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Analysis of fishing quota shares in the EU-UK Trade and Cooperation Agreement

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Executive summary

On 30 December 2020, the United Kingdom and the European Union signed the EU-UK Trade and Cooperation Agreement (TCA)¹. Annexes FISH.1 and FISH.2 detail how 105 quota fish stocks will be shared between the two parties. The following report analyses these changes to quota shares, including providing methodology and caveats for figures already in the public domain.

This is a standalone report that discusses the outcome of the EU-UK deal only and does not account for the outcome of annual negotiations that were completed after the UK-EU Trade and Cooperation Agreement was signed. This analysis only covers fish stocks subject to quota management and therefore does not include non-quota stocks or account for the impact of access arrangements.

If you have any questions regarding this analysis and publication please contact the MMO statistics team: statistics@marinemanagement.org.uk.

¹ [UK/EU and EAEC: Trade and Cooperation Agreement \[TS No.8/2021\] - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/uk-eu-and-eaec-trade-and-cooperation-agreement)

Key terms

Common Fisheries Policy (CFP)

The CFP is a set of rules for sustainably managing European fishing fleets and conserving fish stocks that came into force in 2009. Under the CFP, fishing quotas are set for each Member State that determine how much of a given stock they can catch.

Total Allowable catch (TAC)

Total allowable catches (TACs) are catch limits (expressed in tonnes) that are set for all commercial quota stocks. TACs are set annually for most quota stocks and are based on scientific advice about the state of stock.

Relative Stability (RS)

Relative Stability is the mechanism by which TACs are shared between EU Member States under the CFP. The “relative stability key” is the percentage that each Member State receives of the TAC for each stock.

Hague Preference (HP)

Hague Preference is a mechanism under the CFP that was designed to adjust fish quota allocations to take account of the needs of certain fisheries dependent areas in northern parts of the UK and in the Republic of Ireland. These arrangements provided the UK, whilst an EU Member State, and the Republic of Ireland the opportunity to invoke the Hague Preference when quotas for certain stocks fall below determined trigger levels.

Introduction

As an EU Member State, the UK's quota shares were primarily based on the EU's "relative stability" sharing mechanism under the Common Fisheries Policy (CFP). For a limited number of stocks, there was also the possibility for the UK and/or the Republic of Ireland to invoke a mechanism called the Hague Preference whenever Total Allowable Catch (TAC) limits fell below pre-defined trigger points.

At the end of the transition period following EU Exit, quota shares were agreed via the EU-UK TCA for 105 fish stocks. These quota shares define how the TAC for each stock will be shared between the two parties each year, replacing the previous shares. These changes will be phased in over a 5 year period (until 2026), and for many of the stocks, the UK's new share represents an uplift above the share previously held whilst under the CFP.

The UK government has stated that the full quota share uplift is worth around £146m in fishing opportunities for the UK fleet. This is equal to around 25 per cent of the value of the average EU catch from UK waters and will be phased in over 5 years. This report will explain the methodology, assumptions and caveats behind these figures and provide further context.

UK quota share uplifts

The EU-UK TCA details how 105 quota stocks will be shared between the United Kingdom and the European Union². For the majority of these 105 stocks, the UK has seen an uplift above its historic relative stability share, with 10 stocks increasing by more than 20 percentage points and 8 stocks by between 10 and 20 percentage points.

Table 1: Top 10 stocks by UK share percentage point increase within the TCA

Stock Code	Stock Description	Relative Stability share	TCA share for 2026 onwards ³	Percentage point change
HKE/2AC4-C	Hake (North Sea)	18%	54%	36
POK/56-14	Saithe (West of Scotland)	18%	51%	33
SPR/7DE.	Sprat (English Channel)	53%	84%	32
RJE/7FG.	Small-eyed Ray (7fg)	26%	56%	30
JAX/4BC7D	Horse Mackerel (Southern North Sea and Eastern Channel)	11%	40%	29
COD/5BE6A	Cod (West of Scotland)	53%	81%	29
HER/07A/MM	Herring (Irish Sea)	74%	99%	25
NOP/2A3A4.	Norway Pout (North Sea)	0%	25%	25
COD/5W6-14	Cod (Rockall)	53%	75%	22
WHG/2AC4.	Whiting (North Sea)	53%	74%	21

