

NORWAY IN THE GLOBAL MARKET OF FISH-FARMED SALMON: BRIEF REVIEW

Pidchosa Oleksandr

Ph.D. in Economics, Associate Professor

One Belt One Road Research Institute, Hong Kong Chu Hai College

The world fish production is divided into fishing (capture) and aquaculture (farming) [7]. In the year 2021, a total of ~92.6 million metric tons of fish were harvested from the wild, whereas through the method of controlled aquaculture, 85.5 million metric tons of fish were cultivated and reared.

Thus, fish catches are almost equal to the volume of its cultivation. Interestingly, for salmon this figure is even higher.

Initiated in the 1960s, the industry of salmon farming has experienced significant growth over the past several decades. As of the present day, it's estimated that about 70% of the global salmon production comes from farming [4]. The year 2021 saw the production of over 2.8 million tons of farmed salmonids [6], while the catch of wild salmonids¹ was considerably lower, at approximately 705,000 tons.

At the same time, the difference in the price of wild and farmed salmon remains significant (on average, wild salmon costs 2–3 times as much as farmed salmon [1]). At the same time, the farmed salmon, although became more affordable, still remains a fish for the middle class and above.

The Atlantic salmon² remains the main commercial salmon species, historically concentrated in Norway³, Chile, the UK, and Canada.

The United States⁴, Russia, Japan, and Canada dominate the capture of wild salmon. Between the years 2009 and 2021, the global sales value of Atlantic salmon witnessed more than a threefold increase.

¹ There are 5 species categories: Atlantic Salmon, Pink Salmon, Sockeye Salmon, Coho Salmon, and others.

² Due to its popularity among consumers and favorable growth characteristics.

³ Advantageous location, well-developed infrastructure, strong government support, and investment in research and development granted Norway the leading positions in the production of the Atlantic salmon. As a result, Norwegian companies have improved production efficiency, breeding programs, and disease control measures, making it the leading producer of the Atlantic salmon globally [9].

⁴ The US is the largest market for wild captured salmon. The growing awareness about the benefits of consuming wild captured salmon, including improving bones and teeth health and enhancing the absorption and utilization of calcium or phosphorus is influencing the market positively in the country. Besides this, the increasing adoption of lean meat and protein-rich foods in their daily diets is contributing to the market growth in the country [2].

From 2016 on, the market price of salmon decreased every year, starting at around 6.72 euros per kilogram and ending at five euros per kilogram in 2020, before jumping back up again in 2021 (due to the start of an inflationary spiral in the main producing countries) [5].

Improvements in processing and packaging techniques have simplified the transportation and preservation of salmon, enhanced its longevity, and facilitated its introduction to novel international salmon markets.

Hence, the market value for the Global salmon market was US\$ 30.87 billion in 2022.

The worldwide salmon market is projected to grow at a compound annual growth rate (CAGR) of 3.9% between 2022 and 2027, potentially achieving a value of US\$ 37.40 billion by 2027 [9].

Even in developed countries, salmon had been considered a premium product, until in the 1960-70s, Norway started farming salmon for worldwide distribution. Since then, Norway has been rapidly increasing production, remaining the leader in salmon farming today.

It is important to note that so far (at the beginning of 2023) the largest buyers of Norwegian salmon are European countries: Poland, Denmark, France, the Netherlands, Spain, Italy, Portugal and Britain.

The farmed Atlantic salmon forms Norway's main export earnings. So, the main species exported in 2022 were: salmon: €8.8 bn (+30%); cod: €1 bn (+25%); mackerel: €520 mln (+7%); trout: €415 mln (+24%); herring: €324 mln (-9%); and sei: €299 mln (+44%).

In 2022, the United States showed the most dramatic rise at 46% in imports of salmon¹ from Norway, while sales to China rose by 45% despite some large cities facing Covid lockdowns.

In 2022, fresh salmon fillets reached an all-time high price of NOK 117 or €9.87 per kilogram. Fresh whole salmon also hit a record price, selling at NOK 79 or €6.7 per kilogram [3]. The post-Covid societal reopening has positively influenced the salmon demand.

The primary factors contributing to the price surge include a rise in global and Norwegian demand coupled with a marginal reduction in production volumes. Additional reasons include an escalation in further processing and a depreciation of the Norwegian krone.

