of the port's sales are also to the port hinterland, reflecting its proximity to the Dublin market.

5.2 The fish processing sub-sector is the main contributor

Howth's fish processing sub-sector made the strongest contribution to the Dublin region economy in GVA terms. In 2023, it generated $\\eqref{106.8}$ million of GVA, of which $\\eqref{51.7}$ million was linked to indirect ($\\eqref{39.0}$ million) and induced ($\\eqref{12.7}$ million) effects. Linked to this, the fish processing subsector enjoyed the stronger employment multiplier of the two seafood subsectors, with every 100 direct jobs supporting an additional 120 jobs within the rest of the Dublin region. The fish processing sub-sector is estimated to have provided benefits of the following size:

- 505 direct jobs and €21.9 million of gross wages, producing €55.0 million of GVA;
- 500 indirect jobs and €14.9 million of gross wages, producing €39.0 million of GVA;
- 90 induced jobs and €4.7 million of gross wages, producing €12.7 million of GVA



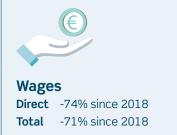
5.3 Though the commercial fisheries component remains significant

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

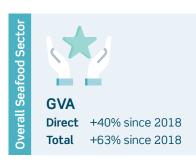
- 85 direct jobs and €1.9 million of gross wages, producing €5.3 million of GVA;
- 25 indirect jobs and €1.1 million of gross wages, producing €2.8 million of GVA;
- 10 induced jobs and €400,000 of gross wages, producing €1.1 million of GVA.

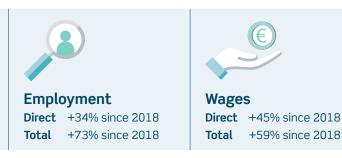






It is estimated that the port's collective seafood sector supported 1,210 jobs, €44.8 million in gross wages and €115.6 million in GVA within the regional economy in 2023. This activity was estimated to be enough to sustain €16.5 million in tax revenues to the public accounts. In comparison, once the results from the last study are converted to 2023 prices, there was an increase in GVA, employment, and gross wages of 62.9%, 72.9% and 59.4%, respectively. This strong growth was driven by more survey results and larger turnover estimates in the fish processing sub-sector. Furthermore, there were more than double the fish processing firms in Howth than at the time of the previous study. This, alongside increased costs experienced by fish processing businesses led to higher supply-chain spending and, therefore, larger indirect impacts.





5.4 Seafood supporting peripheral economies

Howth has a highly-educated workforce, with nearly half of working-age residents educated to degree level or higher, 11 percentage points above the national rate. With proximity to employment opportunities in central Dublin, the seafood industry is not a major source of employment for younger people. However, Howth has an ageing population with the share of those under 45 considerably lower than the national average. As a northern suburb of Dublin, Howth has become a commuter area, with most residents working outside the port area and its hinterland. Therefore, the local seafood sector is important in terms of retaining economic activity and employment within the local economy.

Appendix 1: Howth's economic challenges

Economic activity and structure

The latest available data indicates that Howth's labour market is performing relatively strongly. The local unemployment rate within the port area and its hinterland was relatively low at 6.3% in 2022, around two percentage points below that of both Dublin (8.2%) and Ireland (8.3%). However, the local employment rate of 55.2% was slightly weaker than both the regional and national averages (see Table 11). Furthermore, census data reveals that the economic inactivity rate among those residents aged 15 and over stood at 41.1% in 2022, somewhat higher than the rates across both Dublin (36.0%) and Ireland overall (38.8%).

Table 11. Headline economic indicator comparisons, 2022

	Unemployment rate	Employment rate	Economic inactivity
Howth	6.3%	55.2%	41.1%
Dublin	8.2%	58.8%	36.0%
Ireland	8.3%	56.1%	38.8%

Source: CSO

Demographics

The port area and hinterland's population grew by 6.2% in the six years between 2016 and 2022. Recent population growth has therefore been below the Dublin average (8.4%) and Ireland overall (8.1%). At 61.3%, the working-age component of the population remains well below average, which is likely due to the working-age population in Dublin and Ireland outgrowing Howth between 2016 and 2022.

Table 12. Population indicators, 2022

	Growth (2016-2022)		2022	
	Population	Working age	Population	Working age share
Howth	6.2%	4.5%	67,900	61.3%
Dublin	8.4%	8.5%	1,443,100	68.4%
Ireland	8.1%	7.8%	5,149,100	65.3%

Source: CSO

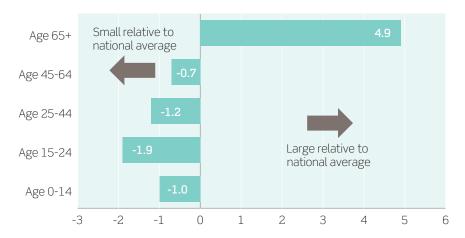
Note: Working age is defined as those aged between 15 and 64

An analysis of the port area's population by age cohorts relative to the national picture shows that the distribution is skewed at both the younger and older ends. Those aged 65 and over accounted for close to 20% of all residents, five percentage points above the national average in 2022. However, younger working-age people (aged 15-24 and 25-44) were underrepresented within the local population.

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

⁶ Economic inactivity represents the share of the population aged 15 and over who were neither employed nor looking for employment.

