Det russiske marked for norsk hvitfilet

– muligheter og begrensninger

Markedsstudie utført for "Filetforum", Fiskeri- og havbruksnæringens landsforening (FHL) med finansiell støtte fra Fiskeri- og havbruksnæringens forskningsfond (FHF)

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TCG
TROMSO CONSULTING GROUP

Contents

1. Summary

The report presents the results of the market research; “The Russian market for Norwegian white fish fillet – potential and limitations” that was carried out in the period from November 2005 till January 2006 in the two biggest cities of the Russian Federation – Moscow and Saint-Petersburg.

The research goal was to reveal current and future trends in the Russian market for white fish fillet products that allow the Norwegian white fillet industry to plan an efficient market entry strategy.

During the last several years the economic development of the Russian Federation has been stable and positive, with a 7.2% growth of Gross Domestic Product (GDP) in 2004. With population of 142.9 million people, the Russian Federation represents the biggest consumer market in Europe. Existing trends in Russian economy are the evidence of favorable conditions for consumers’ markets development.

At present the Russian market for fish products has a capacity of roughly 1'900 thousand tons, at a value of more than 3.7 billion euros. Over the last several years the seafood products market demonstrated an average growth of about 20% annually. The seafood share in typical consumers’ expenditures reached 5.1% in 2005.

Moscow and Saint-Petersburg, the two biggest cities in Russia, are normally the first choice of market entry for foreign exporters. The current capacity of the Moscow seafood market is estimated at 160 thousand tons, while that of Saint-Petersburg is estimated at 60 thousand tons. The Moscow and Saint-Petersburg markets are considered to be quite saturated; a wide range of fish products is offered, of both domestic and foreign origin.

In 2005 capacity of the fresh/chilled white fish fillet market has been estimated to be approx. 1.4 thousand tons in Moscow, and 1.1 thousand tons in Saint-Petersburg. Frozen white fish fillet market is assessed as more capacious, with about 12.0 thousand tons sold in Moscow, and 4.5 thousand tons in Saint-Petersburg. Both domestic and imported products are present in the market; on average, in Moscow domestic white fish products prevail (about two thirds of the total amount), while the Saint-Petersburg market has more imported products (circa 60%).

Market participants expect further active development of the market for white fish fillet products, both fresh and frozen; the capacity of fillet market is expected to be growing. In the next two or three years the increase of sales volume by 10 – 15% annually is predicted, with maximum cumulative growth of 50% for Moscow and up to 30% for Saint-Petersburg.

The Russian white fish fillet market may be characterized as a free competition market; none of market players has a significant market share, no predominant brands exist. The level of competition is moderate. The main share of turnover of the suppliers is constituted by red fish species like salmon and trout, and also by herring and sprat. No company in the market, either producer or distributor, has so far specialized in white fish species, as well as none in fillet products. All these factors imply that barriers to the market entry are relatively low and there are good opportunities for newcomers to consolidate their grip on the market.

The competition is mostly price-based. Market participants offer white fish fillet products at nearly the same prices, and a 15-eurocent margin per 1 kg for a wholesale lot is considered to be significant. In Moscow the competition is relatively stronger; so the wholesale prices for frozen products in Moscow are lower by about 30 eurocents per 1 kg than in Saint-Petersburg. Still the consumer prices in Moscow are higher by about 20%.

The current demand for white fish fillet products is estimated to be moderate. White fish species are not regarded as delicatessen, or fest food, or an attribute by any other important events. Among white fish species sturgeon and zander are considered to be the best by nutritional characteristics. Consumers with low income prefer inexpensive species like hake and Alaska Pollack, which are almost 'half price' compared with cod or haddock.

Among the species under study cod fillets are the most demanded, both fresh and frozen. Fresh cod fillets would probably be most relevant in HoReCa segment, while frozen in retail chains, as well as in the open markets. Haddock and coalfish fillet products are demanded on moderate level. Both species are less popular with restaurants, but good for sale through retail chains and in the open markets. Frozen coalfish fillet is especially important for processors that use it for making of preserved foods and semi-finished products instead of more expensive cod. Spotted catfish, though also being present in the market, is not considered to be a demanded product.

The demand for white fish fillet products is considered to be noticeably dependable on price. With a general increase in prices by 20-25%, there is a significant possibility that white fillet products will be substituted by many consumers with other types of fish products.

The Norwegian white fish fillet products are present in the Russian market; however, their amount is considered to be insufficient for any quantitative analysis or trends description. The import of white fish fillet products from Norway is characterized as rather occasional than regular.

The market potential for the Norwegian white fish fillet products depends strongly on the level of prices the Norwegian exporters are ready to offer. With prices comparable to those in Norway, the only possibility for an exporter to challenge the market is to become a principally niche company specializing on elite quality expensive fish fillet products. Thus, the most promising market segments for cod and haddock fillet products will most likely be retail chains, and HoReCa; fresh fillets delivered mainly by air.

At present only two regional markets in Russia are assessed as potentially profitable for Norwegian exporters – Moscow and Saint-Petersburg. In general the Moscow market is supposed to be more capacious; the Moscow citizens have bigger purchasing power, and are more sensitive to any extra advantages high-quality food can provide. The potential of the other regions of Russia is believed to be minor at present, however, like in case with Norwegian salmon and trout, the regional market for Norwegian white fish fillets is believed to develop gradually in the future, following the same pattern.

2. Research description

2.1 Research background

From its start in mid-80s the export of Norwegian seafood to Russia demonstrated a steady growth. Since then the Russian market has become among the most important ones for pelagic species (herring, capelin and mackerel) and gained reputation as the leading buyer of inexpensive seafood from Norway. In the past 5 years, however, this general opinion has been overruled due to the drastically increased import of frozen and fresh salmon and trout.

It all resulted in that in 2005 the Russian Federation with its 3.7 billion NOK (about 500 mln. Euro) of annual turnover, surpassed France and Denmark and became the largest single market for Norwegian seafood, accounting for 11,7% of the total Norwegian seafood export. Nowadays, Russia is regarded by the Norwegian seafood industry as the “land of opportunities”.

In order to find out the potential of the Russian market for Norwegian white fish fillets, the market research was executed in the period from 10th November 2005 to 16th January, 2006, conducted by Tromsø Consulting Group, Tromsø.

Research goal and objectives

Research goal

To reveal current and future trends in the Russian market of white fish fillet products that allow the Norwegian white fillet industry to plan a market entrance strategy.

Research objectives

- To make an overview of distribution and consumption patterns relevant for Norwegian white fillet in the cities of Moscow and St. Petersburg;
- To make an overview of differences in the distribution and consumption patterns for fresh fillet versus frozen fillet, and single out market niches for fresh white fillet, if such exist per now;
- To make an overview of the requirements relevant for Norwegian white fillet products in various market segments (supermarkets and retail, processing industry, HoReCa);
- To make an overview of the most important suppliers of white fish fillet in the Russian market, if such exist;
- To estimate the potential for Norwegian white fillet in Russia in the coming years, present trends and possible changes in the distribution structure, taking in consideration among other things the fast changing retail market in Russia.

Research subject

The present research concerns market study of fresh and frozen fillets of the following white fish species: cod, haddock, coalfish and spotted catfish.

An important thing to note about the Russian market of fish products is that it does not differentiate between “true” fresh fillets and “chilled ones” made from defrosted fillets. As it was discovered during the research, the majority of the white fish fillets present in the market are chilled ones, although they all are called ‘fresh’. True fresh fillets could be found in a limited quantity in the upper market segment of HoReCa and to some extend in retail.

Therefore, when referring to fresh fillets further in this report, we include both “true fresh” and “chilled fillets” in this notion.

2.2Research methodology

Research methods

In order to achieve the set research objectives, a complex approach has been applied, including three methods:

- Desk research – analysis of free access sources of information on research issues;
- Retail audit – a store-check on the subject of presence of different types of products, and assessment of their sales volume;
- Expert interviews with top managers in the companies that are involved in trade with white fish fillet products. The managers interviewed are in the following referred to as ‘experts’.

The interview questionnaire form is given in appendix 3.

Experts' selection principles

The experts were chosen among the companies, located in Moscow/Saint-Petersburg, which scope of activities includes white fish fillet products. The total number of interviewed experts is given in the table below:

Type of market players	Moscow	St. Petersburg
Importers/distributors/wholesalers	5	5
HoReCa market	5	3
Retailers (chains)	6	3
Processors	2	2

The compliance with the conditions was checked by way of telephone poll and verification of the secondary sources of information (directories, business publications, search web-sites). For the findings of the said poll please refer to appendix 1.

For the list of the experts, please refer to appendix 2.

Experts working cycle

- A preliminary information letter with brief information about the core and the participants of the research.
- Establishing an initial telephone contact with experts, if necessary, providing additional information on the research, persuading the respondent, specifying the date, time and place of the meeting as might be most convenient for the respondent.
- Personal meeting with experts including providing the information on initiators of the research and interviewing the expert.

3. Overview of fish products market in Russia

3.1 Overview of current state of the Russian economy

The data presented in this chapter, if no other source is mentioned, are obtained from the GosKomStat (The Russian State Bureau of Statistics). Additional data tables and diagrams to each subchapter with relevant indicators are given in Appendix 7.

Population

As per November 1st, 2005, the Russian population was 142.9 million persons. Over the last 15 years it has been registered a constant natural decrease in population every year. About 62% of the total population is of working age.

The proportion between urban and rural population is stable and constitutes 73% and 27% respectively.

Moscow with 10.4 mln. inhabitants and Saint-Petersburg with 4.6 mln.,are the two largest cities in Russia.

Labor and income of population

52% of the population is economically active (73.7 million persons in 2005). The level of unemployment amounts to 7.3%. The biggest part of the working population - 51% of all employed persons - is engaged in private sector, while 36% – in state organizations or other parts of public sector. The employment structure is presented in appendix 7.

By the end of 2005 the average monthly per capita income constituted aprx. 241 € (8’299 rubles). However, real average per capita income is estimated to be approximately 600-700 euros in Moscow and somewhat less in St. Petersburg.

The distribution of population by per capita average monthly income according to public statistics is shown in Diagram 1.

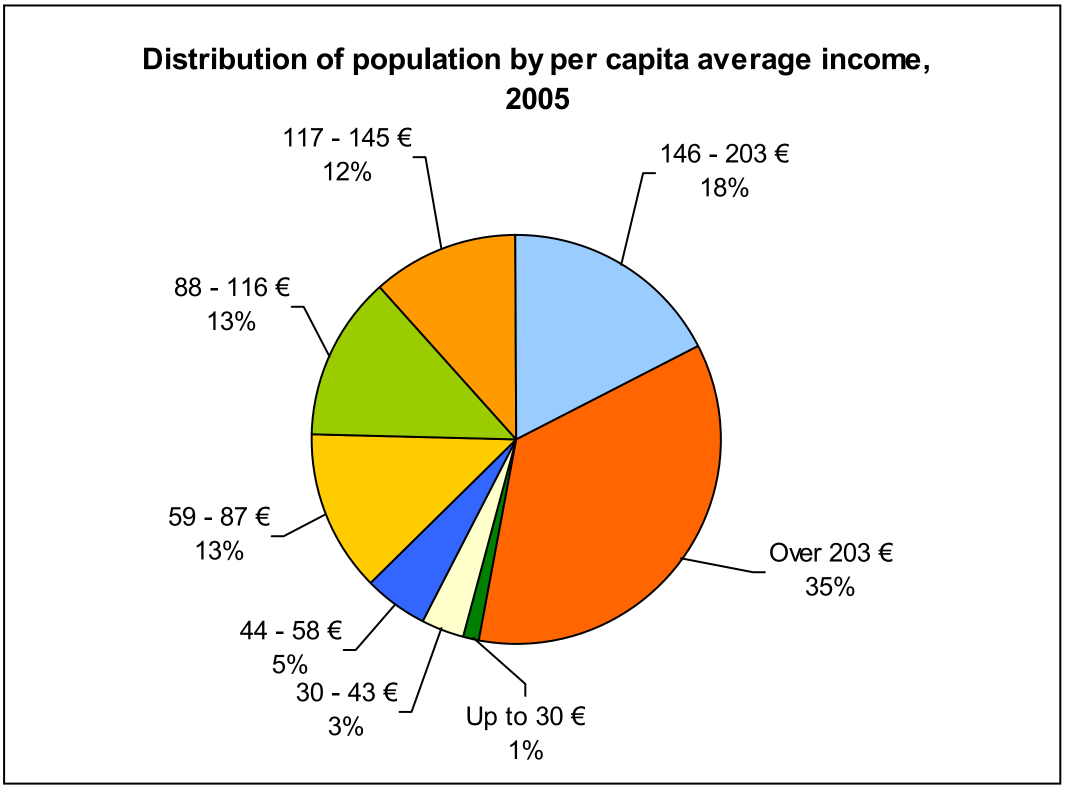


Diagram 1

Average monthly nominal wages amounted to 257 € (8'875 rubles). 70% of income is spent for purchase of goods and payment for services. For expenditure structure please refer to appendix 7.