² [Trade and Cooperation Agreement between UK and EU – CP 426 \(publishing.service.gov.uk\)](#)

³ At the end of the 5 year adjustment period

The mean percentage point (pp) increase, in the stocks where uplifts were achieved, is 9pp. However, the proportional percentage increase in those stocks varies substantially. For example, the UK share of North Sea hake will increase by 36pp (from 18% to 54%) by the end of the adjustment period. This is a threefold increase or a percentage increase of nearly 200 per cent from the UK's previous relative stability share. Whereas, the UK's share of the Western Mackerel TAC will increase by 11pp (from 58% to 69%), which is a much smaller proportional percentage increase of 19 per cent.

The table and paragraph above considers changes against the UK's relative stability (RS) share only. However, there are some stocks where the UK regularly received a higher share by invoking the Hague Preference. There are 4 stocks where the UK's new share agreed in the TCA for 2021 is lower than the share that UK historically received on average via the Hague Preference⁴. By 2026 at the latest, all of these stocks will be equal to or above this level. There are also 10 stocks where the UK historically often received a share of the TAC lower than the relative stability share due to the Republic of Ireland counter-invoking the Hague Preference. The UK's new shares agreed in the TCA are higher for all of these stocks.

⁴ Four stocks are: Haddock (North Sea), whiting (North Sea), whiting (West of Scotland), saithe (West of Scotland). Average between 2014-2020.

Methodology

To calculate an estimate of the value of the TCA shares uplift, we value the historic fishing opportunities received by the UK between 2012-20 (whilst as an EU Member State⁵) and compare this to the value that the UK would have received if it had the final shares in the TCA instead. This method uses a wide time-series of TACs and prices (from 2012-2020) in order to assess this change independently of fluctuating TACs and prices. In this report we refer to the CFP value and TCA value. An explanation of these terms follows.

CFP Value

The CFP value of each individual quota stock is the UK quota (weight) multiplied by the average price for the stock calculated from UK vessels landings for that year. The UK quota is as listed in the EU TAC & Quota Regulations⁶. Zero value landings are excluded from the average price calculation.

The CFP value estimates the value of the full fishing opportunities provided by the UK quota in a given year (i.e., the value if all of the quota was fished).

TCA Value

The TCA value of each individual quota stock is an estimate of what the UK quota in a given year would have been using the UK's final TCA shares. This is calculated using the EU Total TAC⁷ (weight) multiplied by UK's share listed in the EU-UK TCA for 2026 onwards). This quota estimate is then multiplied by the average price for the stock calculated from UK vessels landings for that year. Zero value landings are excluded from the average price calculation.

Similar to the CFP value, this estimates the value of the full fishing opportunities that would have been provided by UK quota in a given year (i.e., if the value of all of the quota was fished).

⁵ Relative Stability and/or Hague Preference shares

⁶ [Fishing quotas \(europa.eu\)](https://europa.eu). This is the UK's final quota based on relative stability shares, any invocations of the Hague Preference, and the EU's quota transfer agreements with third countries such as Norway or the Faroe Islands.

⁷ The "Union TAC" as listed in the EU TAC & Quota Regulations between 2012-2020, which includes the UK's share

Caveats

In order to understand the possible impacts of these new quota shares, we need to define what they may provide for the UK fleet compared to what would have otherwise been received. This depends on a number of key factors:

1. **Total Allowable Catch (TAC)** – for most stocks, TACs are agreed each year by all of the relevant coastal states with an interest. TACs can go up or down each year, based on scientific advice on the sustainability of the stock, and the needs of the fishing industries involved.
2. **Landing price** – the price received for landing/selling a given fish stock can vary based on a wide range of factors, including market supply/demand, the size/quality of the catch, trade impacts, and inflation.
3. **Quota uptake** – the percentage of available quota that is fished varies each year for each stock. For example, this could depend on the frequency of extreme weather events, fishing capacity, or external shocks such as the impacts of Covid-19.