Fig. 12. Age group comparisons, Port area vs Ireland, 2022

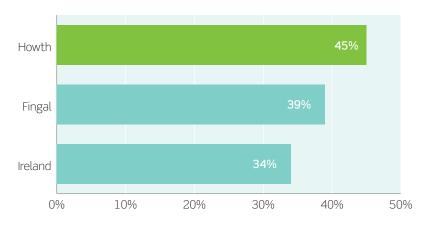


Percentage point difference in shares

Source: CSO Ireland

Qualification attainment within the port area tends to be better than at the national level. Those with no formal qualifications or, at most, primary-level education represented 8% of residents aged 15 and over in 2022, compared to 10% across Ireland. Similarly, higher-level attainment among the port hinterland's residents was much stronger than the national average. Those educated to degree level or above accounted for 45% of those aged 15 and above in Howth, compared to 34% on average across Ireland.

Fig. 13. Degree level or above attainment, 2022



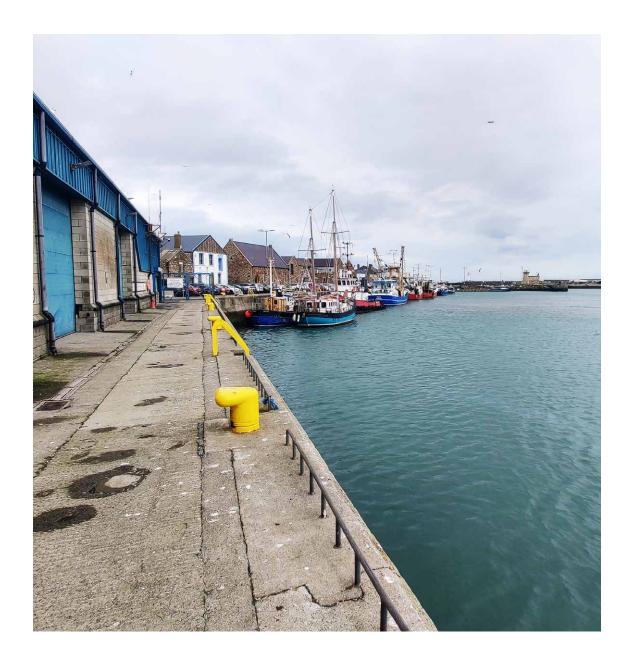
Share of residents over the age of 15

Source: CSO

Summary

Howth has a highly-educated workforce, with nearly half of working-age residents educated to degree level or higher, 11 percentage points above the national rate. With proximity to employment opportunities in central Dublin, the seafood industry is not a major source of employment for younger people. However, Howth has an ageing population with the share of those under 45 considerably lower than the national average. As a northern suburb of Dublin, Howth has become a commuter area, with most residents working outside the port area and its hinterland. Therefore, the local seafood sector is important in terms of retaining economic activity and employment within the local economy.

In comparison to the last study, the unemployment rate fell from 8.1% in 2016 to 6.3% in 2022 while the employment rate grew from 52.5% in 2016 to 55.2% in 2022. The working-age share fell from 62.3% in 2016 to 61.3% in 2022. The age group comparisons with the national average are largely the same as what they were in 2016 with the 65+ years old group continuing to be significantly larger than the national average. Howth has improved its educational attainment as those with degree-level qualifications made up 40% in 2016 and 45% 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.

A company or sector employs lots Direct of staff. Its operations generate **Impact** GDP and tax for the authorities. Indirect **Impact** It also spends money with suppliers who employ staff, generate GDP and pay taxes. They use other suppliers in turn. Induced Impact Employees (including of the suppliers) spend their wages in the wider economy, generating more GDP, jobs and tax revenues.

Fig. 14. 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 regional⁷ and national economy:

- Gross value-added (GVA) contribution to Gross Domestic Product (GDP):⁸ 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 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. 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 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.⁹

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 is then split into the different sectors of the economy ('agriculture, forestry & 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 are 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 assumptions were applied, and the resulting fiscal benefits that would likely be collected by the Revenue Commissioners were calculated.

⁷ Ideally, the impacts of the seafood sector on the port area would be quantified, but there was not enough published sectoral employment, GDP and gross wage data. Sufficient data is only available at regional level to produce sub-national impacts.

⁸ 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.

⁹ 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

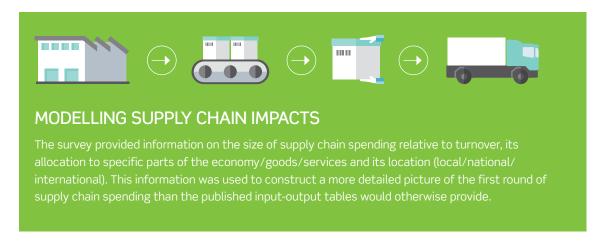
To estimate the indirect and induced impacts, an input-output model was built. Fig. 15 presents a stylised version (showing just three sectors for presentation purposes) of the input-output model, which is a model that traces how economic activity flows through an economy as one sector makes purchases from another sector.

Industry Industry Consumer Other Final **Total** Industry 3 **Spending** Demand Outputs Industry 1 C 1.1 C2.1 C3.1 C4,1 C5.6.7.1 C8.1 Industry 2 C1.2 Industry 3 C1,3 Employment C1,4 Incomes C1.5 Profits Leakages C1,6,7 Total Inputs C1,8

Fig. 15. Stylised input-output model

Source: Oxford Economics

The latest Irish input-output tables 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. ¹⁰ 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.



¹⁰ 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 for the estimation of the income effect.

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 the double counting of some of the impacts.

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, 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/aquaculture sub-sectors' induced impacts will already be accounted for within the induced impacts from the fish processing sub-sector.





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