

# Chapter 5: Russia's Role in International Fish and Seafood Trade

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#### 1 INTRODUCTION

This chapter examines Russia's role in the global seafood trade system over time and concludes with perspectives on its future role.<sup>1</sup> The chapter examines three periods of Russia's seafood production and trade: (1) the development of Soviet fishing industry; (2) the early post-Soviet period (1991–2001); and (3) the Putin period of consolidation. The last section of the chapter presents an outlook for the future role of Russia in global seafood trade. My analysis fits into the larger literature on the Russian government's dual concern for food security in the domestic market on the one hand and a desire for Western currency from export earnings on the other.<sup>2</sup> A key question is how Russia balances the tension between food security concerns and business interests related to foreign trade.

During the past 20 years Russia's seafood trade policy has emphasised both exports and a concern that domestic supplies are sufficient. During the presidency of Dmitrii Medvedev (2008–2012), some noticeable changes in seafood import policy were made following the introduction

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of the Food Security Doctrine in 2010. For example, during his presidency, the government increased control over the import of foodstuffs to Russia. Russia's seafood imports had grown substantially during 2000-2008. Under Medvedev, Rossel'khoznadzor developed a tight system of control over registered foreign food export companies and increased inspections of them. At the same time, new regulations and incentives related to control of seafood exports were introduced. Since Vladimir Putin reassumed the presidency of Russia in 2012, Russia's export of fish and seafood has been steadily growing. Both commercial interests and the Russian government have recently advocated for even higher levels of seafood exports.<sup>3</sup> In particular, Russia's seafood exports play an important role in the trade with the neighbouring regions such as the European Union (EU) and Asia. For example, through 27 December 2020, Russia exported \$3.2 billion USD in food to the EU, of which fish and seafood accounted for \$1.1 billion. To the same date, Russia exported \$3.9 billion USD of food to China, of which \$1.6 billion USD was fish and seafood.<sup>4</sup>

## 2 The Development of the Soviet-Russian Seafood Industry

Seafood has always represented an important dimension of the Russian food system. Looking at Russia as a whole, there are two main geographical areas for catches and one region for seafood trading. For seafood catches, the two areas are: (1) The Northwest Russian fishing industry, which focuses on cod fisheries in the Barents Sea and Northeast Atlantic. This industry exports seafood to Norway and other European countries such as Portugal, UK, Spain, and Germany. (2) In the Russian Far East, the main exportable seafood is Alaskan pollack to China, Japan, South Korea, and Vietnam. In the Far East, Russia has exclusive fishing rights to huge fish stocks, in particular Alaskan pollock. Pollock is one of the world's largest fisheries, with annual harvests ranging from 4 to 7 million metric tonnes annually in the North Pacific over the past decade. Management of this wild fish resource in the Pacific is a joint responsibility between the surrounding coastal states, the United States and Russia, although China, the Republic of Korea, Japan, and Poland also take part in the annual commission meetings as stakeholders.<sup>5</sup> Seafood imports to the Russian Far East region are modest, explained by the huge fish resources that Russia manages and controls in the area. Domestic demand for seafood in the Russian Far East is also limited by its relatively sparse

population, just over 8.1 million people in 2019 in an area that spans more than 6.9 million square kilometres.<sup>6</sup>

(3) For seafood trading, traders in the European part of Russia import seafood, exploiting the supply void that was left by the former Soviet fishing industry. The main import business is centred around Moscow and St. Petersburg where large processing industries have evolved and thrived. Again, geographical proximity is an important factor for the choice of suppliers. A large amount of the seafood, primarily herring, mackerel, and farmed Atlantic salmon, was supplied by Norway while other northern European countries filled in with other seafood species and smaller amounts of salmon and herring.

During the first few decades of the Soviet period, the total seafood catch was relatively modest but there was a steady growth over the years, reaching 6.7 million tonnes of seafood in 1968, an increase of more than 600 percent compared to the 1 million tonne catch in 1913. The big increase came with the industrialisation of the fishing industry, characterised by massive building and use of large factory trawlers with large extractive and storage capacity.<sup>7</sup> Another important factor that enabled the huge growth in the fishing industry was extensive fishing in the open sea. As a result, the Soviet Union experienced an increase in its fish catch to more than 11 million metric tonnes at the apex of the Soviet fishing industry in the 1980s. The entire system was designed to support the Soviet home market, so seafood exports were very limited. The institutional setup was based on the Soviet planned economic principles. The whole industrial complex was one holistic entity structured into five huge seafood general directorates which complied with Gosplan's requirements for output.<sup>8</sup> There was, however, some minor trade of seafood, mainly shellfish (cold water prawns), and caviar that was sold by Soviet state trade organisations, often through foreign subsidiaries in selected countries. This institutional arrangement was coherent, albeit it involved a few faults, the most conspicuous of which was an emphasis on quantity over quality. Fishing vessels were awarded for fulfilling their plan obligation. Any additional delivery that exceeded the plan generated extra benefits for the fishermen and particularly the manager. The Soviet bonus system stimulated an emphasis on volumes rather than quality of the fish, a practice that today would make it difficult to engage in international trade. The primary goals of Soviet seafood policy were to reach per capita consumption of 25 kg of seafood and to support the needs of the Soviet military.