It is not possible to accurately predict how the TACs, market prices and uptake will vary for each of the 105 stocks between 2021 and 2026. Therefore, this analysis relies on historic TACs and prices, and focuses on the “fishing opportunities” provided by the quota, rather than predicting what percentage may be utilised. These uncertainties mean that the provided figures are best estimates of what the quota could be worth to the UK fleet if all the quota were caught. **In reality, by 2026 (when the full quota uplift is realised), the true value may be higher or lower.**

Results

As detailed above, the actual UK quota tonnage and estimated value (“CFP value”) is compared to the quota tonnage/value that the UK would have received in each year between 2012-2020 had it instead held the final 2026 shares agreed in the TCA – the (“TCA value”). The value of these fishing opportunities is estimated using average stock prices from each year, adjusted for inflation⁸.

For a given year, $X = (\text{UK quota in } X * \text{average stock landing price in } X) - (\text{TCA share} * \text{TAC in } X * \text{average stock landing price in } X)$

The mean percentage increase between these values for the period 2012-2020 is 19 per cent a year, ranging between +17 per cent in 2015 and +20 per cent in 2016. This translates to a mean **value increase to the UK fleet of £143.9 million a year**, adjusted for inflation, ranging from a minimum of + £120.5 million in 2015 to a maximum of + £159.9 million in 2016.

⁸ The final value is in 2020 prices.

An alternative methodology is to calculate the tonnage/value provided by one set of shares (TCA shares) against another set of shares (RS shares) for a given year. This method was used to produce the publicly quoted figure of £146m, using a snapshot of the latest data at the time of the TCA's conclusion (2020 TACs and 2018 UK average prices). The two methodologies produce very similar figures, with the first taking into account multiple years, and thereby controlling for the effect of price changes over time.

The uplifts in quota opportunities to the UK fleet vary across the five-year adjustment period, with the largest uplift seen in Year 1 (2021). Comparing TCA values to historic CFP values, we estimate that the year 1 shares would have increased the value of UK quota by 12 per cent, with the shares detailed for Years 2 to 5 seeing an average annual increase of 2 per cent. This represents an overall 20 per cent increase on the estimated value of UK fishing quota opportunities. However as mentioned, projecting the exact increase in value of fishing opportunities each year is difficult due to fluctuations in TAC's and changing of fishing behaviour leading to alterations in prices each year.

Valuation of Fishing Opportunities in Context

The additional value the UK fleet would have been able to catch under TCA terms between 2012 and 2018⁹ represents on average 25% of the value that EU27 vessels landed from UK waters (ranging from 22% – 27%) in the same period.