According to official statistics, in 2005 the real income of population (net income after subtracting obligatory payments and adjusted to the consumer price index) has increased by 9.1% compared to 2004.

The inflation rate amounted to 10.9% in 2005.

Retail trade

In 2004 Russia's Gross Domestic Product (GDP) constituted approximately 500 billion euros, which was an annual growth of 7.2%. The retail trade turnover makes up about 45% of GDP. The share of customer goods sales made up 80% of the total commodity turnover.

In January 2005, 212 thousand retail trade organizations were registered in Russia. Out of them, 24.5 thousand are large and medium-size outlets, while 6.4 thousand outlets are commodity, mixed and food markets.

The structure of retail trade organizations and their turnover are shown in Diagram 2.

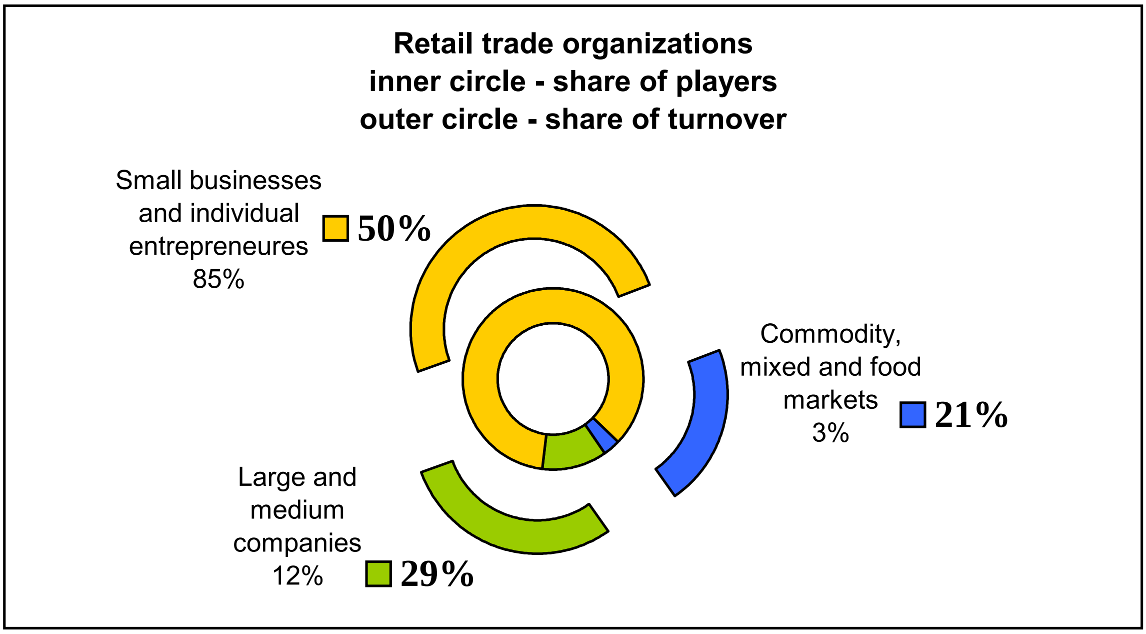


Diagram 2

According to experts' opinions[1], retail chains develop very actively in Russia, especially in Moscow and Saint-Petersburg. Thus, a share of retail chains in the foodstuffs turnover exceeds 55%. The largest market share belongs to retail chains in the segment of footwear, building materials and jewelry – more than 65-70%.

The rapid development of retail market is explained by high profitability of retail chains. According to the international consulting company A.T. Kearny, Russia heads the list of countries with developing economy with the highest investment appeal index in retail the two years in a row.

However, the population demand is considered to be met by the retail sector only by 70%, and the development of trade infrastructure lags behind the demand. That means good opportunities for newcomers on the retail market.

For the present time domestic retail chains predominate international ones, but foreign chains are expected to play an important role in the nearest future as well. So far among international retail chains Auchan, Ikea, Ramstor, Metro Cash and Carry are present. Other retail giants like ALDI, Carrefour, Wal-Mart and Ahold are exploring opportunities of market entrance in Russia.

[1] Kramarev A.N. *Strategy of international retail chains regional markets penetration*

Moscow retail trade[2]

Basic features	Store form				
	Convenient stores	**Food boutique**	**Supermarket**	**Hypermarket**	**Cash & carry**
Market share	29 %	1 %	52 %	10 %	8 %
Forms of service	Normal and discounter (day-to-day goods, limited range of goods)	First-class range of goods, strict quality requirements, careful attention to service	Normal and discounter (wide range of goods at reasonable price)	Normal and discounter	Normal and discounter
Target group	Middle class and lower-middle class; several visits per week	Well-off persons	Households with average income; 2-3 visits per week	Households with average and high income; 1 visit per week	Small wholesalers; officially Metro Cash & Carry work only with legal entities; however, unofficially up to 60% customers are individual persons
Stock-lis t size	3 – 3,5 thousand positions	Under one thousand, may be very small	10 – 20 thousand positions	Not less than 30 thousand positions	Over 20 thousand positions
Area, thousand square meters	0.2–0.6	Optional	3–5	Over 5	Over 5
Average check sum	€ 7	Over € 45	€ 9 – 12	Over € 45	Over € 45
Number of terminals	1 – 2	Not less than 2	Not less than 5 – 7	Not less than 20	Not less than 20
Location	Residential areas	Downtown, elite residential areas	Residential areas	Outside MKAD outer ring road	Outside MKAD outer ring road
The biggest retail chains	Sem' shagov (owned by Sed'moy Kontinent) Mini-Perekrestok (owned by Perekrestok), ABK	Pjat' zvezd (owned by Sed'moy Kontinent), Azbuka vkusa, Kalinka-Stockmann	Ramstor, Sed'moy Kontinent, Paterson, Perekrestok, Billa	Auchan, Mos-Mart, Ramstor	Metro Cash & Carry

Table 1: Moscow market in 2005, grocery segment

[2] Nedvizhimost i tseny. - #43. – 2005.

3.2 Current seafood market capacity

The Russian market for fish products consists of fresh and frozen fish, frozen semi-prepared products, preserved and canned fish, salted, smoked and dried fish products.

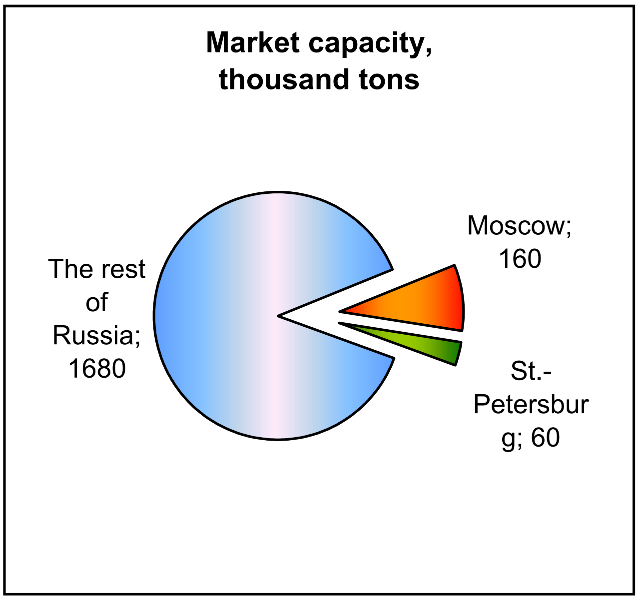
At present the capacity of the Russian fish market is roughly 1'900 thousand tons, or 13 kilograms of fish products per capita annually. In money terms the capacity of the Russian market exceeds 3.7 billion euros. The share of fish products in typical consumers' expenditures constituted 5.1% in 2005.

Main segments of fish products market are represented in table 2:

Sales volume, thousand tons	2004	2005
Fresh and frozen fish products	785	1021
Processed fish products	265	353
Canned fish products	459	482
Total	**1509**	**1856**

Table 2: Approximate segments capacity[3]

Market capacity



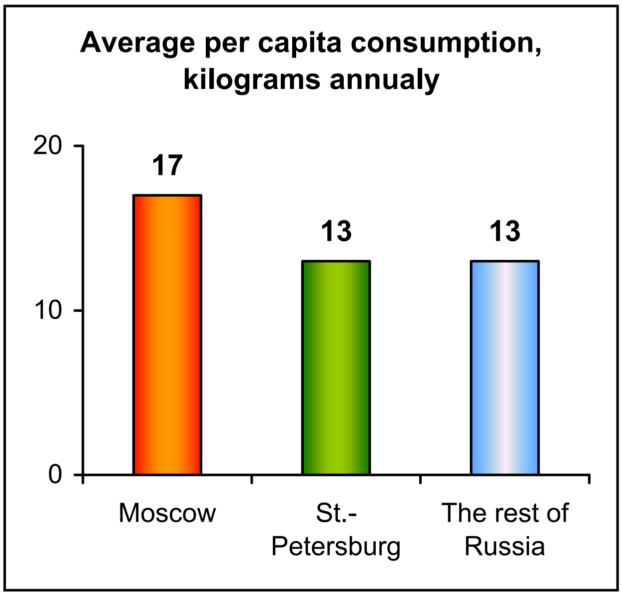


Diagram 3

In 2005 Russia's two largest single markets - Moscow and Saint-Petersburg account for 160 th. tons and 60 th. tons, correspondingly. The capacity of the seafood market of the rest of Russia is estimated at 1680 thousand tons.

In the near future a moderate growth of fish consumption is expected. As estimated by the experts, an average increase of per capita consumption in Russia is aprx. 1 kg per year, which will be related to a corresponding increase of Russia's fish market capacity.

[3] Data are given in accordance with the report published by Agriconsult at http://www.infofood.ru

3.3 Present seafood market structure

The seafood market in Russia is considered to be rather competitive and is represented by a large number of market players. It is due to several reasons[4]. Firstly, a small-scale fish production is estimated to demand moderate start-up investments that may be limited to 20 – 40 thousand euro. Secondly, the difference between the raw material cost and the final product price makes up to 50-100%, which gives a basis for earning good margins. Thirdly, fish products are the category of goods that are always highly demanded. All these factors result in a rather high profitability of the fish processing business, as estimated - 20-25% - and consequently a short period of payback of investments.

Moscow

The Moscow market of fish products has the biggest capacity and growth potential in Russia. In 2005 its capacity is roughly estimated at 160 thousand tons annually or almost 10% of the total Russian seafood market. In value it amounts to at least 300 mln. euro. The average annual per capita consumption of fish products in Moscow reaches 17 kg[5].

The Moscow and Moscow region seafood market has the following structure:

- ≈ 350 wholesale companies;
- ≈ 800 processing companies, including small businesses and individual entrepreneurs;
- 6 specialized fish markets
- ≈ 1700 retail stores with seafood included in the assortment

Thus, the Moscow retail market is recognized to be the most saturated with respect to fish product assortment.

Saint-Petersburg

By its capacity and the growth potential the Saint-Petersburg seafood market is assessed as the second largest after Moscow. The market capacity amounts to 60 thousand tons, or aprx. 110 mln. euro in value. The average annual per capita consumption is 13 kg.

The Saint-Petersburg and Leningrad oblast market include:

- ≈ 180 wholesale companies;
- ≈ 300 processing companies, including small businesses and individual entrepreneurs;
- 8 specialized fish markets
- ≈ 1500 retail stores with seafood included in the assortment

The Saint-Petersburg seafood market is considered to be saturated.

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[4] Tikhomirov Dmitry Massovy posol // Prodindustria. – March, 2004.

[5] Data are given in accordance with the report published by Agriconsult at http://www.infofood.ru

3.4 Main tendencies in the market

At present the following main tendencies can be noted on the Russian seafood market:

- Lack of domestic raw material. More than 50% of the market supply is fulfilled by imported seafood[6];
- High elasticity of consumer demand by price. The average price of fish products is higher than the price of meat due to considerable cost of raw material. Therefore, having a moderate monthly income, most part of the population is still rather sensitive to even slight increase in prices;
- The highest level of market demand is for the cheapest products. This is a consequence of the trend mentioned above;
- Low elasticity of consumer demand by income of consumers. The share of seafood consumption in the "food basket" remains nearly at the same level among different income groups of population; persons with higher income prefer products of higher quality, but the average per capita consumption of 13 kg is relevant for nearly all social groups;
- Increasing popularity of easy-to-cook products. A gradual change in lifestyle is taking place, when the consumers with a relatively higher income prefer semi-finished products, and are ready to pay extra for saving their cooking time;
- A general belief in a better quality of imported seafood. This is cultural stereotype partially based on the consumers' experience with domestic and imported fish products nowadays and in the past.

