



Impacts of current EU regulation on the UK whitefish value chain



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ARTICLE INFO

Keywords:

Value chain analysis
Competitiveness
Sustainability
Bioeconomic modelling
Whitefish

ABSTRACT

Cod and haddock are two of the “big 5” UK supermarket fish species and intrinsic to fish and chip shops nationwide. UK whitefish fleets produce a significant amount, however there is a reliance on imports to maintain supply. The UK is in a strong position to compete for raw material from Iceland and Norway given high prices paid for imports and investment by Icelandic and Norwegian companies in the UK. Regarding UK production of whitefish, the European Common Fisheries Policy landing obligation has introduced significant uncertainty. To avoid discarding of any quota stock, fishing may be stopped before all target stocks quota is reached. For demersal fleets, there is a transition period between 2016 and 18 where target stocks are introduced according to Advisory Council and EU agreement and Article 15, with all quota stocks from 2019. As the capacity of the fleets balance to the new regulations, supply will likely return and if maximum sustainable yield (MSY) is reached in 2020 then an increase in TACs from current levels is likely too. However, markets and industries can change in a short period. Particularly, most processing companies are small to medium size enterprises and those that concentrate on cod and haddock may have to adjust their business. Fleets could be resilient to such short term reductions in landings however this cannot be assumed. The competitiveness of producers will surely be affected in the short to medium term as a result.

1. Introduction

Cod and haddock are by far the largest marine species on the UK seafood market behind salmon, tuna and prawns. Seafish Factsheet [21] reports that sales of cod and haddock in the UK account for over half a billion pounds sterling each year, one fifth of the UK seafood retail market, with the fish and chip foodservice sector worth over one billion pounds sterling per year largely providing cod and haddock [1]. Furthermore, cod and haddock are for the most part sourced from North East Atlantic waters and have significant importance to UK producers, both fleets and processors.

The last European Common Fisheries Policy¹ has introduced some significant challenges to UK fishing fleets to maintain supply of key species in the short term. The two key policies in this regulation are the objective to reach maximum sustainable yield (MSY) for all quota stocks by 2020, and the implement of a landing obligation, essentially a discard ban, for all quota stocks by 2019. A transition period between 2016 and 2019 is being managed to drive fisheries to these positions by the stated years. MSY is calculated at a single species level but the landing obligation operates in a multi-species context. Hence, in 2019, this could mean that fleet's must stop fishing as soon as the quota of a

single stock is met. The resulting effort level may be considerably less than fishing at MSY for some stocks. The binding policy is therefore likely to be the landing obligation, even though fishing below MSY, at levels potentially much lower than those resulting in maximum yield, will have a positive impact on the status of fish stocks. This could however have a severely negative impact on supply. Given this, it is an important statement made by the European PECH Committee which states, “Considering the unclear linkages between MSY and the landing obligation, ... achieving exploitation rates able to produce maximum sustainable yield is likely the most important objective and should be prioritised” (North Sea p. 67 of [19]).

Recent studies have indicated that choke species could reduce catching opportunities for fleets if species for which there is low quota held cannot be avoided [2]. Extra-EU imports, which are considerable, will likely remain unaffected by the changes to the CFP. There is however a competition amongst several EU countries for a limited supply of extra-EU sourced whitefish: cod in particular but also haddock. The processing, retail and foodservice sectors will be most affected should the supply of cod and haddock reduce, putting added pressure on margins but also on the need to offer alternative products to satisfy demand for seafood products.

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¹ Regulation (EU) No 1380/2013 on the Common Fisheries Policy.

In addition to highlighting potentially conflicting objectives of policy, this paper aims to investigate how supplies and markets for cod and haddock are likely to be affected in the UK in the short to medium term. This could impact the competitiveness of UK producers and processors significantly. Competition in international markets is both an opportunity and a threat, as there is limited international supply of cod and haddock, even so it could be expected to have a positive impact in the supply chain for producers. Fleet adjustment, and the need to balance resource availability with the size and composition of the fleet, continues to happen in UK and other EU fleets. This reduces pressure on stocks (i.e. conservation objective) thus enabling the drive towards MSY and subsequently improves the economic performance of fleets (i.e. economic objective) but at the direct expense of reductions in numbers of vessels (i.e. social objective) and the social cost that brings. The objectives highlighted are of course simplified, but demonstrate the social objective pulling in a different direction to conservation and economy [3–5]. This is important with the introduction of the landing obligation as the total demand for fish continues to grow even though average consumption in the UK has decreased slightly in recent years and with that changing prices of fish maintain a healthy market for seafood.

This paper estimates the potential impact of changing regulation to the supply of cod and haddock on UK producers and UK markets. A modelling approach is taken to estimate how the landing obligation might impact fleets. Patterns of trade are analysed to understand the flexibility and complexity of cod and haddock markets. The structure of this paper provides an overview of the whitefish production in the UK and other EU countries, followed by an evaluation of the whitefish value chain, with results from modelled scenarios considering potential impacts on the UK whitefish market, concluding with a discussion and final comments.