#### 2.1 The Early Post-Soviet Period (1991–2001)

After the Soviet Union fell apart, the fishing industry in post-Soviet Russia changed substantially. In terms of structure there was almost total fragmentation, with fishing companies the most heavily affected. Russia's annual seafood harvest fell dramatically to between 3 and 5 million metric tonnes, although the total seafood catch increased gradually since the mid-1990s and continuing to 2019.<sup>9</sup> In the early post-Soviet period, the main geographical areas for the Russian fishing industry were: (1) the Russian Far East with the Sea of Okhotsk and Pacific ocean; (2) northwest Russia with the Bering Sea and Northeast Atlantic; and (3) the open high seas. Over the past ten years, the average volumes of the Russian seafood catch come from the Russian Far East (66 percent); Northwest Russia (12.5 percent); and high seas fisheries (14.4 percent).<sup>10</sup>

Being a coastal state represents an important prerequisite for the ability to balance the trade of fish on the global market. The United Nations Convention on the Law of the Sea paved the way for the establishment of 200-mile Exclusive Economic Zones (EEZ) for coastal states. According to this legal institution, most coastal states were given sovereign rights to exploit the most productive parts of the sea. The rights are defined by their geographical coastline. For Russia, this meant access to two of the most productive sea areas on the globe. In the Northwest, Russia shares sovereign rights to exploit the Atlantic cod fish stock with Norway. The management and quota distribution are made through the Joint Norwegian-Russian Fisheries Commission. The commission has a 50-year record of successful collaboration.

Most of the reduction in Russia's seafood catch during the early post-Soviet period can be explained by changes in the use of open seas fishing areas. The reason why distant fisheries were used less is due to the 200mile EEZ, which excluded foreign countries from accessing these fishing grounds. As a consequence, many of the distant fishing grounds that Russia used to exploit earlier became significantly less accessible.<sup>11</sup> There are a few exceptions though, where some coastal states contract out parts of their quotas and receive a part of the catch in exchange. Russia has, notwithstanding, seen a large decrease in its fishing industry. In addition to the introduction of the EEZs by coastal states, many of the fish stocks in the open seas have decreased in size as a consequence of over-fishing.

In addition to reduced access to previous fisheries in open waters, during the early post-Soviet period the fishing industry struggled with low effectiveness and problems in the value chain in the Russian market. The institutions, or external working conditions of the fishing industry (the laws, regulations, economic institutions/banks etc.), changed dramatically compared to the Soviet planned system. Since institutions regulate and influence the behaviour of companies, institutional change also influences production and the flow of goods.<sup>12</sup> For example, price reform made operations incredibly expensive for newly privatised companies. Fuel costs increased more than ten times compared to the costs in the late Soviet period. Few incentives were established for fishermen to deliver their catch to the Russian market, and no barriers to export were established.

At the same time, Russian fish companies had incentives to deliver their seafood to nearby harbours. The incentives to export were found in the fact that Russia's land-based industry had problems finding money to pay for deliveries of seafood. Foreign fish buyers paid for fish upfront in Western currency, which was yet another attraction for the Russian fishing companies to export. This led to a situation where large amounts of highvalue seafood were delivered directly to foreign ports in adjacent areas to the fishing grounds.

The alteration of behaviour among the fishing companies in the Northwest Russian fishing complex illustrates the cumulative effect caused by changes in the use of distant fisheries. Over a ten-year period, from 1990 to 2000, Russian companies shifted their strategy almost 100 percent. While around 85 percent of their total catch was taken from the high seas in 1990, only 6 percent was caught in these areas in 2000. Russia's fish catch to harvesting in fishing grounds close to EEZ waters close to harbours. Russia's fish catch from the Northeast Atlantic increased from about 15 percent of the catch in 1990 to 94 percent in 2000. Table 1 shows the distribution of Russia's fish catch by fishing area and the volume of catches during 1990–2000.

