1 Introduction

The UK and EU Fishing Industries in Profile

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Introduction

For the purpose of context this first chapter sets the scene for the book by examining the United Kingdom (UK) and European Union (EU) fishing industries, utilising the best currently available reports and statistical information on the UK fishing industry. It is important to emphasise this data was collected prior to the end of the Brexit transition period, which ended on 31 December 2020. Therefore, this study can only provide an economic "snapshot" to enable a limited forensic projection based on the best currently available information. The first section will outline and summarise the UK fishing industry, while the second section provides a similar breakdown of the EU fishing industry as it pertains to fishing in UK waters. Finally, an outline of the subsequent nine chapters of this book is provided.

The UK Fishing Industry – an Overview

This subsection provides a short summary of the UK fishing industry based on the latest statistics at the time of writing by the UK government, the European Commission, independent scientific bodies and NGOs.

Breakdown of the UK fishing industry

The UK fishing industry is extremely diverse. This diversity lies in both the types of fishing vessels and fishing activity gear used,[1] the species fished and the markets they access. Additionally, "ownership of quota" is also a significant factor, and one that has been criticised for existing in an effectively privatised system.[2] The UK fishing industry is also distinguished by having both a

1 See Tables 1.1 and 1.2.

2 See G Carpenter, 'To really "take back control" of UK fisheries, we must treat fishing rights as a public resource' *SERA,* <https://www.sera.org.uk/to_really_take_back_control_of_uk_fisheries_we_must_treat_fishing_rights_as_a_public_resource> accessed 6 April 2021.

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commercial and recreational (e.g., sea angling) component.[3] Though the recreational fishing industry in the UK is of significant economic value, contributing £1.5 billion per year,[4] this book focuses *only* on the commercial component. The commercial UK fishing industry employs over 31,000 people in the UK (0.04% of total UK employment).[5] The industry contributes annually 0.12% of Gross Domestic Product (GDP), with an average annual economic output of £1.4 billion.[6] Commercial UK fishing comprises three sectors:

1 The fishing industry – harvest of wild fish, crustaceans and molluscs;
2 The aquaculture sector – farming of fish, crustaceans, molluscs and seaweed;
3 The fish processing industry – preparation and preservation of fish for human and animal consumption[7]

Table 1.1 Breakdown of gear type and percentage of fish and shellfish catch (UK).

Fear Type	*Examples*	*Percentage of UK Catch*
Active – pursue the catch	Demersal trawlers Beam trawlers Dredges Sein nets	87% in 2019 99% of pelagic fish 91% of demersal fish
Passive – stay in place and catch comes to them	Pots and traps/creels Hooks Drift and fixed nets	< 50% of shellfish 13% of fish catch

Source: Statistics from Marine Management Organisation (MMO) 2019.[8]

3 European Parliament, 2017. Report on the state of play of recreational fisheries in the European Union. 2017/2120(INI), <www.europarl.europa.eu/doceo/document/A-8-2018-0191_EN.html?redirect#title2> accessed 6 April 2021.
4 K Hyder *et al.*, 'Recreational sea fishing in Europe in a global context – participation rates, fishing effort, expenditure, and implications for monitoring and assessment' *Fish and Fisheries* 19, 225–243; D Diz, M Lennan, K Hyder, 'Assessment of governance structures and legal instruments for recreational sea fishing and its inclusion in broader fisheries governance' *Report for Cefas* (forthcoming 2022).
5 Marine Management Organization, 'UK Sea Fisheries Statistics 2018' *Office for National Statistics, Long-term trends in UK employment: 1861 to 2018.*
6 E Ares, C Rhodes, M Ward, 'The UK Fishing Industry' House of Commons Debate Pack CDP 2017/0256 (2017), <https://researchbriefings.files.parliament.uk/documents/CDP-2017-0256/CDP-2017-0256.pdf> accessed 8 April 2021, at 4.
7 E Uberoi, G Hutton, M Ward, E Ares, 'UK Fisheries Statistics' Briefing Paper Number 2788, 23 November 2020, <https://commonslibrary.parliament.uk/research-briefings/sn02788/> accessed 8 April 2021, at 4.
8 Marine Management Organisation (MMO) 'UK Sea Fisheries Statistics 2019' (2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/920679/UK_Sea_Fisheries_Statistics_2019_-_access_checked-002.pdf accessed 10 April 2021, at 34.

Table 1.2 Breakdown of species category (UK).