The present consumer preferences between different fish products are described below:

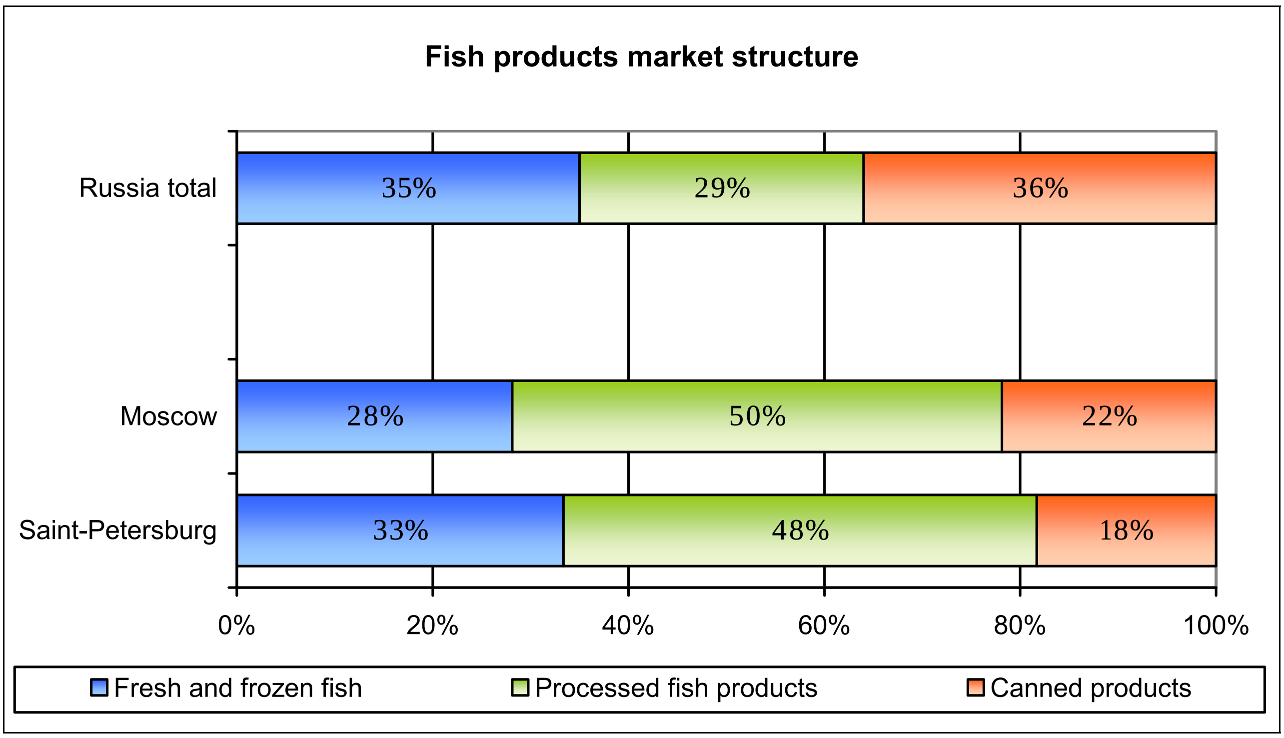


Diagram 4

As noted in the diagram, in general unprocessed fish (fresh and frozen) and canned fish products are slightly more popular than processed products.

[6] www.vokrug.info

4. Market for White Fish Fillet Products (WFFP): current situation and trends

4.1 Current products in the market

During the market research the following fish fillet products were under study:

- Cod fillet, fresh and frozen
- Haddock fillet, fresh and frozen
- Coalfish fillet, fresh and frozen
- Spotted catfish fillet, fresh and frozen

As noted before and as discovered during the research most of 'fresh' fish fillets present in the market are, in fact, chilled (=defrosted) fillets and not really fresh. The true fresh white fish fillets are available in limited quantity only in the upper sector of the market – top restaurants and hotels, as well as retail outlets for the higher income groups.

All interviewed experts mentioned that the Russian market of white fish fillet includes significantly more species of white fish. The following species are attributed to white fish as well:

- Sturgeon
- White sturgeon (beluga)
- Stellate sturgeon
- Zander (pike-perch)
- Perch
- Carp
- Pollan
- Sterlet
- Redfish

During the product check in retail outlets, it was discovered that portion fillet products (loins, tails etc.) are not distinguished in the market. It is an important feature of fish products classification in Russia. As a rule there is no indication what part of the fillet is inside of the package named 'fillet a la carte' (fillet portion).

Moscow and Saint-Petersburg markets are considered to be quite saturated by the product assortment under study. At present there are all kinds of fillets under consideration present in the market – fresh and frozen fillets of cod, haddock, coalfish and spotted catfish. The most widespread types of white fish fillets are the following (in a descending order):

Moscow:

- Fresh cod fillet – whole, skinless; both chilled and true fresh
- Fresh cod fillet a la carte; mainly chilled
- Frozen cod, haddock and coalfish fillets – all types

Saint-Petersburg:

- Frozen cod fillet – whole, skinless;
- Frozen haddock fillet – whole, skinless
- Frozen cod and haddock fillets a la carte (loins, center cut, tails)

Some experts underlined the fact that the market is flooded with faulty products. For example, some unfair competitors happen to sell fillets of hake, Alaska Pollack, poutassou and coalfish under the label of 'skinless cod fillet'.

4.2 Origin of WFFP products

Proportion of domestic and imported products

Today the market offers both domestic and imported white fish fillet products. The proportion of the two categories varies depending on the market segment:

Wholesale companies

Moscow

Domestic products prevail in the Moscow wholesale market, since Moscow wholesalers cooperate with all major fishing regions of Russia – the Far East (Primorsky kraj, Kamchatskaya oblast, and Sakhalinskaya oblast), Murmansk oblast and Archangelsk oblast, Astrakhan and Rostov oblasts. Also some amount of Chinese and South American products is present in the Moscow wholesale market.

Saint-Petersburg

Imported products noticeably predominate over domestic ones. Experts estimate the share of foreign white fillets as varying between 60% and 80%, with average of about 70%. Domestic products constitute respectively from 40% to 20% of the market. Saint-Petersburg is the main entry harbor for import of seafood to Russia. It makes seafood of foreign origin, including white fish fillets, more competitive pricewise with the similar products of domestic origin, most of those have to be transported over quite a long distance from the Far East.

Concerning supply to the domestic market of white fish fillets from Murmansk, it is rather limited due to the fact that the major part of the fillet production in Murmansk (up to 90% of the on-shore production and almost 100% of the sea-frozen fillets) is exported. The main reason for that is the better prices paid and a more stable demand of quantities of white fish fillets offered by the foreign customers compared to Moscow/Saint-Petersburg clients.

Processing industry

Moscow, Saint-Petersburg

A huge predominance of domestic products of about 90% is registered. The main reason for choosing Russian fillets is their cost which in comparison to imported fillets is much more attractive for processors. Since processed white fish fillet products are not considered to be fest food (unlike salmon or trout), the processors prefer the raw material which allows to keep the resulting consumer price at reasonable level, thus providing popularity for products with the buyers.

HoReCa

Moscow, Saint-Petersburg

This segment generally gives preference to imported fish fillets because of the image of quality products they have. That's why the share of fillet products of foreign origin makes roughly equal part to that of domestic products in HoReCa, for which the quality is the most important characteristic of the product.

Retail trade

Moscow, Saint-Petersburg

Generally retail chains assess the proportion between Russian and foreign suppliers as 50% to 50%, since retail chains are trying to meet the needs of various consumer groups. However, the proportion of products differs depending on the type of a store. Convenience stores mainly operate with fillet products of domestic origin (up to 100% of their stock-list), and so do separate food stores of daily trade format. Hypermarkets, which are normally oriented at middle and high income groups, on the contrary, seek to underline the foreign origin of the fillets even though it might not always be the fact. It is connected to better quality image of imported seafood by the Russian consumers, especially, when it relates to fresh and chilled seafood.

The summary of distribution between products in the markets of the two cities is described in diagram 5.

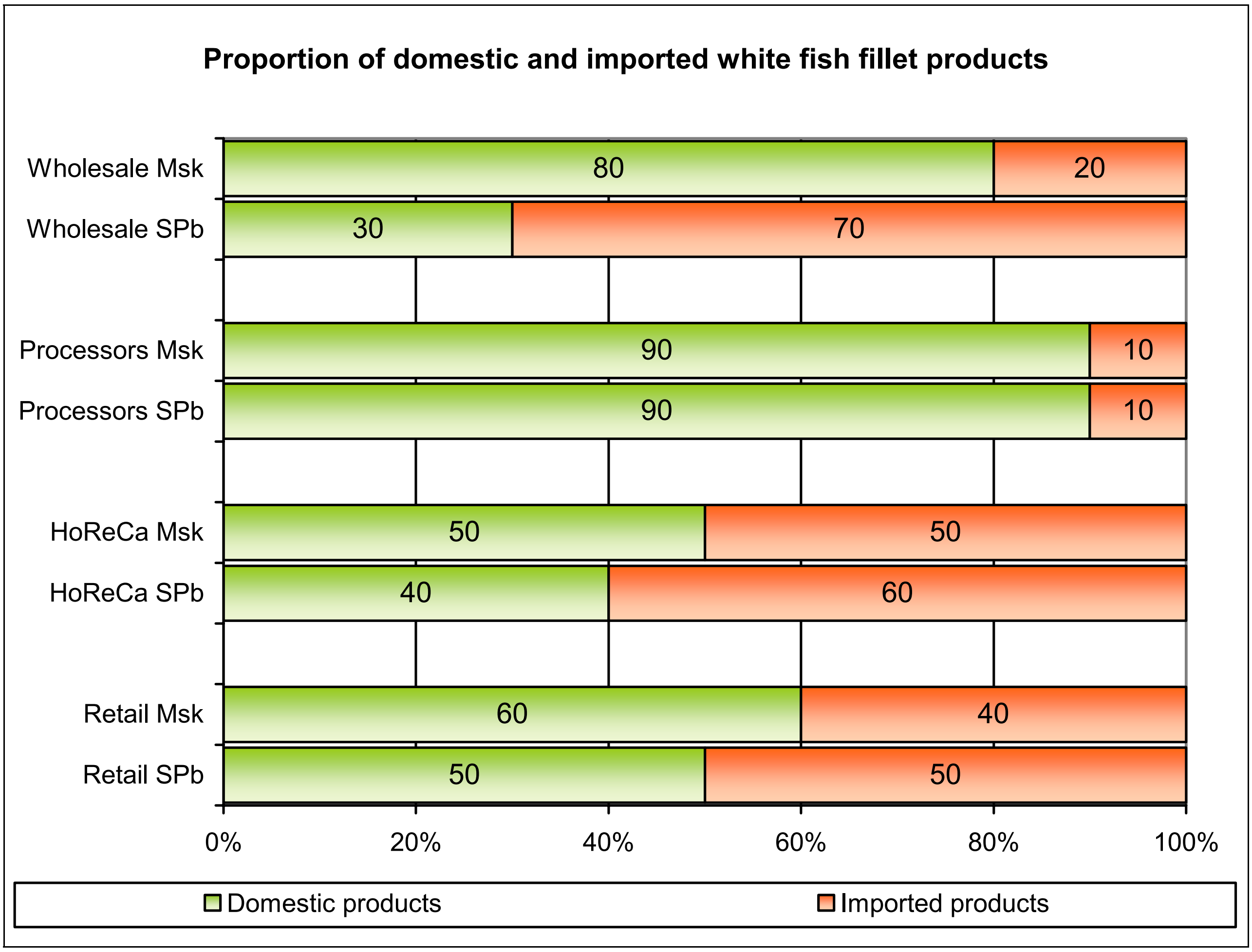


Diagram 5

Countries of origin

Moscow

Fresh white fish fillets, which constitute a small fraction of the upper market, are brought to Moscow mostly from either the Far East region (Kamchatka), Murmansk or one of Scandinavian countries (Norway, Denmark, Sweden). The delivery is done by air.

Frozen white fish fillet products are delivered from mostly Russian regions – Murmansk, Astrakhan oblast and the Far East. Some products with labels of Saint-Petersburg companies are present in the Moscow market.

Experts pointed out that during the last few years there emerged a considerable amount of Chinese fish fillets in the market, as well as those from South America – Argentina, Uruguay and Peru. Most of them have specific shortage in quality, in particular, an enormous amount of icing, which makes in case with frozen fillets up to 30-40% of the total weight. Though considered to be of not as high quality as other fillets (a certain part of them is estimated as imitation of expensive species from cheap ones), these products still have an advantage in price, and in this way are competitors to keep in mind.

A summary for countries of origin is shown in table 3:

Region	Countries	Countries with intensive export to Russia
Russia – regions	Far East region – Kamchatka, Murmansk oblast, Astrakhan oblast, Saint-Petersburg,	
CIS countries	Kazakhstan	
Europe	Norway, Denmark, Sweden, Finland, Iceland Spain, Poland, Netherlands, Germany, Scotland	Norway, Denmark, Sweden, Spain
Asia	China, Korea, Cyprus, Vietnam.	China
America	Argentina, Brazil, Chile, Mexico, Ecuador USA	Argentina, Chile
Africa	Morocco	
Australia and New Zealand	Australia, New Zealand	Australia

Table 3: Countries of origin of products in the Moscow market

Saint-Petersburg

Fillet products present in the market are brought to Saint-Petersburg mainly from either one of Russian regions – Murmansk oblast, Karelia, Astrakhan oblast, Far East region (rather seldom), or have a label of a Moscow distributor – or are imported from European countries – Norway, Denmark, Finland, Poland, Sweden, Netherlands, Spain, Estonia.