There are two aspects of particular interest to the decrease of the distant fisheries. The first was an increase in Russia's seafood exports, and the second was a direct result of the sudden transition from state-owned to privately-held fishing companies. The newly established, privately-held companies needed quick earnings and lower expenditures on fuel and other significant operating costs. These needs combined with few restrictions on trade.<sup>13</sup> The same situation was present in the Russian Far East, where the new private companies exported large volumes of white fish to Japan, China, and Korea at the expense of deliveries to the Russian home market.<sup>14</sup>

Table 1 Changes in Russia's fishing pattern: High seas and other non-Russian areas vs. regional Russian EEZ Waters	kussia's fishing patte	ern: Hig	h seas a	und oth	er non	-Russia	n areas	vs. reg	ional Ru	Issian I	EEZ W	aters
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Catches in other fishing grounds (%)	grounds (%)	85.3	85.3 56.8 28.8 21.9 21.7 11.1	28.8	21.9	21.7	1.11	7.8	9.2	8.3	11.7	6.0
Catches in the NE Atlantic (%)	iic (%)	14.7	43.2	71.2	78.1	78.3	88.9	92.2	90.8	91.7	88.3	94.0
Catches in other fishing grounds	grounds	1,359	831	347	198	157	73.4	52	4 52 57,3 48 85	48	85	50.8
Catches in the NE Atlantic	lic	234	633	858	707	568	589	617	566	529	639	792.2
Total catches by the Northwest Russian fleet 1,593	thwest Russian fleet	1,593	1,464	1,205	905	725	662.4	669	623.3	577	724	843
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Note Catches are in thousand tonnes Sources Data from "Serryba", Russian Academy of Sciences; Rosrybolowstvo, various years; and author's compilation

Other obstacles also affected Russia's fishing industry. Fuel was expensive and in short supply. Russia's fishing fleet was old and very inefficient. According to Deputy Minister Ilya Shestakov, the head of *Rosrybalovstvo*, Russia's federal fishing agency, more than 80 percent of the fishing fleet is older than 20 years. The fuel consumption of old Soviet trawlers was around three times higher compared to a typical Western trawler. Therefore, it became important for newly privatised Russian fishing companies to reduce idle transportation as much as possible. In sum, the privatisation of the fishing industry in Russia drove some of the fishermen towards deliveries to Western markets, in particular in Russia's Northwest and the Russian Far East.<sup>15</sup>

While Russia's privately-held fishing companies searched for alternative solutions to renew and modernise their fleets, investors from Western countries were ready to offer a solution. A special leasing arrangement, called the bareboat charter (BBC), was introduced. BBC arrangements are generally a leasing contract with an option to buy the vessel at the end of the contract period. A key aspect of the BBC contracts is that they are managed by the Western management company who controls all transactions related to the leased vessel. As it applied to Russia, in order to maintain the control of cash flow the leased fishing vessel was required to deliver all its catches to designated processors in the West (including Norway). The Western management company was then responsible for paying the lease in line with the contract requirements, as well as paying for operating expenses in accordance with the bilateral agreement. At the end of the lease, the Russian company could purchase the vessel. Western sellers saw the BBC contracts as the best way of selling fishing vessels to Russian fishing companies. In practice, the BBC contract was organised as an instalment-based purchase arrangement. As the number of BBC contracts increased gradually from 1994 onwards, and as more of seafood catches were delivered to Western processors the volumes of seafood deliveries to Russia's domestic market sank gradually for the next 10 years or so to around 3.2 million tonnes.

The problem for Russia's political and administrative bodies at the regional and the federal level was that deliveries of fish from the BBC vessels were locked into Western buyers by contract. The consequence was that a large percentage of attractive fish catches from Northwest Russian and the Russian Far East fishing fleets were delivered directly to nearby foreign markets. This was basically the export of valuable white-fish—Atlantic cod in the Northwest and Alaska Pollack in the Far East.

The operation provided no benefit for the Russian government in terms of taxes or foreign currency. At the same time, the domestic supply of seafood decreased sharply, and prices increased, thus reducing demand even more.

While domestic deliveries decreased, Russia's seafood exports remained stable at around 1.2 million tonnes. The deficiency in domestic supplies of seafood opened an opportunity for foreign exporters who could sell to Russia. As a consequence, Russia's annual import of seafood more than doubled from 424 thousand tonnes in 1990 to 979 thousand tonnes in 2005, when it stabilised at around 1 million tonnes through 2013.<sup>16</sup> The majority of the imported fish was whole frozen, but the import of fresh fish (mainly farmed Atlantic salmon from Norway) also increased. A corresponding new Russian processing industry thrived on seafood imports. Seafood imports did not, however, manage to compensate fully for the shortage in deliveries to the domestic market. Total supplies to the domestic market dropped from about 3.3 million tonnes in the mid-1990s to a record low level of 2.5 million tonnes in 2005. As a rough estimate, this volume translates to an average per capita seafood consumption of around 17.5 kg. The estimate is based on round weight data of the fish, which means that the actual average consumption was much lower, maybe around 14–15 kg per capita.<sup>17</sup>

Russia's role in the international seafood trade system during the early post-Soviet period was affected by the absence of trade protectionism. The main characteristics of Russia's engagement in the global seafood system may rather be seen as two detached arms: one dealing with the export of valuable whitefish to geographically close markets. The other arm was dealing with the import of seafood, taking advantage of the market demand for high-quality seafood. The Russian food market in the European part of Russia revealed a large demand for seafood that was traditional in the Russian diet, primarily herring and mackerel and later substantial amounts of farmed Atlantic salmon.