2. Material and methods

2.1. UK Whitefish production

The UK whitefish fleet is for the most part concentrated in the Scottish ports of Peterhead and Fraserburgh, although there are whitefish vessels registered in other ports in England, Wales and Northern Ireland. For the purpose of this study, the following evaluation focuses on vessels using demersal trawl/seine to target cod, haddock, whiting and saithe predominantly, with revenue from these four species representing more than 50% of these vessels' total fishing income. The vessels selected are split into two length classes: 12–24 m, and over 24 m (Fig. 1). There are many other vessels that catch whitefish in addition to other species, for example anglerfish, megrim, plaice, lemon sole etc, however these are not included in this analysis.

The number of vessels for the over 24 m segment have remained stable at between 55 and 60 vessels across the period. The number of

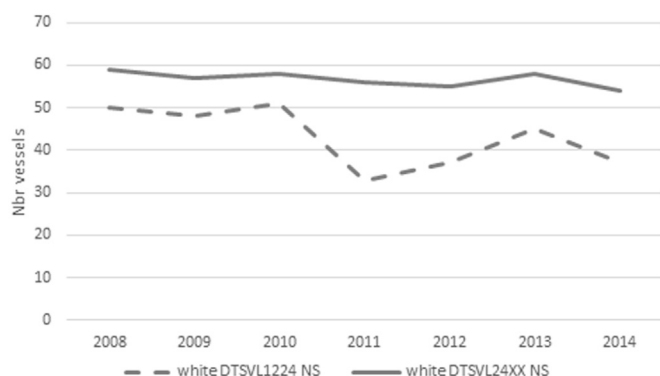


Fig. 1. Whitefish fleet segments 12–24 m and over 24 m vessels source: estimated from [20].

vessels for the 12–24 m segment have fluctuated strongly mostly as a result of quota availability and the need to target other stocks to a greater extent for a time. This was evident in 2011–12 as the fishing opportunities for cod and haddock, as well as whiting and saithe, worsened. This is notably due to increasing fuel prices (approximately 34p in 2010 to 46p in 2011) and decreasing TAC particularly for North Sea cod from 40,000 t in 2010 to 32,000 t in 2011. From a level of around 50 vessels in 2008–10, the 12–24 m fleet segment has reduced to around 37 vessels in 2014.

Cod, haddock, whiting and saithe contribute over 70% to both fleets total landing value (Fig. 2). The remaining 30% of landings value is made up from anglerfish and flatfish and small amounts of hake, cephalopods, ling, plaice and pollack (included in “Others”). Income in the most recent two year (i.e. 2013–14) are at their highest by a considerable margin. This indicates that fishing opportunities have increased with greater TACs, particularly North Sea haddock, but also that prices have improved. For example the North Sea and West Coast haddock TAC(IV, IIIa and VIa) increased from an average of 39,413 t in 2011–12 to an average of 49,566 t in 2013–14. Haddock prices rose from an average of £1.14 per kg to £1.26 per kg over the same two periods.

Both fleets have seen increases in income (Fig. 2) and profit (Fig. 3) in recent years. Income for the 12–24 m fleet segment has increased by 50% between 2008 and 2014 and for the over 24 m fleet segment by 33% from its lowest in 2009 compared to 2014. In addition, other income reflecting quota trade has increased by approximately 10% over the period for both fleet segments.

Average vessel profit is estimated to have increased sharply since 2009 and even more so since 2012. For the 12–24 m fleet segment, this could be explained partly by less vessels getting a greater share. For the over 24 m, number of vessels has however remained relatively constant. The increase in profitability is likely due to a mix of increased prices, increased TACs and stable costs (mainly energy/fuel costs). These latter costs have on average reduced from £299,000 in 2012 to £269,000 in 2014 for the larger vessels (over 24 m). Conversely, all other costs appear to have increased by 10% year-on-year from 2012 to 2014. Smaller vessels (12–24 m) have seen costs increasing significantly, with revenues increasing at a greater rate on average.

Overall, it is apparent that the amount of revenue required to breakeven for the over 24 m whitefish fleet has reduced in recent years, mostly as a consequence of reduced costs and lower fuel prices (Fig. 4). For the 12–24 m whitefish fleet breakeven revenue has remained fairly stable increasing to a small degree in recent years. For both fleet segments, income per day has steadily increased. Similarly for both fleet segments, the number of days required to breakeven has decreased as income has increased at a greater rate than costs (Fig. 4). In 2014, the 12–24 m whitefish fleet segment is estimated to have broken even in 50% of the days fished and the over 24 m fleet segment in approximately 43% of days.

2.2. UK Whitefish value chain

UK whitefish production is important to the UK fishing industry, with cod, haddock, whiting and saithe contributing 14.3% to the total UK landings value (at £122.9 million) [6]. Even so, the strong demand for cod and haddock by UK consumers means that imports of these species are considerable and a magnitude higher than UK production. Total imports for cod and haddock represent in 2014 close to 152,000 t for a value of £649 million, with Iceland, Norway, China and Denmark representing over 75% of the volume of imports (Fig. 5). Iceland and Norway supplied 48% of the imports of cod in 2014 and 44% of haddock. China, Denmark, Germany and the Faroe Islands are also large suppliers (41% cod and 35% haddock). Most imports coming from China are processed products, companies taking advantage of Chinese lower costs to process raw material before shipping it back to the UK.

Data on nine whitefish value chains were collected for 2014 (Table 1). The majority of whitefish landings by UK registered vessels

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