In Saint-Petersburg market there is also plenty of Chinese and South American frozen fillets.

In table 4 a summary for countries of origin is shown.

Region	Countries	Countries with intensive export to Russia
Russia – regions	Murmansk oblast, Republic of Karelia, Astrakhan oblast, Far East region	
CIS countries	-	
Europe	Estonia (mainly an intermediate party, imports fish products from South America), Denmark, Norway, Poland, Spain, Finland, Sweden, Netherlands	Norway, Denmark, Poland, Finland
Asia	China, Vietnam	China
America	Peru, Argentina, Uruguay, Panama	Argentina, Uruguay
Africa	-	
Australia and New Zealand	New Zealand	-

Table 4: Countries of origin of products in the Saint-Petersburg market

4.3 Range of prices

Wholesale prices

The Moscow and Saint-Petersburg wholesale traders offer very competitive prices. Wholesale prices vary depending on the lot size and region of origin of fish products. However, there are some stable frames of prices, within which white fish fillet products are considered to be competitive and reliable in quality (at least, relatively). If the prices are below the lower limit, strong suspicions in falsification arise, while in case the prices are higher the clients ask for a proof of superior quality of the products.

An important fact is that prices may be changed due to negotiations with the supplier and personal relations with the producer.

Experts assume that the majority of low-priced fish is ill-conditioned, with overdue expiry date. If an unscrupulous supplier has a fish product out of order (got defrosted or with an overdue expiry date), in order to get rid of those, the company will sell the products not through its own sale chain, but with the help of intermediates, or even through a one-day-firm opened especially for this operation. That's why too low prices put customers on guard.

In tables on the next pages wholesale prices are represented, both in rubles and in euros. Typically the price level varies within the bounds of 5 rubles (less than 15 cents) per 1 kg. The price variation is narrower in case of cod and catfish, and wider for haddock and coalfish.

There is a distinct difference between wholesale prices in Moscow and Saint-Petersburg:

- Frozen fillet products – in Moscow prices are by 10 rubles (≈ 29 cents) lower compared to average Saint-Petersburg ones; it is considered to be a significant difference.
- Fresh fillet products – in Moscow prices are by 40 – 100 rubles (≈ € 1.16 – 2.90) higher than in Saint-Petersburg.

The variation in price for fresh fillets is strongly connected with the patterns of consumption of white fish fillet products in the two cities. In Moscow fresh/chilled cod and haddock fillets are considered to be first-rate products for restaurants or high-class people consumption. In addition, among Moscow consumers it is considered to be a matter of social status to buy more expensive fresh fillets instead of frozen ones, therefore the demand for fresh/chilled fish is higher which is reflected in higher prices.

In Saint-Petersburg fresh/chilled fillets are mainly perceived as quality food, a product for the well-off persons who don't have enough time for cooking. Actually, in Saint-Petersburg white fish fillet products lack image necessary for a price increase.

Still with the frozen products the reasons differ. The Moscow market is quite saturated with domestic products and also with cheap production from China and South America, the number of suppliers is rather big, and they are forced to maintain the lowest possible prices.

Moscow

Price, rubles *	Cod fillet		Haddock fillet		Coalfish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	200	100	160	100	140	80	110	100
Range of prices	130 – 350	80 – 130	130 – 200	80 – 180	120 – 160	70 - 100	80 – 120	80 – 110
Whole, skinless, PBI, interleaved	250	110	180	110	150	90	120	100
Whole, skin on, PBI, interleaved	200	100	150	100	110	80	100	90
Fillet a la carte		80		80		70		80

Table 5: Wholesale prices for white fish fillet products in Moscow, rubles per kilogram

* 1 NOK= 4,2 Rubles

Price, euros	Cod fillet		Haddock fillet		Coalfish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	5.8	2.9	4.6	2.9	4.1	2.3	3.2	2.9
Range of prices	3.8 – 10.1	2.3 – 3.8	3.8 – 5.8	2.3 – 5.2	3.5 – 4.6	2.0 – 2.9	2.6 – 3.5	2.3 – 2.9
Whole, skinless, PBI, interleaved	7.2	3.2	5.2	3.2	4.3	2.6	3.5	2.9
Whole, skin on, PBI, interleaved	5.8	2.9	4.3	2.9	3.2	2.3	2.9	2.6
Fillet a la carte		2.3		2.3		2.0		2.3

Table 6: Wholesale prices for white fish fillet products in Moscow, euros per kilogram

Saint-Petersburg

Price, rubles *	Cod fillet		Haddock fillet		Coalfish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	140	120	120	110	100	90	100	90
Range of prices	120 – 180	100 – 150	110 – 160	90 – 150	80 - 120	70 – 120	90 – 110	80 – 100
Whole, skinless, PBI, interleaved	160	140	130	120	120	100	110	100
Whole, skin on, PBI, interleaved	120	110	110	100	90	80	100	80
Fillet a la carte		100		90		80		80

Table 7: Wholesale prices for white fish fillet products in Saint-Petersburg, rubles per kilogram

* 1 NOK= 4,2 Rubles

Price, euros	Cod fillet		Haddock fillet		Coalfish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	4.1	3.5	3.5	3.2	2.9	2.6	2.9	2.6
Range of prices	3.5 – 5.2	2.9 – 4.3	3.2 – 3.5	2.6 – 4.3	2.3 – 3.5	2.0 – 3.5	2.6 – 3.2	2.3 – 2.9
Whole, skinless, PBI, interleaved	4.6	4.1	3.8	3.5	3.5	2.9	3.2	2.9
Whole, skin on, PBI, interleaved	3.5	3.2	3.2	2.9	2.6	2.3	2.9	2.3
Fillet a la carte		2.9		2.6		2.3		2.3

Table 8: Wholesale prices for white fish fillet products in Saint-Petersburg, euros per kilogram

Retail prices

In retail it is observed an enormous variation of prices, depending on the type of retail store. While convenience stores offer mass products at prices close to the wholesale price level, in hypermarkets quality fresh white fish fillets may be 3-4 times more expensive than average purchasing prices.

Average retail prices are higher in Moscow in comparison to those in Saint-Petersburg, in spite of lower wholesale prices. The reason is a bigger paying capacity of the Moscow citizens, a factor that allows Moscow retail chains and HoReCa companies set big margins.

Moscow

Price, rubles *	Cod fillet		Haddock fillet		Coal fish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	300	170	250	160	140	120	130	110
Range of prices	250 – 700	130 – 600	180 – 600	130 – 500	110 – 160	100 – 150	110 – 150	90 – 130
Whole, skinless, PBI, interleaved	350	180	200	170	170	140	140	120
Whole, skin on, PBI, interleaved	280	160	180	150	130	120	110	110
Fillet a la carte		150		160		110		110

Table 9: Retail prices for white fish fillet products in Moscow, rubles per kilogram

* 1 NOK= 4,2 Rubles

Price, euros	Cod fillet		Haddock fillet		Coalfish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	8.7	4.9	7.2	4.6	4.1	3.5	3.8	3.2
Range of prices	7.,2 – 20.3	3.8 – 17.4	5.2 – 17.4	3.8 – 14.5	3.2 – 4.6	2.9 – 4.3	3.2 – 4.3	2.6 – 3.8
Whole, skinless, PBI, interleaved	10.1	5.2	5.8	4.9	4.9	4.1	4.1	3.5
Whole, skin on, PBI, interleaved	8.1	4.6	5.2	4.3	3.8	3.5	3.2	3.2
Fillet a la carte		4.3		4.6		3.2		3.2

Table 10: Retail prices for white fish fillet products in Moscow, euros per kilogram

Saint-Petersburg

Price, rubles *	Cod fillet		Haddock fillet		Coal fish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	200	170	160	130	120	110	110	100
Range of prices	160 – 600	140 – 250	130 – 250	120 – 200	110 – 180	100 – 150	100 – 140	90 – 130
Whole, skinless, PBI, interleaved	200	180	170	160	130	120	120	100
Whole, skin on, PBI, interleaved	180	160	140	130	110	110	110	100
Fillet a la carte		160		160		110		100

Table 11: Retail prices for white fish fillet products in Saint-Petersburg, rubles per kilogram

* 1 NOK= 4,2 Rubles

Price, euros	Cod fillet		Haddock fillet		Coal fish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price	5.8	4.9	4.6	3.8	3.5	3.2	3.2	2.9
Range of prices	4.6 – 17.4	4.1 – 7.2	3.8 – 7.2	3.5 – 5.8	3.2 – 5.2	2.9 – 4.3	2.9 – 4.1	2.6 – 3.8
Whole, skinless, PBI, interleaved	5.8	5.2	4.9	4.6	3.8	3.5	3.5	2.9
Whole, skin on, PBI, interleaved	5.2	4.6	4.1	3.8	3.2	3.2	3.2	2.9
Fillet a la carte		4.6		4.6		3.2		2.9

Table 12: Retail prices for white fish fillet products in Saint-Petersburg, euros per kilogram

4.4Current capacity of the market for WFFP

An indirect method for estimation of the market capacity was applied. Experts were asked to estimate the share of fillet products market and white fish fillet products market separately, under condition that annual capacity of all fish products makes up 100%. On the basis of information collected during desk research, the market capacity was calculated (last column of the table).

Moscow

Market	Average capacity in%	Annual capacity
Fish products market	100%	160 thous. Tons
Fish fillet products market	About 30 % of fish products market	48 thous. Tons
Fresh/chilled white fish fillet market	Up to 3 % of fillet market *About 0.9 % of fish products market*	Approx. 1.4 thous. Tons
Frozen white fish fillet market	Up to 25 % of fillet market *About 7.5% of fish products market*	Approx. 12.0 thous. Tons

Table 13: Annual capacity of white fish fillet products market in Moscow

In 2005 the total capacity of the Moscow seafood market was estimated to be around 160 thousand tons. Moscow experts believe that fish fillet products constitute around 30-35% of the total market, if counting only unprocessed products. So, the fillet market capacity amounts to 48 thousand tons.

The market for fresh/chilled white fillet products is estimated, as developing, in a rather early stage. Considering the high price for these products, the consumption hardly exceeds 3% of fillet market (about 0.9% of fish products market), or circa 1.4 thousand tons annually.

Frozen white fillet market has significantly bigger capacity due to more reasonable prices – up to 25% of fillet market (about 7.5% of fish products market), or circa 12.0 thousand tons annually.

In diagram 6 the shares of Moscow white fish fillet market are presented.

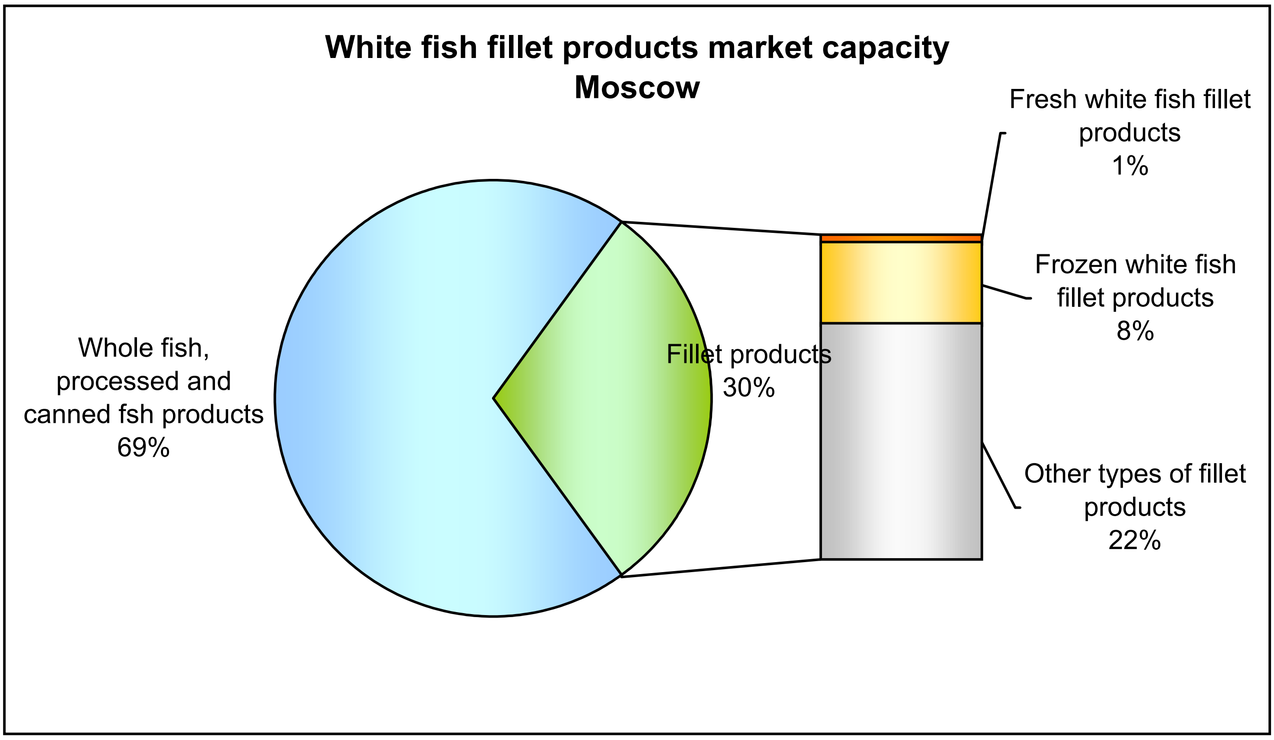


Diagram 6

Saint-Petersburg

Market	Average capacity in%	Annual capacity
Fish products market	100%	60 thous. tons
Fish fillet products market	About 30 % of fish products market	18 thous. tons
Fresh/chilled white fish fillet market	Up to 6 % of fillet market *About 1.8% of fish products market*	Approx. 1.1 thous. tons
Frozen white fish fillet market	Up to 20 % of fillet market *About 6% of fish products market*	Approx. 3.6 thous. tons

Table 14: Annual capacity of white fish fillet products market in Saint-Petersburg

According to the report of the consulting company Agriconsult, the capacity of the seafood market of Saint-Petersburg amounted to 60 thousand tons in 2005[7]. During our study, the experts reported that the market capacity of all fillet products may exceed 40 – 50% of fish products market, including both un-processed and processed fillet.