#### 2.2 The Putin Period of Consolidation

When Vladimir Putin assumed the presidency of Russia in March 2000, emphasis was placed on consolidation and strengthening the central government and Russia itself. One of the priorities was addressing the food situation.<sup>18</sup> During the 1990s, the volume and value of national food production had decreased substantially. At the same time, both

the value and volume of food imports—mostly meat and meat products—increased significantly during the decade. Food imports declined in 1998–2000 due to severe devaluation of the ruble before starting to increase again in 2001 (see Chapter 1).<sup>19</sup> Likewise, imports of seafood rose as well. For Russia's fishing industry, the value of seafood imports rose from \$209.8 million USD in 2001 to \$956.9 million USD in 2005. Interestingly, the majority of Russia's imported seafood came from Norway, a small neighbouring country that has only 5 million inhabitants and an annual seafood production of 2.75 million tonnes. Norway has exclusive rights to a long and sheltered coastline and adjacent 200-mile EEZ. The EEZ is one of the most productive sea areas, which explains Norway's production capacity and why the country is one of the world's largest seafood exporters. During 1991–2005, Norway supplied about 45–50 percent of Russia's seafood imports.

One of the species that increased the value of Norway's seafood exports to Russia was farmed Atlantic salmon. The volume of Norwegian salmon exported to the European part of Russia increased significantly from 9 tonnes in 1998 to 50 tonnes in 2005, and reached a record high of 182 tonnes in 2012.<sup>20</sup> Overall, the value of Russia's seafood imports from Norway grew from \$96.8 million USD in 2001, to \$450.3 million USD in 2005, and to \$1.1 billion USD in 2013.<sup>21</sup> Imports of high-value fish like salmon have a larger impact on import statistics in value than volume, naturally. Frozen herring, a low-priced and highly nutritional fish that is popular in all social strata in Russia, constitute the largest share of frozen imported fish in terms of volume. This situation is neither intended nor seen as desirable from the Russian government's point of view. The political intention remains to reduce seafood imports and lower Russia's dependency on Western countries.

For reasons already explored, seafood exports are difficult to control but from January 2009 a prohibition was enacted on bareboat charter arrangements (BBC) in the Russian EEZ.<sup>22</sup> In January 2010, the Food Security Doctrine defined and gave direction to food independence and food security for the Russian Federation.<sup>23</sup> In the doctrine, food independence and food security refer to Russian sufficiency and economic availability of safe foodstuffs for every citizen. Both independence from international supplies and availability of fish for the average Russian are both important dimensions for Russian food policy and as a basis for the development plans for the fisheries and agricultural complexes.<sup>24</sup> The doctrine defines how much of supply should be supplied to the Russian

market from domestic production. According to the 2010 doctrine, Russia's fish catch should account for no less than 80 percent of total consumption of seafood.<sup>25</sup>

Two other important measures were introduced to develop the Russian fishing industry and secure a high level of self-sufficiency. The first was a 'Concept for the Development of the Fishing Industry of the Russian Federation to 2020'. The Concept was approved by governmental order No. 1518 on 8 September 2003. The Concept laid out the principles for how the Russian fishing industry should develop in order to regain an important role as a pillar in the food system.

The second measure was a Federal State Program entitled the 'Development of the Fisheries Complex', approved by the government on 15 April 2014 by Resolution No. 314.<sup>26</sup> The 2014 programme was subsequently amended and revised in March 2018 (Resolution No. 380) and March 2019 (Resolution No. 324). In March 2020, the most recent version of the state programme for the development of fisheries was adopted (Resolution No. 394).<sup>27</sup>

Similar to agriculture and other branches of the economy, a 'Concept' carries more long-term and macro goals, leaving specifics to the state programme. Thus, the state programme was more operational and contained monetary allocations for various policy goals. According to the 2020 version, the programme will run through 2024 and it envisions expenditures of more than R70 billion from 2020 through 2024. During the entire duration of the state programme, 2013–2024, more than R154 billion will be spent. In addition, domestic production should meet 85 percent of demand, and annual per capita seafood consumption should reach 23.1 kg by 2024.

The programme postulated other goals as well. One goal was directed towards the renewal of the fishing fleet and land-based processing industry by introducing an investment fishery quota. The fishery quota is an arrangement whereby a relative share of the total fishing quota for more valuable species is allocated to actors on the condition that they actually carry out renewal projects in the fishing industry. Basically, Russia's government is allocating 20 percent of the total allowable catch (TAC) for companies willing to invest in new vessels, which must be built in domestic shipyards.<sup>28</sup> The total allowable catch (TAC) is a restricting factor because it sets an upper limit for a country's maximum catch of wild fish species. The establishment of a TAC (which is an annual process) is based on recommendations from ICES (International Council for the

Exploration of the Sea), and a joint decision between the stakeholders (different states).