Species Category	*Definition*	*Examples*
Pelagic	Fish that inhabit the water column	e.g., Mackerel, Blue whiting, Herring, Sardines
Demersal	Fish that inhabit near and the bottom of the sea	e.g., Bass, Brill, Cod, Haddock, Hake, Halibut, Lemon Sole, Monkfish, Plaice, Whiting
Shellfish	General term for several aquatic invertebrates including molluscs and crustaceans	e.g., Nephrops (Langoustines), Lobsters, Crabs, Cockles Mussels, Clams, Scallops, Shrimps and Prawns, Squid, Whelks

Economic Output

In 2019, the fishing and aquaculture sector of the UK had an economic output of £446 million as defined in terms of Gross Value Added (GVA).[9] This was 59% lower than in 1990, highlighting the fact that the UK fishing industry has been in steady decline since 1992.[10] It is important to note that fishing productivity in the UK varies regionally. For example, in 2018 Scotland contributed 61% GVA of the UK fishing industry total (this figure includes aquaculture output), whereas the South West of the UK contributed 10%, Northern Ireland contributed 6% and Wales was 3%.[11] There were 4,491 fishing vessels registered as active in the UK in 2019 (35% had an annual fishing income of under £10,000).[12] In terms of GDP, the UK fishing industry in 2019 was worth £747 million as a whole, an increase of 44% from the £520 million in 2009.[13]

Employment and Fleet Size

In 2020 alone a total of 3,705 fishing businesses were registered in the UK.[14] In terms of employment, the UK fishing industry has also been in steady decline, with the number of fishers working on UK-registered vessels decreasing from the 48,000 when records began in 1938 to 12,000 in 2019.[15] This figure of 12,000 has remained stable since 2009.[16] Presently 45% of fishers working on

9 GVA is similar to GDP, see E Uberoi *et al.* (n 7).
10 Ibid.
11 Ibid at 5.
12 Seafish, 'Economics of the UK Fishing Fleet' (2020), <https://www.seafish.org/document/?id=c0640cf9-a9c8-4d03-8c35-6f7a966ad056> accessed 10 April 2021.
13 MMO (n 8) at 54.
14 E Uberoi *et al.* (n 7) at 6.
15 MMO (n 8) at 13.
16 Ibid. at 4.

UK vessels are on English vessels, and 40% are on Scottish vessels, 7% on Welsh, and 7% on Northern Irish. In Scotland, there were 4,847 registered fishers with the Scottish port authorities.[17] Of note, 80% of the UK fishing fleet comprises vessels 10 metres or less in length.[18] Only 4% of the UK fleet are vessels over 24 metres in length. However, these vessels consist of three-fifths total fishing capacity.[19] In terms of regions, England has the largest number of vessels in the UK; however, Scottish vessels have the highest capacity (57%) and power (49%) despite compromising only 36% of the total number of vessels in the UK.[20]

Table 1.3 Size of UK fishing fleet by country.

	Vessels <10m	*Vessels >10m*	*Total*
England	2,323	496	2,819
Scotland	156	549	2,109
Wales	385	29	414
Northern Ireland	198	128	326
Crown Dependencies	168	32	200
Total	4,634	1,234	5,958

Source: Data from MMO 2019[21]

Landings and Efforts

Between 2018 and 2019, fishing effort by the UK fleet over 10 metres decreased by 3%, with overall fishing effort by this section of the UK fleet decreasing by 35% since 2003.[22] The UK Marine Management Organisation (MMO) indicates that most of the decline of overall fishing effort has been driven by a 36% reduction in effort in the demersal trawl and seine sector of the UK fleet from 2004 to 2019.[23] The majority of fish caught by the UK fishing industry is landed in UK ports. That being said, a 'substantial proportion is landed in foreign ports. In 2019, the total weight of fish landed by UK vessels in the UK and abroad was 621,900 tonnes, of which 230,700 tonnes (37%) were landed abroad.'[24] All of the top three ports for landings of fish and shellfish in the UK are located in the north of Scotland (Peterhead, Lerwick, Fraserburgh), totalling 180,600 tonnes worth £260.3 million in 2019.[25]

17 Ibid.
18 Ibid. at 10.
19 Ibid. at 10.
20 Ibid. at 8.
21 Ibid.
22 Ibid. at 42.
23 Ibid. at 43.
24 E Uberoi *et al.* (n 7) at 16.
25 MMO (n 8) at 30.