The net capacity of fresh and frozen fillet products runs now at about 30% of fish products market, with 18 thousand tons annually. This figure embraces fillets of all fish species. Unprocessed white fish fillet products, according to experts' estimates, may amount jointly up to 25% of fillet products market or 4.5 thousand tons annually.

Fresh/chilled white fish fillets are far less popular than frozen ones. Among fresh products, such species as salmon and trout take the first place with huge sale volumes in retail, HoReCa and the processing industry. So, for fresh white fish fillets about 6% of fillet market – circa 1.1 thousand tons annually is left.

Frozen white fish fillet products are often used for processing industry and day-to-day cooking, so the sale volumes are considerably bigger – about 20% of fillet market – circa 3.6 thousand tons per year.

In diagram 7 the shares of Saint-Petersburg white fish fillet market are represented.

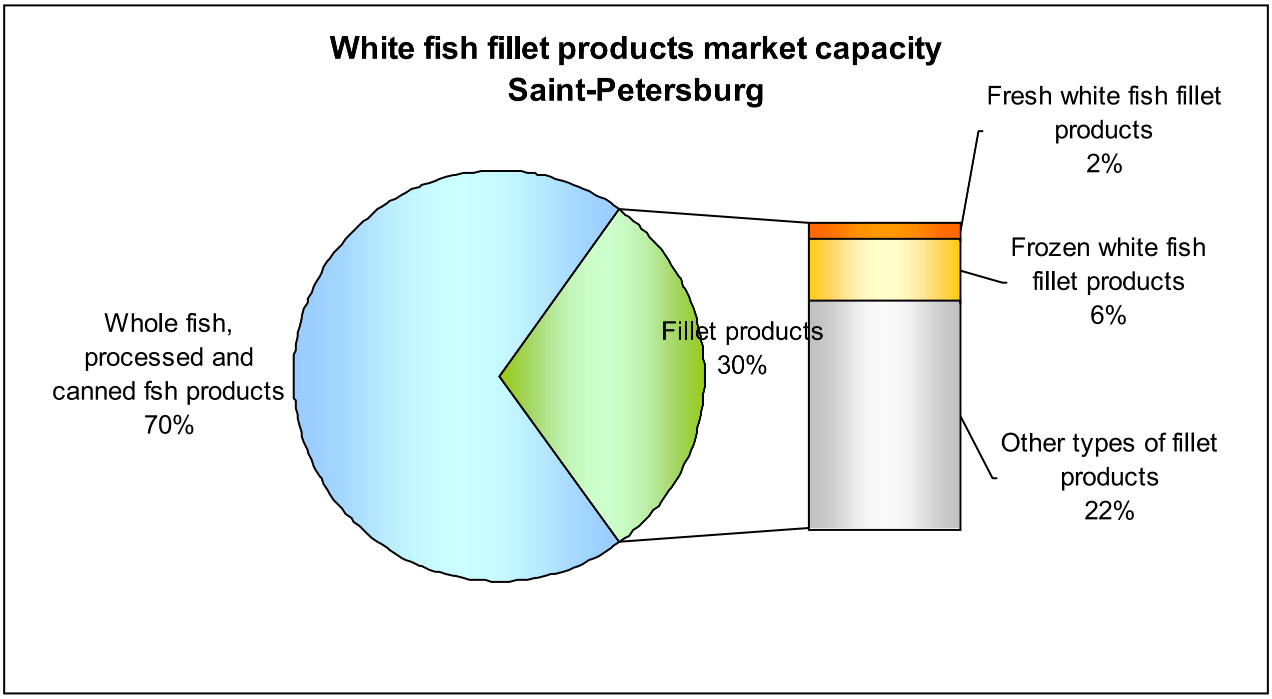


Diagram 7

[7] http://www.infofood.ru

4.5 Market trends

Generally, experts are optimistic regarding the development of the market of white fish fillet products, both fresh and frozen. The current trends are that the consumers' purchasing power is constantly increasing. Customers are beginning to prefer products that are "ready to cook".

Secondly, the HoReCa and retail sectors continue its active development in Russia, a lot of catering and retail companies enter the market every month,and new potential intermediate consumers emerge.

As long as these tendencies continue, the capacity of fillet market will be growing. In the next two or three years market players are expecting increase of sales volume by 10 – 15% annually, with maximum cumulative growth of 50% for Moscow and up to 30% for Saint-Petersburg.

It is also noted that, so far, the consumers' demand for white fish fillet products is not completely satisfied by the market.

The consumers' demand depends on the following factors:

- General purchasing power of the population – fillet products are not cheap products, they are mostly consumed by middle and upper-class groups of population;
- Level of prices – the demand for white fish fillet products is still price sensitive;
- Change in lifestyle – young generations live 'active lives' and often prefer not to spend too much time on cooking;
- Fashion for healthy life style, since white fish species contain less fat in comparison to redfish;
- Seasonality – during cold period of the year, from middle of autumn till end of spring, the sales volumes increase due to psychological factor – it is widely believed that in summer fish products may not be properly stored, and, as a result, sold in condition not healthy for consumers;
- Closeness to holidays and fest times – during fest times fish consumption is higher;
- Revival of religious traditions – some part of Russian population keeps the fast, either only principal (nearly every two-three months), or also weekly fasts ('fish days'); during autumn fasts the biggest amount of all fish products is sold;
- Mass media threats like poultry diseases – considerable part of consumers switch from chicken to fish in order to maintain the share of protein food in their diet;
- Scandals with producers. Publications in mass media about negative quality checks of production lead to temporary decrease of demand for all products from the region where the involved company is situated (e.g. prohibition of import of fresh fish from Norway).

Negative factors in Saint-Petersburg

In 2006 the KUGI (The Committee for City Property Management of Saint-Petersburg) raises rent for non-residential premises. This will entail an increase in prices which in turn will influence the level of demand. If prices for all fish species increase, some HoReCa companies may switch to white fish fillets instead of more expensive species, and consumers as well. But that may bring general decrease of demand for fillets, since the prices could be regarded as unacceptable for most consumers.

5. Participants of the Russian market for WFFP

5.1 Competition in the WFFP market

The white fish fillet market is assessed by the experts as competitive; however, the experts representing different market segments are divided in their assessments of the competition.

While producers, distributors, wholesalers and processors see the state of competition in Moscow market as strong or rather strong, the HoReCa representatives characterize the white fish fillet market as moderately competitive. And the retail chains are inclined to assess the level of competition as insignificant.

Moreover, some experts prefer not to make difference between the suppliers, since they have an impression that the offers are much the same with regard to the range of products and prices.

Evidently, the white fish products market is still in the development process, when most of market players are not well-known by consumers, and they strive hard to gain market shares.

One more important fact proving the market is not settled yet, is the price basis for competition. No producer has promoted a brand known by most customers. The suppliers are in the process of positioning in the market.

There are several bases for competition; however, still the price-based competition prevails, which is exactly the same as in the other consumer markets. While the level of income of most consumers is low, it could be hard to focus on other, more complicated basis for competition (for instance, quality of service, additional services and so on).

Some important factors for choosing suppliers are:

- Discounts for regular customers
- Wide range of products
- Constant availability of goods from stock-list
- Good relations with the customs officials
- Short terms of delivery
- Quality of products (was mentioned by experts in the end of the list)

The current state of the white fish fillet market may be characterized as a free competition market, where none of the market players has a significant market share, no predominant brands exist and there are not so many fixed relations between suppliers and customers. All these conditions imply that barriers to the market entry are relatively low and there are good opportunities for newcomers to consolidate their grip in the market.

5.2Main market participants

Some experts underlined that the number of large-scale suppliers is rather limited, since first priority for a distributor is good relations with the customs officials, in order to be able to make proper import of foreign products.

Most market players are heavily involved in trade with fish products in general and not specialized in white fish and fillet trade. The main share of turnover is thus constituted by red fish species like salmon and trout and also by herring and sprat.

While processing factories usually have considerable turnover and constantly seek for suppliers which are competitive in price, HoReCa companies and retail chains prefer to cooperate with certified producers and distributors that have a wide range of quality products and are reliable in deliveries. Their number is seldom big, typically, 2 or 3 companies.

Retail chains, being relatively new market players, strive aggressively for consumers. Thus retail chains are trying to reduce their expenditures at the expense of suppliers. Management principles of every chain introduce strict stock-list policy, limited and well-defined list of suppliers. Acting principle "the bigger order – the lower price" results in cutting the number of partner suppliers.

Moscow

In Moscow there are about 20 – 25 main market players, while hundreds of small ones.

In Saint-Petersburg there were until recently not more than 10 major producers and suppliers, but in 2004–2005 a considerable number of Moscow suppliers emerged. According to the experts' assessment, presently about 10 large-scale companies dominate the market, in addition to about 25 medium size operators, while the rest could be considered as small businesses.

A specific feature of fish products market in current stage is lack of free-accessed information on many market players. Only few major and medium companies have their web pages. For example, a large scale producer like Lankala is not even registered in the Yellow Page reference system.

For the list of main market players in Moscow and in Saint-Petersburg, please refer to appendix 8.

5.3Brands in WFFP market

Moscow

There are no trade marks, not to mention brands, created especially for white fish products or fillet products.

Two main types of trademarks are currently present in the Russian seafood market:

- General trade mark for all kinds of fish products made or distributed by a specific market player.
- General trade mark for all types of frozen fish, either whole, filleted or cut, made or distributed by a specific market player.

Some experts mentioned that there are only few trade marks that has been in the market for some years. Typically branded products emerge in the market, are sold for a short time and then disappear. Instead of trade marks, names of producers/distributors/wholesalers are often focused.

Companies within the HoReCa segment demand normally special made catering products where the branding part is not very much in focus. On the other hand, HoReCa clients pay close attention to the country of origin of the products, as well as to personal relations with the supplier's representatives.

Products imported from Europe have better image than domestic ones. Experts believe they have better packing, standardizing of size, more attractive look etc.

The following trade marks were noticed during the study in Moscow:

Trademark	Owner	Description
Gulfstream	Gulfstream	General trade mark for all kinds of fish products made by the company
Emborg	Emborg	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Poseidon	Delta Plus	General trade mark for all kinds of fish products made by the company
BonDeLaMar	Lankala	General brand for all kinds of whole fish products and whole fish fillet products made by the company
Rybka po-botsmanski	Lankala	General brand for portions fish fillet products and cut fish products made by the company
Mys udachi	Orghimecologiya	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Krugly god	Cyros	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Shturman	Talisman VVV	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Gulfish	Homjakovskij hladokombinat	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Frosta	Frosta	General trade mark for all kinds of fish products made by the company
Vici	Viciunai	General trade mark for all kinds of fish products made by the company

Greentrust	Greentrust	General brand for all types of frozen fish, either whole, filleted or cut, made by the company

Table 15: Trademarks in the Moscow market of white fish fillet products

Saint-Petersburg

In general, the white fish fillet market lacks strong brands. Only few trade marks are recognized by experts as more or less 'branded products'. There are, however, some, like the following:

Brand	Owner	Description
Lenryba	Lenryba	General brand for all kinds of fish products made by the company
Lenryba product	Lenryba product	General brand for all kinds of fish products made by the company
Vkus severa	Krof (jointly with Polimorproduct)	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Sailor	ROK-1	General brand for all kinds of fish products made by the company

Table 16: Brands in Saint-Petersburg market of white fish fillet products

In addition to the brands mentioned above, some other trademarks are to a certain extend known in the marked related to fish products. In this respect the following could be mentioned:

Trademark	Owner	Description
BonDeLaMar	Lankala	General brand for all kinds of whole fish products and whole fish fillet products made by the company
Rybka po-botsmanski	Lankala	General brand for portions fish fillet products and cut fish products made by the company
Poseidon	Delta Plus	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Mys udachi	Orghimecologiya	General brand for all types of frozen fish, either whole, filleted or cut, made by the company
Vici	Viciunai	General trade mark for all kinds of fish products made by the company
Krugly god	Cyros	General brand for all types of frozen fish, either whole, filleted or cut, made by the company

Table 17: Trademarks in Saint-Petersburg market of white fish fillet products

It is a widely used practice for seafood distributors to have local producers making 'private label' products for them. The same tendency is for retail chains when they want their own 'private label' products in distribution. Thus it can be a challenge to trace real origin of the product, even more difficult to find origin of the raw material that is used.