The initiative from *Rosrybolovstvo* for the investment quota has encouraged fishing companies to spend their money in Russia, that is, to use Russian fishing wharfs for construction of new fishing vessels, and to increase the effectiveness and capacity of the Russian fishing industry and fleet. This is considered as an important dimension of the social and economic contribution to Russia from the fisheries sector. A large part of the fishing fleet is still old and obsolete, and a renewal is necessary. From the perspective of Russia's policymakers, it is desirable that fishing companies invest in Russia, and also that they deliver their catch to Russian processing companies. Together, these key federal support systems, along with a substantial number of other governmental measures, were introduced to improve the productivity of the Russian fishing industry and to secure a much-needed renewal for both the land-based processing industry and the fishing fleet.

In a broad sense, from the perspective of the Russian government, the state programme since 2013 has been successful. The overarching goal—to secure stable and sufficient supplies of seafood to the domestic market without becoming too dependent on any one foreign supplier country or organisation—was achieved. A reduction in seafood imports was further amplified by the food embargo in 2014. At the same time, Russia's seafood exports have continued to grow substantially as illustrated in Fig. 1. The explanation for the increase in exports is twofold: (1) Russia's seafood catch has grown gradually and has generated a surplus that allows for an increase in exports; and (2) Russia's fishing companies have focused on key target markets in the Far East such as China, the Republic of Korea, and Japan. Figure 1 indicates trends in Russia's total catch, seafood imports and exports, domestic supply balance during 2000–2019.

### 3 THE FOOD EMBARGO AND ITS IMPACT ON RUSSIA'S GLOBAL SEAFOOD TRADE

Following the introduction of the Food Security Doctrine in 2010, Russia started to govern seafood imports and exports more systematically. The key goals proceeded along two lines: (1) to reduce dependence on large volumes of seafood from a few, dominating countries; and (2) to achieve the goal of self-sufficiency for seafood, defined by the Russian government

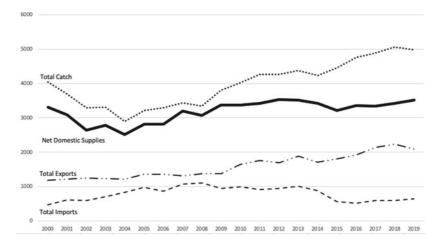


Fig. 1 Russia's total catch, trade, and domestic supply balance, 2000–2019 (1,000 Tonnes) (*Sources* Author's compilation based on data from *Rosrybolovstvo* and Rosstat)

as no less than 80 percent of domestic consumption should be supplied by Russian fishermen and the domestic seafood industry. The 2020 Food Security Doctrine and the State Programme for the Development of Fishing increased the threshold to 85 percent. The first point has concrete implications for the supply structure, that is, who may supply seafood to Russia's domestic market. The 2010 Food Security Doctrine gave power to *Rossel'khoznadzor*, the Russian food safety authority, along with three important power bases: legitimacy, expertise, and coercive power.<sup>29</sup> *Rossel'khoznadzor* has formal independence as an executive expert and has control over the veterinary field, including over aquatic resources.<sup>30</sup>

*Rossel'khoznadzor* was established in 2004 and immediately started the process of looking into critical issues related to suppliers' (countries) structure and capacity. As the main foreign supplier of seafood to Russia, Norwegian authorities received a letter from *Rossel'khoznadzor* already in 2005, requesting a wide range of information about production systems, capacity, and technical food safety regimes in Norway. By the end of 2007, the number of approved Norwegian exporters was reduced significantly, even as the volume of seafood exports continued to rise. The 2010 Food Security Doctrine provided a formal instrument for Russian

authorities to curtail the dominant position that several food exporting countries had in the Russian market, but more time to achieve actual results was evidently required. In 2012, for example, Norway alone had a 45 percent market share in seafood exports to Russia. According to the head of *Rossel'khoznadzor*, Sergei Dankvert, reliance on one supplier is an unacceptable situation for Russia.<sup>31</sup>

Subsequent to the 2010 food doctrine, Russia became a member of the World Trade Organization (WTO) on 22 August 2012. By taking this step, there was an expectation that Russia would join the liberal global trading order and that barriers to entry to the Russian food market would be lowered. In the run-up to formal acceptance into the WTO, Russia had modified its laws and customs policies, made promises about reducing tariffs and non-tariff barriers, agreed to limit its subsidies to agriculture, and indicated a willingness to open certain sectors of its economy to competition (banking, insurance, automobiles).