The UK fleet catches over 150,000 tonnes of mackerel per year constituting 24% of the total UK sea fisheries catch, and of this 60% of the mackerel catch is landed outside of the UK.[26] Turning attention to shellfish, the MMO has indicated that since 1996, 'the quantity and value of key shellfish species landed by the UK fleet has increased'.[27] Two-thirds of all shellfish landed in the UK are nephrops, (i.e., langoustine or Norway lobster), scallops and crabs; the largest quantity and highest value of shellfish species are caught closest to the UK coast.[28] The total catch for shellfish by UK vessels was 146,800 tonnes, representing 25% of the total landed catch by weight.[29] In 2019, £393 million worth of shellfish was landed by the UK fleet. Pelagic fish landings were worth £247 million, and demersal fish landings were worth £347 million.[30]

Trade

As mentioned in the introduction, seafood is a globally traded commodity. Globally, the UK imports more fish than it exports. The MMO has estimated that the UK's "trade gap" is 270,000 tonnes of fish.[31] However in 2019, the UK exported more seafood to the EU than it imported from the EU.[32] The UK's imports and exports of fish and fish products are broken down in Table 1.4. It is important to bear in mind that these statistics are from 2019, prior to the UK formally leaving the EU, and thus it is difficult to gauge the true economic impact on the trade of seafood between the two trade partners at this time.

Imports

The UK is a net importer of seafood (see Table 1.4). In terms of fish imports into the UK, demersal (so-called groundfish, e.g., cod, haddock and flatfish, see

Table 1.4 Imports and exports of fish and fish products into and out of the UK by tonnage and value in GBP.

	Tonnage	*Value*
Import	854,300 tonnes	£3.6 billion
Export	496,300 tonnes	£1.9 billion
Deficit	–358,000 tonnes	–£1.7 billion

Source: Figures from 2019[33]

26 Ibid. at 24.
27 Ibid. at 27.
28 Ibid. at 27–29.
29 E Uberoi *et al.* (n 7) at 16.
30 Ibid.
31 MMO (n 8) at 4.
32 E Uberoi *et al.* (n 7) at 12.
33 Ibid. at 11.

Table 1.4) and pelagic (e.g., herring and mackerel) fish comprised 82% by weight.[34] The remaining 18% by weight were shellfish (e.g., shrimp and prawns); this is primarily due to the higher price of shellfish species.[35] In terms of fish products, 133,000 tonnes of fish products (e.g., fish meal and oils) were imported into the UK in 2019. The total imports for 2019 were 854,000 tonnes (see Table 1.4).[36] During 2019, the UK was a net importer of cod (106,000 tonnes), tuna (110,000 tonnes), and prawns (78,000 tonnes).[37] This can be explained by the fact that "UK consumers are extremely conservative in their seafood tastes and this trend is increasing over time".[38] Consumers prefer the "big five" species: cod, salmon, tuna, haddock and shrimp, which account for 80% of the market share.[39] In 2019, the UK's fish imports from the EU were worth £1.2 billion – this comprises 35% of all fish imports into the UK by value.[40] The UK's imports from non-EU countries were worth £2.2 billion.[41]

Exports

The UK exports around 80% of its catch, with the key markets being France, the United States, Spain and Ireland. In terms of exports, demersal and pelagic fish comprised 82% of fish exports from the UK by weight, while shellfish comprised 18%.[42] Total tonnage of fish products exported out of the UK was 44,000 tonnes in 2019, meaning the total exports of sea fish, fish products and freshwater fish were 500,000 tonnes.[43] The UK exported 62,000 tonnes of mackerel in 2019 and remains a net exporter of this species.[44] By value, in 2019, the UK's fish exports to the EU were worth approximately £1.4 billion, representing 67% of all fish exports from the UK by value.[45]

Preliminary Conclusions

Based on the statistics presented above, the general picture painted of the fishing industry in the UK, in at least some aspects, is an industry trending in a steady decline prior to Brexit. Indeed, the UK fishing industry is proportionally a small national industry, contributing a very small portion of total GDP. The

34 MMO (n 8) at 50.
35 Ibid.
36 Ibid. at 50.
37 Ibid. at 51–52.
38 *Fisheries and Brexit, UK in a Changing Europe Report* (2020), <https://ukandeu.ac.uk/research-papers/fisheries-and-brexit-3/> at 8.
39 Ibid. at 8.
40 E Uberoi *et al.* (n 7) at 12.
41 Ibid.
42 MMO (n 8) at 53.
43 Ibid. at 53.
44 Ibid. at 53.
45 E Uberoi *et al.* (n 7) at 12.