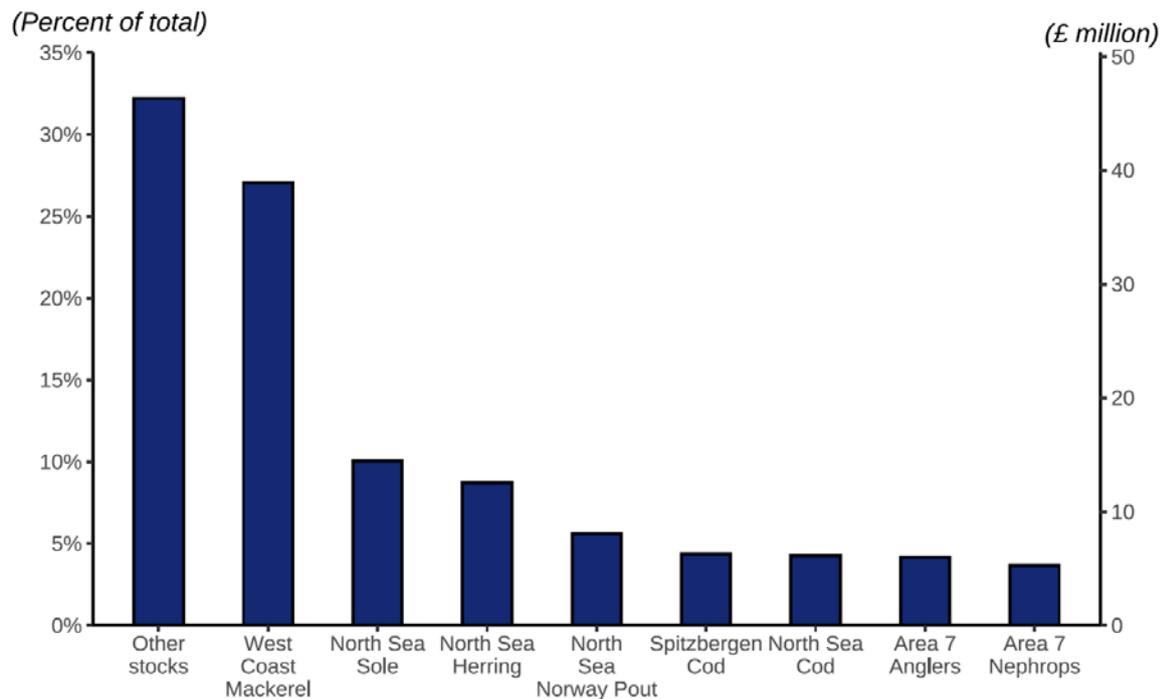
This statistic uses EU27 vessel landings only as the denominator, reflecting the fact that the quota transfer detailed in the TCA came from the EU only. To put these figures into context, EU27 vessels landings in UK waters were worth on average £523.4 million between 2012 and 2018 (not adjusted for inflation).

EU27 landings from UK waters are estimated using Exclusive Economic Zone (EEZ) data. Please see the MMO's published EEZ report for further detail on the methodology behind the MMO's EEZ estimates¹⁰.

⁹ Complete EU27 and UK vessels landings data for 2019 and 2020 were not available at the time this analysis was carried out. This data is published by the EU, Data by Quarter-Rectangle, JRC Fisheries Dependent Information (2019 Edition). <https://stecf.jrc.ec.europa.eu/27/dd/effort/graphs-quarter>.

¹⁰ UK commercial sea fisheries landings by Exclusive Economic Zone of capture report 2019: <https://www.gov.uk/government/statistics/uk-commercial-sea-fisheries-landings-by-exclusive-economic-zone-of-capture-report-2019>

Figure 1: West Coast Mackerel, North Sea Sole, North Sea Herring and North Sea Norway Pout make up more than half of the additional value¹¹.



At stock level, four stocks make up over 50 per cent of the additional value the UK fleet would have been able to catch under TCA terms between 2012 and 2020, assuming the TCA quota is fully utilised¹².

- West Coast Mackerel (MAC/2CX14-), currently the UK's most valuable and most participated fishery, with +£38.9 million per year on average representing 27 per cent of total gains
- North Sea Sole (SOL/24-C) with +£14.4 million per year on average, corresponding to 10 per cent of total gains
- North Sea Herring (HER/4A.) with +£12.5 million per year on average, or 9 per cent of total gains
- North Sea Norway Pout (NOP/2A3A4.) with +8 million per year on average, equal to 6 per cent of total gains

In the remaining 49 per cent, corresponding to an estimated value of £69.9 million per year on average, the stocks with higher value gains include Spitzbergen Cod (4%), North Sea Cod (4%), Area 7 Anglers (4%) and Area 7 Nephrops (4%).

¹¹ Average yearly additional value of UK fleet quota stock opportunities under UK-EU Trade and Cooperation Agreement (2012-2020).

¹² These stock level figures are adjusted for inflation in the period between 2012 – 2020.