The expected trade liberalisation from Russia's accession to the WTO, however, had little chance to become reality. Almost exactly two years later, on 6 August 2014, Russia introduced an import ban on agri-food products from selected Western countries as a response to their sanctions which had targeted certain sectors of Russia's economy. Russia's food embargo (countersanctions) towards the EU did not include seafood but focused on agri-food. Prior to the food embargo, Russia had been the second most important destination for EU agricultural products, trailing only the United States. The main agricultural products from the EU that were affected by Russia's countersanctions were pork exports (58.9 percent of Russia's total imports); milk and milk products (37.4 percent of Russia's total imports); and vegetables and fruits (31.9 and 23.5 percent of Russia's total imports), respectively.<sup>32</sup>

Norway, however, was targeted by countersanctions even though it is not part of the EU, and as a consequence its seafood exports to Russia were affected. As shown in Table 2, Russia's import of seafood from Norway terminated almost instantly after countersanctions were introduced. Norway's drop from being the dominating supplier with around 45–50 percent market share in Russia's seafood imports to almost zero overnight was dramatic. To replace Norwegian seafood, Russia needed to find other suppliers. The decline in Russia's seafood imports in 2015 and 2016 reflects initial challenges securing alternative suppliers (as well as the devaluation of the ruble and an economic recession). Eventually, three smaller, but still substantial, producers of farmed Atlantic salmon and

	2001	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Norway (%)	45.8	47.1	44.2	41.3	44.8	39.9	22.1	0.6	0	0	0.6	1.0
Chile (%)	1.2	3.1	3.8	0.5	4.9	10.4	16.0	24.3	23.5	20.2	25.6	21.5
China (%)	1.2	4.0	9.5	1.1	9.6	9.2	12.0	12.2	15.5	14.6	1.5	14.9
Vietnam (%)	0.1	2.4	3.7	4.2	3.3	2.8	3.6	5.6	6.4	6.2	4.8	6.0
Argentina (%)	0	3.2	1.0	1.3	0.9	0.8	1.4	1.5	2.2	3.4	3.5	4.7
India (%)	0	0.1	0.1	1.3	1.2	1.4	2.9	2.3	4.2	4.2	4.9	5.4
Greenland, Faroe Isl., Turkey (%)	0	0.4	1.5	2.3	4.2	5.2	10.1	28.0	28.3	31.6	26.6	25.2
Belarus (%)	0	0	0	0	0.8	2.2	4.3	7.1	7.4	7.2	6.5	6.6
Sum (%)	48.3	60.3	63.7	51.8	69.6	71.9	72.2	81.7	87.5	87.5	73.9	85.4
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*Note* Percentages are based on dollar value of imports *Source* Trade statistics for international business development, https://www.trademap.org/ other farm-raised fish from Europe entered the Russian market: Greenland, Faroe Islands, and Turkey. In addition, Chile significantly increased its market share compared to the period before the sanctions. Greenland, Faroe Islands (EU), and Chile are suppliers of farmed Atlantic salmon, while Turkey is a new supplier of farmed whitefish such as sea bass and seabream. In addition, some Norwegian farmed salmon found its way to the Russian market through Belarus, although the volumes were marginal compared to previous direct exports to Russia. Norway was not the only country from which seafood transited through Belarus, which became a kind of trading hub for seafood from sanctioned countries. Table 2 indicates the country of origin for Russia's seafood imports from 2001 to 2019.

The table demonstrates three notable dimensions related to the change in seafood trade in the aftermath of the 2014 embargo. First, there was a change from one dominating supplier to Russia to a higher number of suppliers, each of which exported lower volumes of seafood to Russia than the one dominating supplier had in the pre-embargo period. In particular, Norway went from being the dominant supplier in 2013 to virtual irrelevance, with seafood exports to Russia falling to 1 percent of market share in 2019. Second, after countersanctions were introduced, the combination of main suppliers captured a much higher share of Russia's total seafood imports. Taken together, the group of main suppliers increased their market share from 72 percent in 2013 to 85 percent in 2019. Third, main seafood suppliers to Russia were distributed across a wider spectrum of geographical regions, including Asia, South America, and Europe. Chile in particular increased its market share from 10 percent in 2013 to almost 22 percent in 2019; China's share rose too, from 9 percent in 2013 to nearly 15 percent in 2019. That said, countersanctions contributed to a decline in the value of Russia's imported seafood, which dropped from \$2.8 billion USD in 2013 to around \$1.6 billion USD in 2018 (the value includes fresh and frozen fish and seafood).<sup>33</sup> The reduction in seafood imports is explained by the combination of reduced import volumes and the purchase of less expensive seafood, i.e. the volume of farmed salmon declined.

In the aftermath of Russia's 2014 countersanctions, Russian seafood exports did not experience the same change as occurred with imports. On the contrary, the primary purchasers of Russia's seafood have remained stable, with the Asian countries by far representing the largest Russian export market. In particular, China, the Republic of Korea, and Japan have been quite stable markets, buying 70–80 percent of the total Russian seafood exports. The volume of seafood exports to Asia coincides with the Russia's seafood resource base, which is by far the largest in the Russian Far East. These three Asian countries buy large quantities of Alaska pollack, salmon, and pelagic species (mackerel and herring). In Europe, the classical customers (Norway, Germany, Denmark, and the UK) are purchasers of Northeast Atlantic cod. Compared to the seafood trade in the Russian Far East, the value is quite small, but is stable and did not change much as a result of countersanctions. Since 2013, the Netherlands has become a relatively large consumer for Russia's seafood, increasing its share from about 10 percent in 2013 to over 17 percent in 2019. In total, European markets received about 20 percent of Russia's seafood exports during 2017–2019. The distribution of Russia's seafood exports by main buyers is indicated in Table 3.