industry, moreover, relies heavily on exports to EU markets to stay afloat. Consumer preferences in the UK drive higher imports of fish from the EU than corresponding exports to the EU. Further, statics argue that fishing activity is not distributed evenly across the four nations of the UK – Scotland has larger vessels and lands a significantly greater tonnage of catch while England has larger vessels and employs a greater number of people. Fishing, at least in the UK public's imagination, appears to be a largely romanticised image of itself as an island nation rather than a currently accurate statistical fact. This, in conjunction with the fact that UK waters are a major source of fish for EU vessels, appeared to have given confidence to UK government negotiators that they had the upper hand when finalising the Trade and Cooperation Agreement (TCA) with their EU counterparts. An overview of the EU fishing industry as it relates to access of UK waters is outlined below.

The EU Fishing Industry in UK Waters – an Overview

This smaller section provides a snapshot of the EU fishing industry, as it pertains to vessels that fish in UK waters. This overview is based on the latest statistics available from the UK government, the European Commission, independent scientific bodies and NGOs. Globally, the EU is not a large fishing entity; like the UK the EU fishing industry does not make up a large part of the EU economy accounting for only 6% of global EU trade and 4% of fish production.[46] Most EU Member States, barring its landlocked members, have a fishing industry. Spain, Denmark and France are the big players and account for over 50% of total catch within the EU-27.[47] Prior to Brexit, the UK was between Denmark and France in terms of average catches.[48] In contrast to the previous section, it is worth emphasising that the EU is a bloc of States, some whose vessels fish UK waters only some of the time, and some whose vessels do not fish in UK waters at all. A consequence of this is that it is challenging to find disaggregated data on topics such as number of individuals employed in the EU on vessels who fish in UK waters. As such, this section groups together subsections that were presented individually in the previous section.

Breakdown of the EU Fishing Industry in UK Waters

It is estimated that in the past decade, an average of 42% of fish catches (by volume) by EU Member States were caught in UK waters. This statistic can rise to 60% depending on species or fleet.[49] EU fishers rely heavily on the

46 Fisheries and Brexit, UK in a Changing Europe Report (n 38) at 9; fishing as a percentage of EU economies for every Member State in 2017 can also be viewed here and at *Eurostat*, <ec.europa.eu/eurostat/web/national-accounts/data/database> accessed 12 April 2021.

47 Ibid. Fisheries and Brexit, UK in a Changing Europe Report at 9.

48 Ibid. at 9–10.

49 M Minarik, 'All in The Same Boat: Free Markets and Fishing Grounds – European Fisheries Alliance EUFA' *European Fisheries Alliance EUFA*, 2021, <https://fish

north-east Atlantic, which includes a substantial portion of UK waters. For example, EU-27 vessels operating in UK waters landed 656,000 tonnes of fish in 2012–2014.[50] More detail and catch breakdown by EU Member State fleets in UK waters is given here.[51] Five EU Member States historically catch 90% of the catch by weight in UK waters. These States are Demark (32%), the Netherlands (24%), France (16%), Ireland (12%) and Germany (10%).[52] These Member States rely rather heavily on access to UK waters, especially around the north-east Atlantic. For example, the Netherlands fish catch is greater than half from this area.[53]

Economic Output, Employment, Landings

The value of catches by EU vessels in UK waters was estimated to be around €524 million for the years 2013–2015.[54] Additionally, fish processing is a greater industry than in the UK. France, for example, employs twice as many individuals in fish processing compared with fish catch; Germany employs 85% of the entire fishing sector; while in Spain, one-third of jobs in the fishing industry are in fish processing.[55] These processing industries rely on the export of UK catch to maintain a steady supply of fish to process. In terms of target species, species caught by EU vessels are very different to those caught by the UK. For example, French vessels catch the greatest share of monkfish, whiting and hake, while Irish vessels catch the largest share of horse mackerel.[56] Dutch fisheries catch 80% of North Sea sole, and Danish fishers catch 90% of North Sea sprats.[57] By contrast, only 13% of UK catch comes from EU waters.[58]

Trade, Import and Exports

As discussed above the EU exports more fish to the UK than the EU imports from the UK (see also Table 1.4). This constitutes the so-called "fish swap" where France, Spain and Ireland import langoustines, scallops, crab and

eriesalliance.eu/key-issues/all-in-the-same-boat-free-markets-and-fishing-grounds/> accessed 12 April 2021.