6. Market demand for WFFP

6.1 Consumers' attitudes and patterns of consumption

Fresh cod fillet

Fresh cod is considered to be high-class food for well-off people, mainly consumed in restaurants. Though not regarded as delicatessen food, cod fillet is still perceived as quite good and healthy dietary product that is used to diversify meals. Fresh cod fillet is appreciated for its gentle taste and good combinatory qualities with regard to garnishes, wines etc. Market players characterize fresh cod fillet as a product of somewhere in-between of 'upper market' and 'upper-middle market' sectors.

Experts especially underlined that cod fillet, even fresh, is not regarded as fest food. However, it has still a certain image of being to some extent 'status food'. This perception is maintained by high prices for fresh cod fillet, either whole or in portions. As it was mentioned previously, true fresh cod fillets are expensive for Muscovites because fresh products are brought in Moscow mainly from the Far East region, or from Scandinavian countries. High transport costs of delivery by air is an important element in this respect. The major part of fresh cod fillet is delivered to Moscow restaurants and retail stores.

Frozen cod fillet

With regard to frozen cod fillets, experts cannot define a single market sector specificly relevant for such frozen products. On one hand, it has also a rather high pricing in comparison to other white fish fillets like coalfish, hake, Alaska Pollack etc. With the average retail price of about 5 euros per 1 kg, it is hardly consumed very often by so called 'ordinary consumers'.

On the other hand, the Moscow market is flooded by cheap Chinese and South American fillets. Being, in fact, made from hake or Alaska Pollack, sometimes these species are sold under the name of 'cod'. Such "cod fillets" have prices affordable for most consumers.

Taken in consideration pricing, frozen cod fillet could be placed in the market structure in between 'upper-middle' and 'mass market' sectors.

Fresh haddock fillet

Haddock fillet has no clear or evident image, and as a result – no typical pattern of consumption. As for fresh fillet, experts believe it might be used as a substitution to cod. Both fish species have distinct white meat without any strong aftertaste, and can be cooked in a variety of ways. However, haddock is less known by the consumers and respectively less popular than cod.

The same as cod, fresh haddock fillet is mostly served in restaurants, or is ordered in rather small amounts by large hypermarkets or supermarkets (during retail audit there was no fresh haddock fillet in retail chains noted).

Frozen haddock fillet

Haddock is considered not to be very convenient raw material. After having been stored as frozen, defrosting it is very likely to reveal a not too pleasant odor. Nevertheless, frozen haddock fillets are considered to be a substitute for frozen cod fillets, with small differences in taste. Some restaurants use frozen haddock fillet to feed the staff (for clients mostly fresh haddock fillet is suitable).

Generally frozen haddock fillet is put by experts in between of 'upper-middle market' and 'mass market' sectors.

Fresh and frozen coalfish fillet

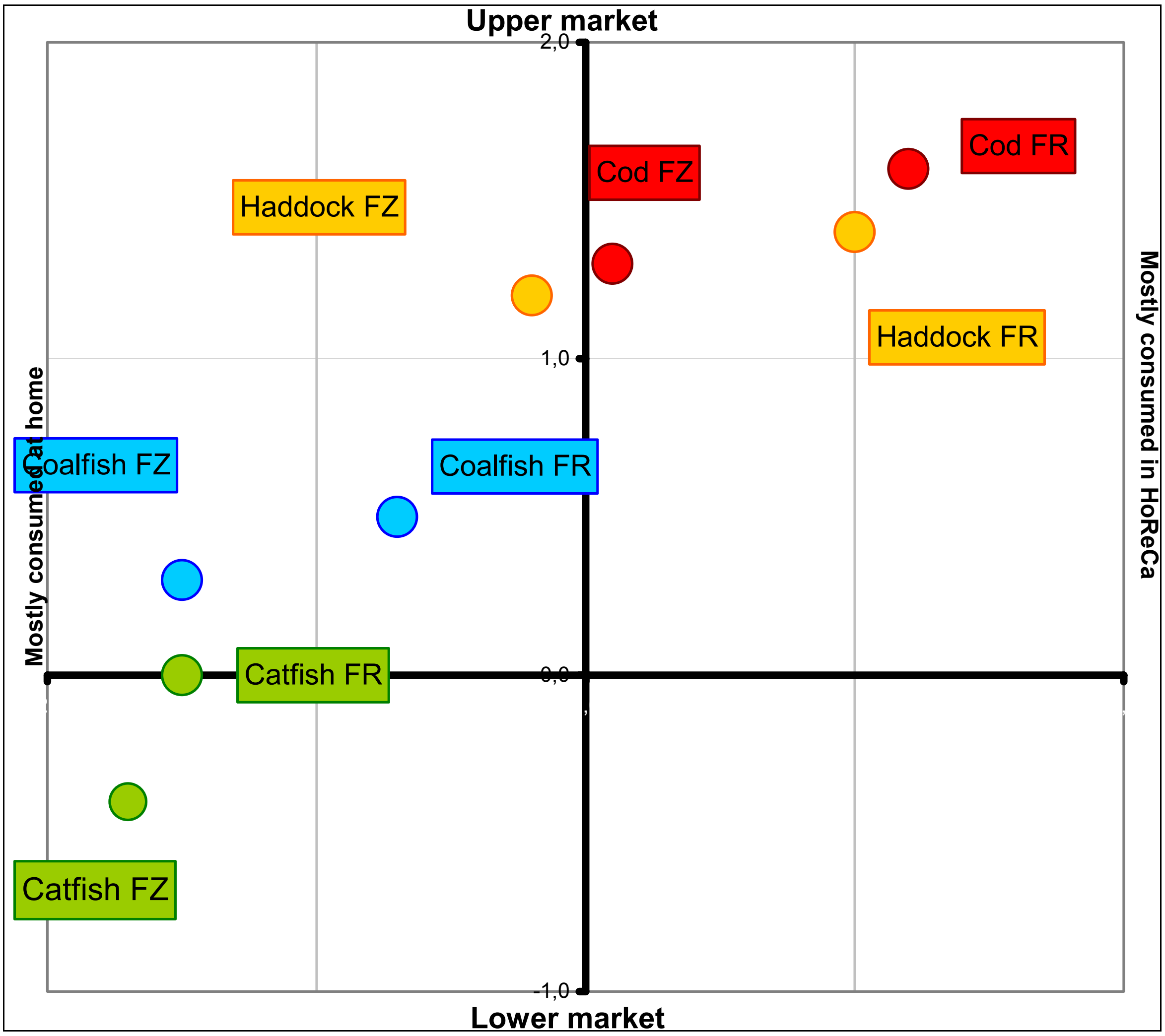
Both fresh and frozen fillet types are considered to be closer to 'mass market' sector than to 'upper-middle' one. Found mostly in retail chains and in the open markets, coalfish fillet has a contradictory image of rather expensive products. Experts express that coalfish fillet is a product of demand for typically ordinary consumers. Moscow HoReCa companies are not very interested in these products.

The nutritional value of coalfish fillets is somewhat diminished by brown tint of meat and specific slight fat aftertaste. Actually, not so long time ago it was typically referred to as 'cats' food', meaning that it could hardly be tasty. However, with modern ways of cooking this opinion is not so widespread any more.

Fresh and frozen catfish fillet

Though being present in retail stores, spotted catfish fillet products are perceived as having no competitive advantages comparing to other white fish fillet products. Spotted catfish is mostly assessed as cheap product for mass market sector (and in case of whole – even lower market).

In graph 1 perception of white fish fillet products in the market is presented.



Graph 1: Segmentation map for white fish fillet market

6.2 Demand for specific WFFP

Demand for all filleted fish is presently rather high; however, the species studied are of moderate demand due to the following reasons:

- The most popular fish species are salmon, trout, chum salmon and hunchback salmon. These species constitute traditional fest food, have a very positive image of tasty products and are consumed even on everyday basis by well-off persons. However, among red species mainly fresh fillet products are in demand;
- Among white fish species sturgeon and zander are considered to be the best by nutritional characteristics.
- People with low income prefer inexpensive species like hake and Alaska Pollack, which are now imported in large volumes from Argentina and China; these species are almost twice cheaper than cod or haddock, they are table type of fish and are consumed as everyday food.

Moscow

Cod fillet products are most demanded, both fresh and frozen. Fresh cod fillets is most relevant in the HoReCa segment, while frozen in retail chains, as well as in open markets.

Haddock and coalfish fillet products seem to be demanded on moderate level. Both species are less popular with restaurants, but good for sale through retail chains and open markets. Frozen coalfish fillet is especially demanded by processors that use it for making of preserved foods and semi-finished products instead of more expensive species like cod.

Spotted catfish, though also being present in the market, is not considered to be a demanded product. Experts demonstrated doubts that these products could be of mass interest for consumers, indifferently of the fillet type.

Saint-Petersburg

Saint-Petersburg experts assess current popularity of fish products as relatively high. All experts have strong opinions that current demand for white fish fillet products is met not completely, as well as for all fish products.

In Saint-Petersburg predominance of demand for cod fillet products is still more noticeable. Due to reasonable prices for fresh and frozen cod products, retail chains are actively interested in deliveries of them. HoReCa segment is also in favor of cod fillets, mainly fresh. As for frozen fillet products, some Saint-Petersburg processors prefer cod to coalfish or haddock. It was mentioned that Saint-Petersburg lacks quality raw material – frozen fillet products in blocks. It is recognized to be seasonal – in summer and winter many producers noticed lack of it, though in autumn the deliveries are more regular.

Haddock and coalfish are assessed as having moderate or slightly lower than moderate demand. Catfish fillet is reported to be off the consumers' demand.

In the diagrams on the next two pages a summary of demand for white fish fillet products is presented. Experts were asked to assess the relevance of each product in every market segment by a 5-point scale, with 1 point – 'no relevance at all', 5 points – 'high relevance'. After all inputs were collected, mean value was calculated, and then expressed in terms of percentage – level of demand out of 100%.