The Putin period of consolidation also brought attempts to establish an institutional setup for the governance of Russia's role in the global seafood trade. The federal government has tried to establish a system of incentives to provide control over seafood exports as a valuable asset. Russia's export of fish has been an important binder in relations with large trade partners in the Far East. Russia seems to have succeeded with the strategy of assuming some control of the export. It is evident that Russia's government intends to remain involved in seafood trade as part of its overall food security strategy. In January 2020, President Putin signed a new Food Security Doctrine to replace the 2010 version. Of note is the fact that the target for self-sufficiency in seafood was raised from 80 to 85 percent (in live weight). In the 2020 version, under the chapter of 'Strategic Goal and Key Objectives of Ensuring Food Security', the doctrine stated:

The strategic goal of ensuring food security is to provide the country's population with safe, quality and affordable farm products, raw materials and food in the quantities that satisfy balanced food consumption. Based on food independence requirements, the major sources of foodstuffs are products of agricultural, forestry, fishery and hunting sectors, as well as food industry products. The agricultural, fishery and food industries play central role in the food security assurance.<sup>34</sup>

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Table 3	

	2001	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
China (%)	18.8	27.9	41.4	39.6	37.2	36.0	31.9	35.3	34.2	31.3	34.9	36.2
Korea, Republic of (%)	26.8	1.9	3.8	38.5	40.3	39.5	36.4	34.8	33.6	34.2	32.0	3.8
Japan (%)	27.3	20.8	9.1	8.2	10.0	7.2	7.4	9.4	9.1	7.3	8.2	6.2
Netherlands (%)	1.9	1.7	6.1	7.1	0.	9.9	16.4	13.2	14.3	19.7	16.1	17.1
EU countries and Norway (%)	13	13	7	7	7	Г	Г	I	Г	7	7	ŝ
Belarus (%)	0	0	0	0	1.1	1.9	2.5	1.7	0.2	1.6	1.5	1.4
United States of America (%)	0.5	2.4	0.7	0.1	0.1	0.1	0.1	0.2	0.2	0	0.4	0.4
Sum (%)	88.3	67.5	63.1	95.8	95.4	95.7	96.0	95.8	92.5	95.7	95.3	95.9
	dollar val	of evo	orte									

*Note* Percentage of exports based on dollar value of exports *Source* Trade statistics for international business development, https://www.trademap.org/ Not only does the new Food Security Doctrine provide more detail than the previous 2010 version, it also contains several strategic measures and directions for the desired future development in the food sector.

In addition, a governmental order (*razporiazhenie*) in April 2020 (No. 993-r) laid out a new 'Strategy for Development of the Agribusiness and Fishery Sectors of the Russian Federation to 2030'.<sup>35</sup> The strategy considers economic models for development and is closely tied to the new Food Security Doctrine and other official programmes related to the strategic development of the food sector in general. Some of the goals are to increase the share of value-added products and make them available to Russian consumers, and to increase the exports of food products to at least \$45 billion USD annually, a goal that subsequently was modified to \$34 billion USD by 2024 instead. To increase exports, the order advocates the elimination of trade barriers, stimulation of export-oriented businesses, and to promote Russia's agriculture and fish products in export markets.<sup>36</sup>

#### 4 Outlook

Russia's role in global seafood trade has changed over time. The first change is as a seafood importer. Russia has stabilised as a less prominent actor as an importer in the global seafood market. The overarching element in the Russia's seafood trade after 2000 has been self-sufficiency, that is, to produce enough to meet Russia's own needs. The early post-Soviet era was characterised by heavy importation of low-value seafood and export of high-value seafood. After 2010, Russia now has net production that exceeds domestic demand and consumption. Over the past decade and, in particular after the 2014 embargo, Russia decreased the value of food imports in general, with the dollar value of food imports falling from a post-Soviet high of \$43 billion USD in 2013 to less than \$25 billion USD in 2016.<sup>37</sup> The dollar value of Russia's food imports has increased since 2016 but has not come close to the pre-2014 level. The dollar value of seafood imports also fell due to countersanctions, although since 2017 have stabilised (see Fig. 1). The 2020 food security doctrine prescribes more self-sufficiency in seafood.

