

Background

There are seven major Scottish salmon producers including Mowi, Loch Duart, Grieg Seafood, Wester Ross Salmon, Cooke Aquaculture Scotland, The Scottish Salmon Company and Scottish Sea Farms. The key industry economic data shown below is based on information for the Scottish Salmon Producers' Organisation (SSPO) members.

The information is drawn from the latest accounts and reports from the SSPO members, as well as business register data from the Office for National Statistics (ONS). Some data was only available for 2017 and these figures were adjusted to 2018 prices (using HM Treasury deflators).

Key economic data

Table one shows some key economic data for the production of Scottish salmon. Industry turnover is just over one billion pounds with Gross Value Added (GVA) of £365m. The industry also contributes £50m in corporation tax and £76m in wages. The average wage for workers in the Scottish salmon industry is around £34,000 per annum.

Table 1: Scottish salmon key facts (2018 prices)

Economic Indicator	Value (£m)
Turnover	£1,027
Gross Value Added (GVA)	£365
Gross capital investment	£72
Corporation tax	£50
Total salary costs	£86
Total wages	£76
Income tax & national insurance	£24
Average wage (£)	£34,000
Employment	2,300

Source: 4-consulting

The latest data suggests international exports of Scottish salmon are over half a billion pounds each year. The latest Scottish Government export statistics show food and drink exports (excluding Scotch Whisky) are one billion pounds. The value of Scottish salmon exports therefore accounts for more than half of Scottish food and drink exports (excluding Scotch Whisky). Some exports of Scottish salmon may be categorised as agricultural produce in the Scottish Government figures.

Economic impact

The most recent version of the Scottish Government's economic impact model (based on Input-Output tables) shows that for every £100 of turnover within the Scottish aquaculture industry another £93 is sustained elsewhere in Scotland's economy through supply chains and high street spending from the wages paid to employees.

Given an industry turnover of £1,027 million, this suggests that the economic impact of the industry could support nearly £2 billion of turnover in Scotland's economy today and several thousand Scottish jobs.

Taxes

Table two shows the tax revenues from Scottish salmon production; these figures exclude VAT from household purchases of Salmon products. The UK's HM Treasury currently assigned some VAT revenue to the Scottish Government on the basis of household consumption rather than production.

HMRC and Annual Business Survey (ABS) data was used to produce tax coefficients similar to employment and GVA coefficients showing taxes as a proportion of industry turnover. This allowed tax multipliers to be produced showing how much income tax, national insurance and corporation tax is generated by suppliers to the Scottish Salmon industry.

For example, the Scottish Government shows for £100 of income within aquaculture a further £163 of income is sustained in the rest of Scotland's economy through supply chain effects and employee spending.

The income multiplier for aquaculture (2.63) is one of the highest of any Scottish industry and reflects the capital-intensive nature of Scottish salmon industry. The income tax and national insurance multiplier for aquaculture was estimated to be 2.41 (every £100 within industry generates another £163 from elsewhere in Scotland).

The total economic impact of Scottish Salmon production on other net taxes (taxes minus subsidies) on production and products is also shown in Table 2. The total tax revenues generated by Scottish Salmon production are £216 million. Nearly half of these revenues are raised by (or assigned to) the Scottish Government.

Table 2: Tax revenues from Salmon production

Economic Indicator	Value (£m)
Corporation tax	£50
indirect and induced	£71
Income tax & national insurance	£24
indirect and induced	£34
Other net taxes on production & products	£37
Total tax revenue	£216

Source: 4-consulting and Scottish Government Input-Output model

Modern apprenticeships

The Scottish Salmon industry has around 250 employees that are engaged in modern apprenticeships each year. Some employers reported that approaching one third of their workforce were currently engaged in modern apprenticeships.

The number of modern apprenticeships in aquaculture training has grown from 10 in 2009-10 to 112 last year. This includes modern apprenticeships in aquaculture and aquaculture management (technical apprenticeship).

In addition to aquaculture and aquaculture management there were nearly 800 modern apprenticeships in food and drink operations for all employers across Scotland in 2018 (April to December 2018).

Table 3: Modern apprenticeships in training

Industry	2009-10	2012-13	2015-16	2018*
Aquaculture	10	36	51	85
Aquaculture management	-	-	-	27
Total	10	36	51	112

Source: Skills Development Scotland (*latest data cover April to December 2018 only)

Currently 82% of those leaving aquaculture modern apprenticeships achieve qualifications compared to 76% in food and drink operations and 75% for all modern apprenticeships (2018).

About the author

Richard Marsh is an economist, an elected fellow of the Royal Statistical Society and member of two Scottish Government expert groups advising on statistics and modelling. He is a Fellow of the Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA).

Richard has led high profile economics research projects for the Office of the First Minister for Wales, the Office of the First Minister and Deputy First Minister for Northern Ireland and the Office of the Chief Economic Advisor for Scotland. Richard Marsh undertook research on behalf of Scotland's Sustainable Growth Commission (published last year) supporting the commission's report in the areas of migration.