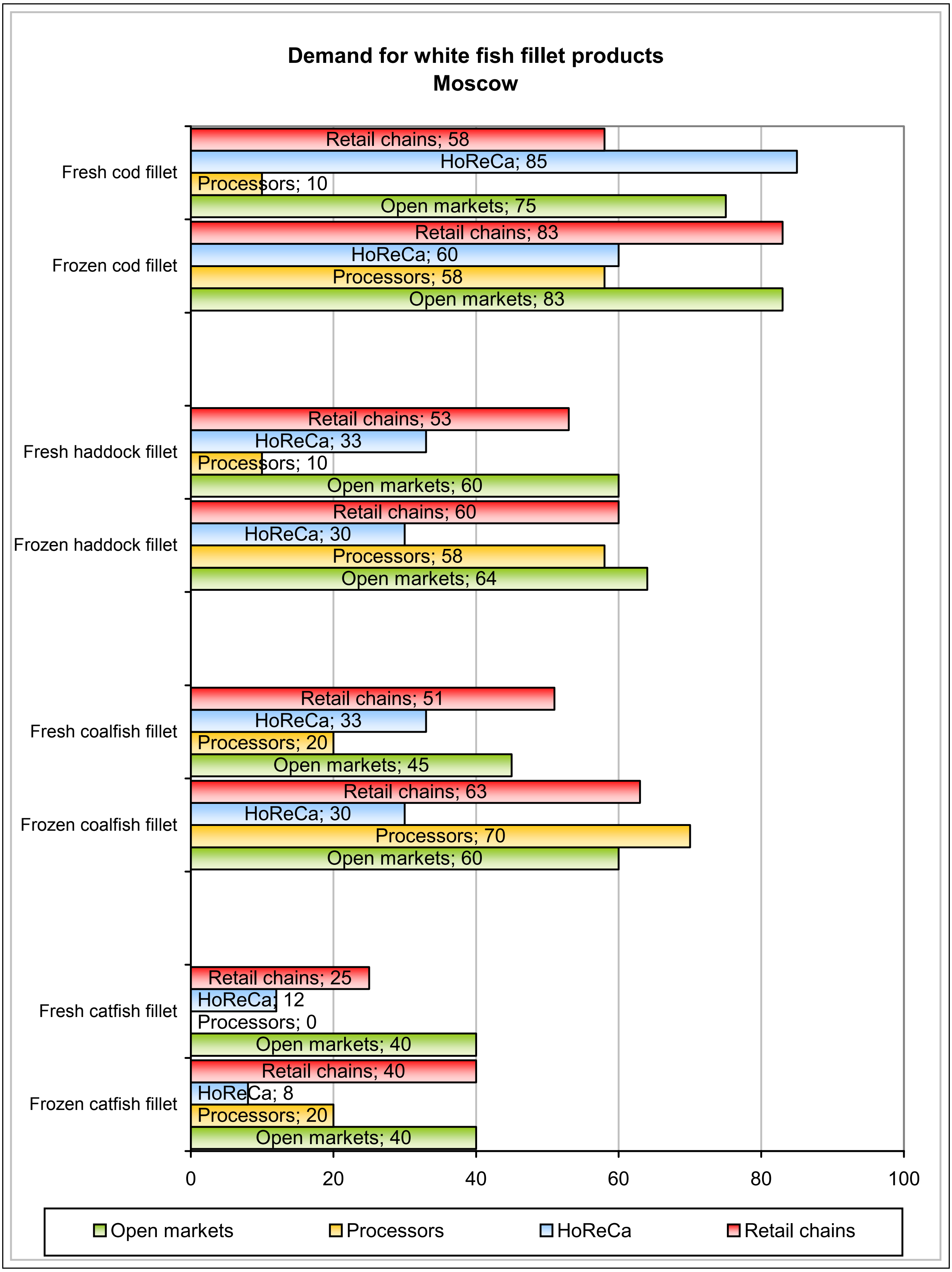

Demand for white fish fillet products
Moscow
Fresh cod fillet
Retail chains; 58
HoReCa; 85
Processors; 10
Open markets; 75
Frozen cod fillet
Retail chains; 83
HoReCa; 60
Processors; 58
Open markets; 83
Fresh haddock fillet
Retail chains; 53
HoReCa; 33
Processors; 10
Open markets; 60
Frozen haddock fillet
Retail chains; 60
HoReCa; 30
Processors; 58
Open markets; 64
Fresh coalfish fillet
Retail chains; 51
HoReCa; 33
Processors; 20
Open markets; 45
Frozen coalfish fillet
Retail chains; 63
HoReCa; 30
Processors; 70
Open markets; 60
Fresh catfish fillet
Retail chains; 25
HoReCa; 12
Processors; 0
Open markets; 40
Frozen catfish fillet
Retail chains; 40
HoReCa; 8
Processors; 20
Open markets; 40
0
20
40
60
80
100
Open markets
Processors
HoReCa
Retail chains

Diagram 8

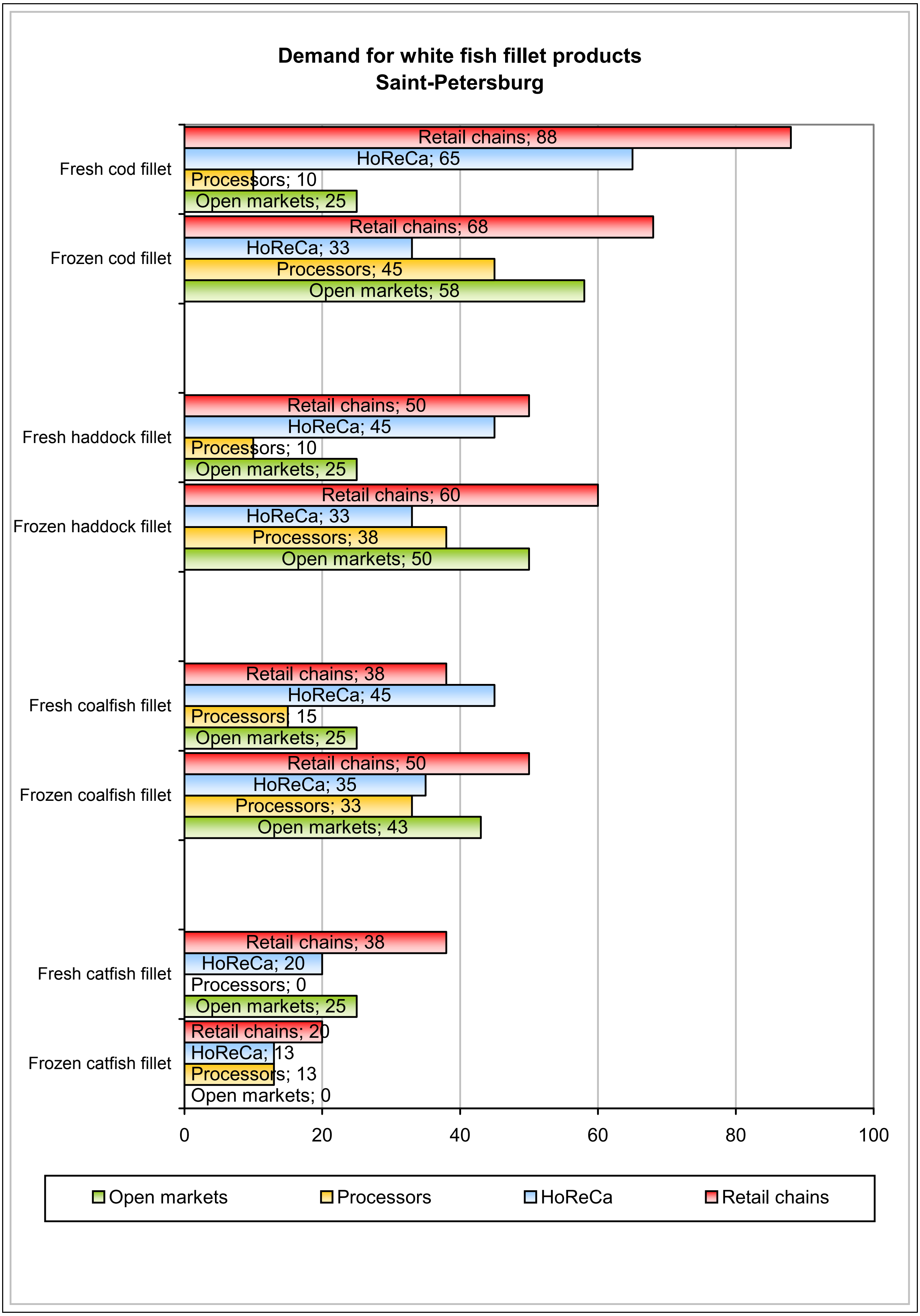

Demand for white fish fillet products
Saint-Petersburg
Fresh cod fillet
Retail chains; 88
HoReCa; 65
Processors; 10
Open markets; 25
Frozen cod fillet
Retail chains; 68
HoReCa; 33
Processors; 45
Open markets; 58
Fresh haddock fillet
Retail chains; 50
HoReCa; 45
Processors; 10
Open markets; 25
Frozen haddock fillet
Retail chains; 60
HoReCa; 33
Processors; 38
Open markets; 50
Fresh coalfish fillet
Retail chains; 38
HoReCa; 45
Processors; 15
Open markets; 25
Frozen coalfish fillet
Retail chains; 50
HoReCa; 35
Processors; 33
Open markets; 43
Fresh catfish fillet
Retail chains; 38
HoReCa; 20
Processors; 0
Open markets; 25
Frozen catfish fillet
Retail chains; 20
HoReCa; 13
Processors; 13
Open markets; 0
0
20
40
60
80
100
Open markets
Processors
HoReCa
Retail chains

Diagram 9

6.3Distribution patterns of WFFP

Demand in different market segments, described in the previous subchapter, entails the respective distribution patterns for fresh and frozen white fish fillet products (diagrams 10 and 11)

Average distribution of fresh white fish fillet products

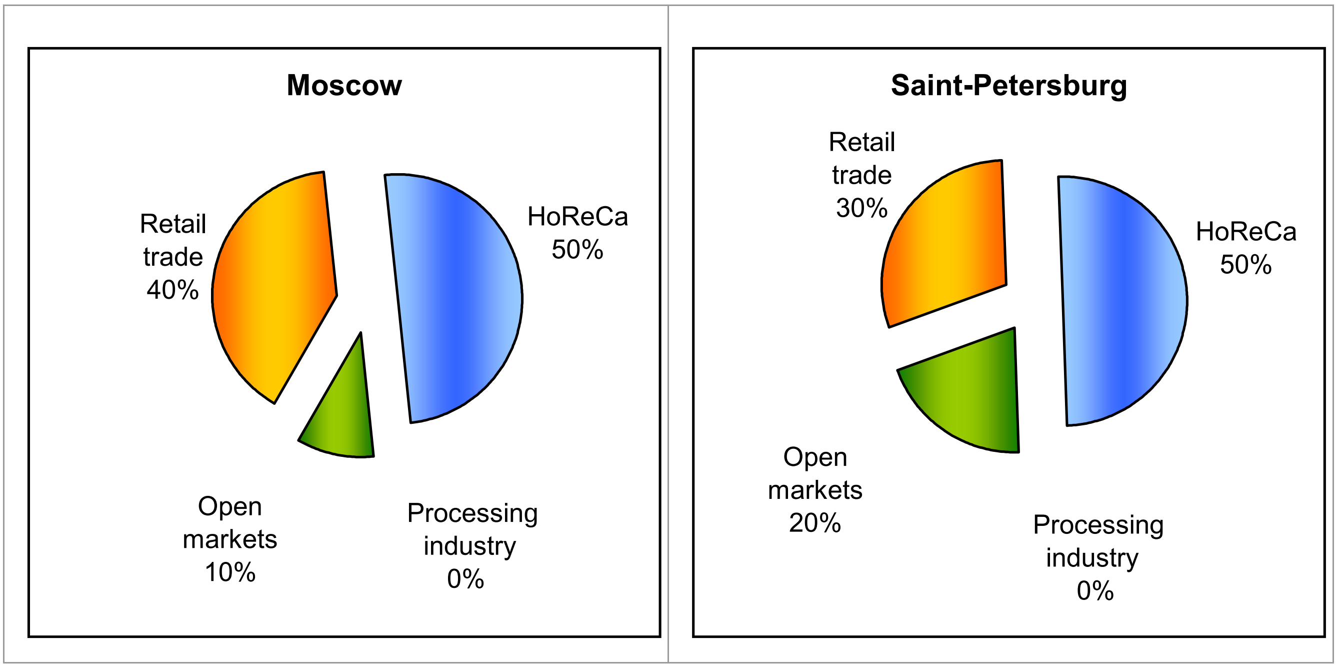


Diagram 10

Average distribution of frozen white fish fillet products

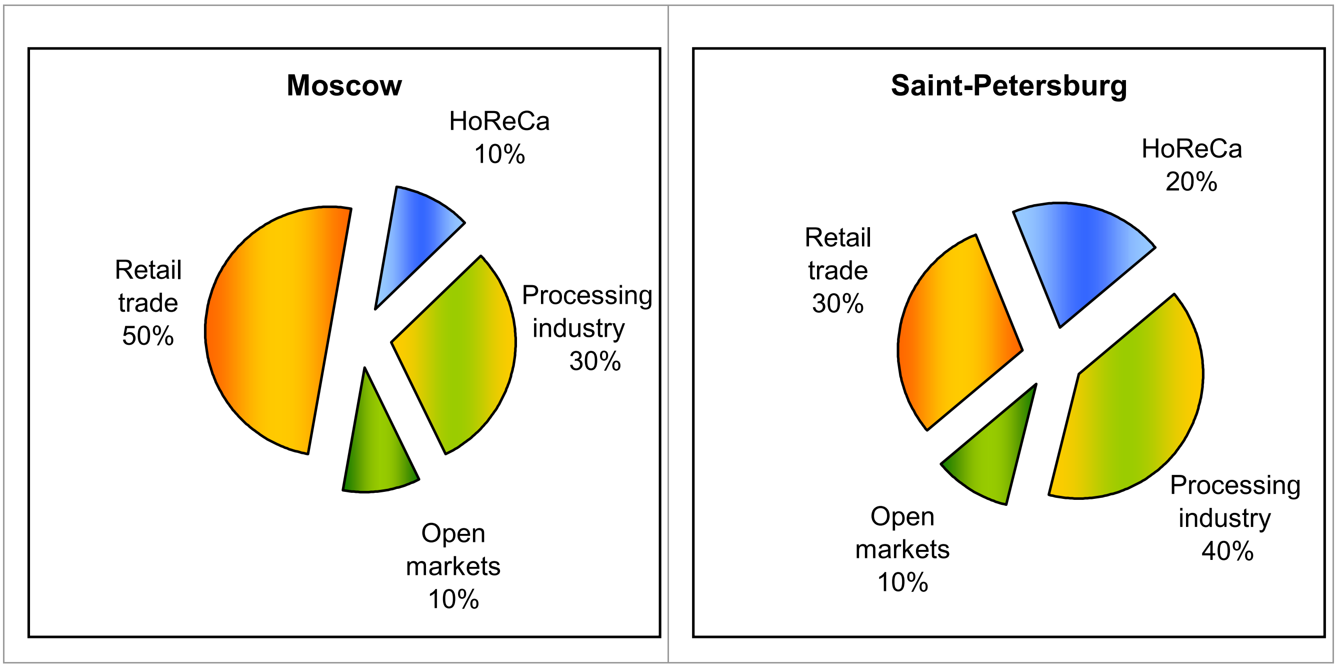


Diagram 11

6.4Forecast of demand for specific WFFP

In retail chains various white fish species would most likely have a potential in the next few years, according to experts' opinion. Besides cod, haddock and coalfish, some inexpensive species were mentioned like hake, Alaska Pollack, flatfish etc. Experts from hypermarkets are inclined to think that mostly 'noble' fish species will be demanded – cod, zander and halibut.