50 J M Sobrino Heredia, 'Research for PECH Committee – Common Fisheries Policy and BREXIT – Legal Framework for Governance' *Policy Department for Structural and Cohesion Policies* (European Parliament, 2017), <https://www.europarl.europa.eu/RegData/etudes/STUD/2017/601981/IPOL_STU(2017)601981_EN.pdf> accessed 13 April 2021 at 61.

51 Ibid.

52 Fisheries and Brexit, UK in a Changing Europe Report (n 38) at 11; J M Sobrino Heredia (n 50) at 61–62.

53 Ibid. Fisheries and Brexit, UK in a Changing Europe Report.

54 J M Sobrino Heredia (n 50) at 63.

55 Fisheries and Brexit, UK in a Changing Europe Report (n 38) at 11.

56 Ibid.

57 Ibid.

58 Ibid. at 10.

mackerel from the UK. Farmed salmon is also largely imported into the EU from the UK. The greatest importers of fish and fish products from the UK, and exports from the EU to the UK were covered above.

Preliminary Conclusions

In comparison with the UK fishing industry profiled in 'The UK Fishing Industry – An Overview', it is apparent that the northern EU Member States are reliant on access to UK waters for fisheries. Vessels fish particularly in the north-east Atlantic and catch different species than UK vessels. However, the EU exports a greater value and tonnage of fish to the UK. Certain EU Member States rely on catches from UK waters to maintain their large fish processing industries.

Covid-19

In addition to the uncertainties for the UK and EU fishing industries brought about by Brexit, the unprecedented Covid-19 pandemic has seen the UK fishing industry impacted badly in its key local and international markets, including export of valuable seafood to European markets, and the closure of restaurants in the UK and abroad who source UK seafood. However, compensation schemes were created for fishers by the UK government; for example,[59] it remains to be seen how the seascape of the UK fishing industry will look when the pandemic subsides. It is important to mention the pandemic here to indicate another prominent cause of harm to the UK and EU fishing industries, which has compounded the impacts of Brexit.

For the purpose of introduction, both the UK and EU fishing industries, respectively, have been profiled with a focus on EU vessels that have access to UK waters for their catch. It can be said that the EU relies more on access to UK waters than vice versa while the UK imports a greater volume of fish from the EU, and the UK industry relies heavily on exporting catch to the EU. Brexit has brought about huge challenges in this regard. The rest of the book will address the following topics.

Chapter 2 by Robin Churchill outlines the fisheries management position of the UK up until 2020, and then analyses the constraints placed on UK fisheries management as a result of the TCA, and outlines the changes the TCA has made to fisheries management in the UK from the previous status quo. Andrew Serdy analyses the fisheries provisions of the TCA (Articles 493–511) in Chapter 3, and the imbalance of negotiating power between the parties, as well as issues with the dispute settlement provisions and the potential for

59 Marine Management Organisation, COVID Pandemic: COVID Financial Support Guide for Fishing and Seafood Businesses (2021), <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/970524/One_Stop_Shop_Covid_v9-2.pdf> accessed 5 April 2021.

overcatch. Chapter 4 analyses the recent trilateral and bilateral fishing negotiations between the UK and EU, and the UK, EU and Norway to glean an initial picture of the UK's new role as an "independent" fisheries player in the North Atlantic.

Chapter 5 then examines the Fisheries Act 2020 vis-à-vis devolution in the UK, and makes inferences on how this new key piece of UK fisheries legislation empowers the devolved powers in the UK to manage fisheries in their respective waters. In keeping with the national approach, Chapter 6 by Mercedes Rosello and the editors illustrates, using the case study of Rockall, the complex framework of international legal commitments in fisheries enforcement that still apply to the UK. Continuing with international legal obligations, Chapter 7 elaborates on the UK's commitments under international environmental law applicable to fisheries, while Chapter 8 explores the UK's participation in regional fisheries management organisations after Brexit.

Chapter 9 offers multiple expert perspectives on Brexit and the new British fishing policy, based on the outcome of the workshop titled "Legal Challenges Faced by Coastal and Fishing Communities, Brexit and the New British Fisheries Policy" jointly organized by the City Law School, the International Law and Affairs Group, the Institute for the Study of European Law, the London Universities Maritime Law and Policy Research Group and the World Maritime University held on 8 June 2021. Finally, Chapter 10 offers some conclusions and summarises the key points of the book.