Seafood imports from Europe fell dramatically as a consequence of the food embargo and has reinforced Russia's reduced role as a seafood importer. The major seafood trade inflows most affected by the ban are imports of Atlantic salmon, herring, and trout from Norway and cold water shrimp from Canada. Even if the import ban against the EU has been compensated somewhat with imports from other countries, the big picture is still a reduction in seafood imports.<sup>38</sup> A parallel trend in Russia's seafood import is the gradual shift from European to Asian countries where China has maintained its position as the second largest foreign supplier of seafood to Russia, with the volume increasing by 23 percent during 2010–2016 (see Table 2). Other states that have appeared as newcomers among the top ten exporters of seafood to Russia are Vietnam, Peru, Morocco, Thailand, and India, thereby strengthening the trend for Russia to distance itself from trade with Western countries.<sup>39</sup>

Russian food security issue is clearly a political ambition strongly related to the independence of seafood imports in order to self-supply the domestic market. As indicated above, the Russian model of food security places emphasis on national vulnerability from foreign sources.<sup>40</sup> On the other hand, the Russian economy benefits from a trade surplus in one sector in order to bolster sectors that have a negative trade surplus (such as the agriculture sector). Based on statements by government leaders, official documents and plans, institutional arrangements, and business interests within Russia, I expect that Russia's role as a seafood importer to change significantly.

The second change is as a seafood exporter. Russia's export of seafood has increased steadily. During the past 15 years, Russia's role as a dominant global seafood exporter has grown. In 2003, Russia ranked 35th globally in dollar value of seafood exports. In 2019, Russia advanced to 7th place as a seafood exporting country, exceeded only by traditionally large seafood exporting countries such as China, Norway, USA, Chile, and India. Russia's ranking as seafood importer and exporter during 2003–2019 is shown in Table 4.

There is an aspiration to further develop seafood exports. In October 2018, then-Russian Prime Minister Dmitrii Medvedev announced a goal of achieving \$8 billion USD in revenue from annual seafood exports by 2024. In 2018, Russia exported seafood valued at \$4 billion USD.<sup>41</sup> The head of *Rosrybolovstvo*, Ilya Shestakov, indicated that Russia's fish catch is projected to rise by only 500,000 metric tonnes by 2030, so a rise in export value has to come from an increase in high-value fish.<sup>42</sup> He suggested moving from supplying primarily whole fish to selling value-added products such as fillets that come from processing. The move to exports of value-added products was reflected as well in governmental

	2003	2007	2010	2015	2019
Ranking of eigh	t largest seafood e	exporting cour	ıtries		
1	China	Norway	China	China	China
2	Norway	China	Norway	Norway	Norway
3	USA	USA	Vietnam	USA	Vietnam
4	Vietnam	Vietnam	USA	Vietnam	India
5	India	Canada	Canada	India	Chile
6	Canada	Chile	Thailand	Canada	USA
7	Chile	Spain	Spain	Chile	Russia (7)
8	Sweden	Thailand	Chile	Sweden	Sweden
	Russia	Russia	Russia (12)	Russia (10)	
	(10)	(35)			
Ranking of eigh	t largest seafood i	i <b>mporting</b> cou	ntries		
1	Japan	Japan	Japan	USA	USA
2	USA	USA	USA	Japan	China
3	Spain	Spain	Spain	China	Spain
4	France	China	France	Spain	Spain
5	Italy	France	China	France	France
6	China	Italy	Italy	France	France
7	Sweden	Germany	Germany	Sweden	Sweden
8	Hong Kong	Rep. of Korea	Sweden	Germany	Korea repub
	Russia (21)	Russia (14)	Russia (11)	Russia (19)	Russia (18)

 Table 4
 Ranking of Russia's place in global seafood trade

Note Ranking is based on U.S. dollar value

Sources International Trade Statistics; Federal Customs Service, Russia; Rosstat; and UN Comtrade

order from November 2019 (No. 2798-r), also entitled 'Strategy for Development of the Fisheries Sector to 2030'. In this document, a clear ambition was expressed to strengthen the export of white fish and stimulate increased exports of processed fish.<sup>43</sup> This order is specific to the fishing industry although it shares the same name with the April 2020 order that was mentioned above. According to order No. 2798-r from November 2019, to reach export goals Russia should focus on the export of large-volume, valuable white fish species.

Going forward, the room for manoeuvre for Russia as a global actor in seafood trade is affected by resource accessibility, organisational behaviour, and state political aims, goals, and institutional capabilities. Russia's government has made clear its intentions to play a direct role in seafood exports. Since 2000 a whole range of different economic and institutional measures have been implemented. Legal institutions, regulations, and various incentive measures have been introduced together with the transfer of power to various federal control organs such as the Federal Customs Service, *Rossel'khoznadzor*, and other more sector-specific organs that give the state the ability to move seafood exports in desired directions. With regard to seafood exports, there is little to suggest a pull back in Russia's export orientation. Stable and high levels of the fishing quotas will continue Russia's role as a prominent actor in global seafood trade.

#### Notes

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over time. That said, commercial aquaculture will continue to play an insignificant role in the production and economics of the fishery sector, even though its average annual production growth rate has been about 15 percent. Commercial aquaculture is a part of the total fish production that is possible to control and increase. Current output from this industry is, however, modest and not subject to export.

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