Salmon increased 16.25 NOK/KG (1.35 EUR/KG) or 19.40% since the beginning of 2023, according to trading on a contract for difference (CFD) that tracks the benchmark market for this commodity [8].

The increase in prices is associated with inflationary processes and the tight monetary policy of the Norwegian Central Bank to combat inflation,

¹ Though the US is one of the top wild salmon fisheries, declining catches and increased consumption due to salmon's growing popularity are spurring increased imports of farmed salmon from Norway. The strengthening of the US dollar since the beginning of 2022 also has a positive effect on the growth of imports.

which led to an increase in borrowing and debt servicing for salmon producers and affected the price increase.

In general, this process is going on (inflationary spiral) and further weakening of the crown and unfolding of inflationary processes are taking place.

Salmon is viewed as a nutritious food item and a wholesome protein source. This perception has contributed to the surge in its demand as a healthy dietary option. Moreover, the expanding consciousness of the health advantages associated with seafood consumption, salmon in particular, has fueled the expansion of the global salmon market. Various end product types include frozen, fresh, canned, among others.

Frozen accounted for the largest market share on account of the increasing preference for convenience foods, such as ready-to-eat (RTE) and ready-to-cook (RTC) food products. In addition, the rising demand for frozen salmon as a thickening agent in various food processing applications is influencing the market positively.

Recently the salmon market has been experiencing moderate growth on account of the advent of smoked salmon, salmon jerky, salmon oil, salmon lox, and salmon spreads. The expanding consumer base has significantly improved the existing sales. These value-added products are gaining popularity in numerous countries wherein consumers are living hectic lives.

In addition, there is an increase in the number of cafes, restaurants, and luxury hotels that are incorporating salmon-based dishes, such as pizza, pasta, burger, salad, sushi, and mac and cheese, in their menu to expand their consumer base. This, coupled with the flourishing food and beverage (F&B) industry, is propelling the growth of the market.

Apart from this, rising consumer preferences for frozen, canned, and ready-to-eat (RTE) salmon-based food products due to rapid urbanization, increasing working population, busy lifestyles, and the expanding purchasing power of consumers are creating positive trends for the market.

Furthermore, increasing sales of salmon-based food products via various online food delivery applications on account of their easy availability and doorstep delivery are bolstering the market growth.

Modern methods of packaging and storage of fish also significantly affect the opportunities for its sales, especially in the sector of products with high added value.

Additionally, the surging prevalence of obesity, eye problems, skin cancer, cardiovascular diseases, and other chronic disorders result in an increasing shift towards healthy lifestyle where salmon-based food products are becoming the best option across the European Union [2].

References:

1. Farm-Raised salmon vs wild salmon. Diffen. 2023. Available at: https://www.diffen.com/difference/Farm-raised_Salmon_vs_Wild_Salmon

2. Global Salmon Market Size, Price Trends and Forecast 2023-2028. 2023. Available at: <https://www.imarcgroup.com/salmon-market>
3. McDonagh, V. (January 5, 2023) US and Chinese Markets Drive Norway's Export Success. Available at: <https://www.fishfarmermagazine.com/news/us-and-chinese-markets-drive-norways-export-success/>
4. Shahbandeh M. (October 15, 2020) Global production of Atlantic Salmon 2000–2021. Available at: <https://www.statista.com/statistics/1179062/global-atlantic-salmon-production/>
5. Shahbandeh M. (February 16, 2023) Salmon Industry – Statistics & Facts. Available at: <https://www.statista.com/topics/7411/salmon-industry/#topicOverview>
6. Shahbandeh M. (February 8, 2023) Global salmonids supply by type 2021. Available at: <https://www.statista.com/statistics/1026343/global-salmonids-supply/>
7. Shahbandeh M. (April 13, 2023) Global fish production by fishing and aquaculture 2022. Available at: <https://www.statista.com/statistics/272311/world-fish-production-by-fishing-and-aquaculture-since-2004/>
8. Salmon – 2023 Data – 2012–2022 Historical – 2024 Forecast – Price – Quote – Chart. 2023. Available at: <https://tradingeconomics.com/commodity/salmon>
9. Global Salmon Market, Volume, Size, Forecast 2023-2027, Industry Trends, Growth, Share, Outlook, Impact of Inflation, Opportunity Company Analysis. 2023. Available at: <https://finance.yahoo.com/news/global-salmon-market-volume-size-112800119.html>