HoReCa traditionally prefers 'elite fish' species – those of sturgeon group (sturgeon, white sturgeon, stellate sturgeon), as well as 'noble table fish' – cod, zander and sterlet.

Processors are interested in minimizing their production costs, so they will search mostly for coalfish, hake, Alaska pollack, flatfish and sole.

Target groups for open markets players are mainly medium- and low-income classes. So with regard to open markets, inexpensive species: coalfish, hake, Alaska Pollack and flatfish will also prevail there.

	The most relevant white fish fillet types	
Market segment	**Moscow**	**Saint-Petersburg**
Retail chains	Cod, haddock coalfish Halibut, redfish Flatfish	Cod, haddock, coalfish Zander, halibut, redfish Hake, Alaska Pollack, flatfish
HoReCa	Cod, coalfish (to feed the staff) Sturgeon Zander	Cod, haddock Sturgeon, white sturgeon (beluga), stellate sturgeon Zander, sterlet
Processing industry	Cod, haddock, coalfish Sole	Cod, haddock, coalfish, catfish Zander Hake, Alaska Pollack, flatfish
Open markets	Cod, haddock, coalfish Hake, Alaska Pollack	Cod, haddock, coalfish Hake, Alaska Pollack, flatfish

Table 18: The most relevant white fish fillet types in the next few years

6.5Customers' requirements

Each group of market participants has their specific requests with regard to quality of fillet products.

Packaging

Fresh fillet

Producers, distributors and wholesalers, as well as retailers, prefer reliable polystyrene boxes for fresh fillets, with small individual disposable packs inside it, each containing about 5 to 10 kilograms of product; packs should be iced with the amount of ice not less than 30% out of total weight.

The only requirement of HoReCa companies is about reliability of the packaging which should protect all the original appearance, taste, odor, texture etc.

Frozen fillet

All groups insist that fillet should be made from fresh fish, not from frozen, and to be frozen only after filleting is done.

Producers, distributors and wholesalers are used to work with large distribution containers with ready-made individual consumer packages, fixed weight, labeled etc..

HoReCa companies and processors don't have any special requests concerning packaging; they prefer large layers of fillet inside the container.

Retail trade companies prefer two main types of packaging, depending on the type of store:

- Consumer packages of standardized size (in grams): 200+, 300+, 500+, 800 +, 1000+;
- No packaging or labeling of production at all, so that the retailer could pack products itself and mark them with its own brand name

Fillet features

Fresh fillet

A lot of producers would like to receive cod fillet products with skin on, in order to be convinced that they buy true cod product. That's because many unfair market players are trying to fake skinless cod fillet, since it is a rather expensive product. To get a fake, they take either coalfish, or hake, or Alaska pollack, skin the fish off, then bleach it with a small amount of chemicals, and then try to sell as a quality cod fillet.

With regard to appearance, all groups have similar requirements: fresh, succulent, not dried, not chapped fillet with dense texture of meat, not flaky. All species should have a distinct white color without yellowing; the surface should be clean, smooth, and free from grumes. Fillets should have no additional, irrelevant odors. To avoid strange odors, experts recommended to keep the fish stored not too long before the sale.

Retailers are especially after aesthetically beautiful appearance that can attract consumers.

In general experts mentioned that Saint-Petersburg consumers prefer skinless cod, Moscow consumers – cod with skin on.

All experts expressed a desire to receive lots of stable and predicable quality from the suppliers, in order to be able to plan sales strategy. Additionally, the experts stated that correct and proper veterinary documents are a must for any supplier, regardless of the species.

In tables 18 and 20 summarized quality requirements are presented.

Quality requirements

Market segment	Packaging	Freezing	Size	Appearance	Type of cutting	Additional
Retail trade	Reliable distribution package that doesn't allow any water or odors in, neither any melt water out Individual disposable packages for each 5 – 10 kilograms	Made not from frozen fish Interlaid with a lot of ice, not less than 30% of total weight	Medium size fish, about 1 – 2 kilogram The same size for the whole lot is preferable	Aesthetically beautiful appearance Fresh, succulent, not dried, not chapped Dense texture of meat, not flaky Distinct white color without yellowing Clean, smooth surface Absence of grumes No additional, irrelevant odors	Whole skinless boneless fillet Cod preferable with skin on, in order to verify the species	Any lot must have proper veterinary control documents Similar quality of each lot from the same supplier
HoReCa	Reliable distribution package that doesn't allow any water or odors in, neither any melt water out	Made not from frozen fish Interlaid with a lot of ice, not less than 30% of total weight	Large size fillets	Aesthetically beautiful appearance Fresh, succulent, not dried, not chapped Dense texture of meat, not flaky Distinct white color without yellowing Clean, smooth surface Absence of grumes No additional, irrelevant odors	Whole fillet products	Any lot must have proper veterinary control documents Similar quality of each lot from the same supplier
Processors	Very seldom use the fresh white fish fillet					
Open markets and small wholesalers	Reliable distribution package that doesn't allow any water or odors in, neither any melt water out Polystyrene boxes are preferable Individual disposable packages for each 5 – 10 kilograms	Interlaid with a lot of ice, not less than 30% of total weight	The same size for the whole lot is preferable The bigger the better, 300 grams+	Dense texture of meat, not flaky Distinct white color without yellowing Absence of grumes No additional, irrelevant odors	Haddock / coalfish – whole, skinless, boneless; Cod preferable with skin on, to verify the species	Any lot must have proper veterinary control documents Similar quality of each lot from the same supplier

Table 19: Quality requirements for fresh white fish fillet products

Market segment	Packaging	Freezing	Size	Appearance	Type of cutting	Additional
Retail trade	Vacuum consumer packaging; Labels of producer on the package with full information Aesthetically beautiful consumer package Some big supermarkets and hypermarkets prefer production without consumer packaging at all, they make it afterwards with their own label	Individual freezing Fillet from fish should be made before freezing	300, 500, 800, 1000 grams The same size for the whole lot is preferable	Dense texture of meat, not flaky Distinct white color without yellowing after defrosting Clean surface Absence of grumes No additional, irrelevant odors	Whole skinless boneless fillet Or fillet a la carte (in portions) Cod preferable with skin on, in order to verify the species	Any lot must have proper veterinary control documents Not too long time of keeping the fillet stored frozen before sale Similar quality of each lot from the same supplier
HoReCa	Reliable package that protects all nutritional qualities of fillet; specific form of packaging is not that important Large layers are preferable	Interleaved fish or individually frozen, not monolith Fillet from fish should be made before freezing	The bigger the better	As fresh a s possible Dense texture of meat, not flaky Distinct white color without yellowing after defrosting Clean, smooth surface Absence of grumes No additional, irrelevant odors	Whole fillet products	Any lot must have proper veterinary control documents Not too long time of keeping the fillet stored frozen before sale Similar quality of each lot from the same supplier
Processing industry	Reliable distribution package that doesn't allow any water or odors in	Interleaved frozen, not monolith Glacing not more than 10%	Not important	Dense texture of meat, not flaky Distinct white color without yellowing after defrosting No additional, irrelevant odors	Fillet a la carte (in portions)	Any lot must have proper veterinary control documents Similar quality of each lot from the same supplier
Open markets and small wholesalers	Reliable distribution package that doesn't allow any water or odors in Inside distribution container there should be consumer packages	Sea frozen Interleaved fish or individually frozen, not monolith Glacing not more than 8%	The bigger the better, 300 grams+ The same size for the whole lot is preferable	Dense texture of meat, not flaky Distinct white color without yellowing after defrosting Absence of grumes No additional, irrelevant odors	Cod preferable with skin on, in order to verify the species Haddock / coalfish – whole, skinless, boneless;	Any lot must have proper veterinary control documents Not too long time of keeping the fillet stored frozen before sale Similar quality of each lot from the same supplier

Table 20: Quality requirements for frozen white fish fillet products

Importance of factors in market segments

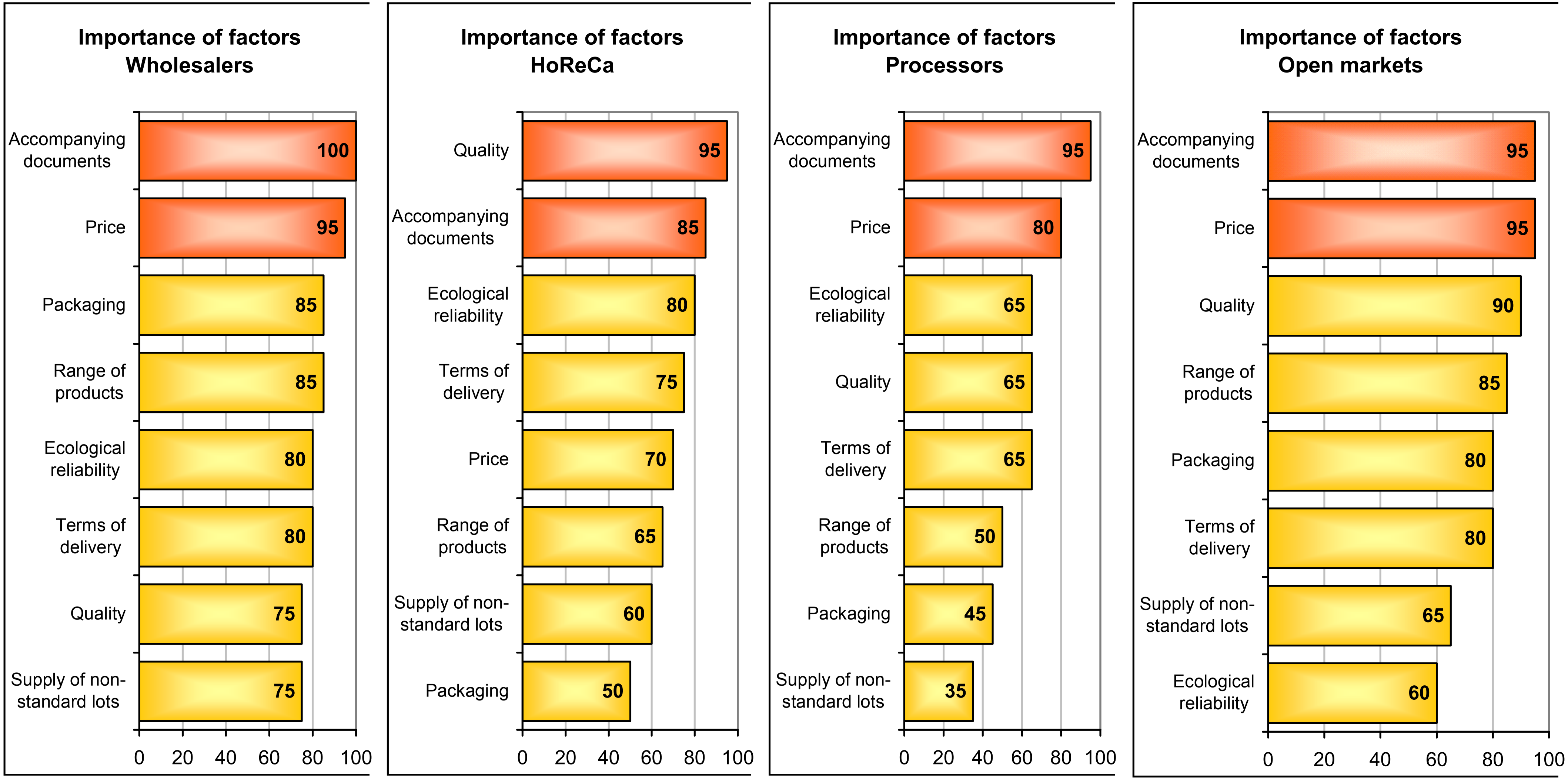


Diagram 12

6.6 Substitutes for WFFP

The demand for white fish fillet products is considered to be noticeably dependable on price. White fish species are generally not regarded as delicatessen, or fest food, or an attribute by any other important events. Besides, fillet as a product is not cheap, and is normally not affordable for ordinary consumers. As a consequence, the demand is rather sensitive related to price level. In case of general increase in prices by 20-25%, there is a significant possibility that white fillet products will be substituted by other types of fish products.

Experts have revealed differences in consumers' perception of white fish species. For Moscow buyers of fillet product is it quite important that preparation of the product is time-saving. Moreover, experts assume that consumers are normally not familiar with white fish species in general and thus not aware of the differences in taste of various white fish species.

Saint-Petersburg consumers prefer just specific fish types; so in case of price increase or absence of a given product they would most likely prefer whole fish of the same species.

In table 21 possible substitutes, presumed for the two cities, are presented

Fillet type	Potential substitutes	
	Moscow	Saint-Petersburg
Cod fillet	Whole fish – reduction of price	Whole fish – reduction of price
	Haddock fillet Zander fillet Hake – the price is lower, for cooking is not important Alaska Pollack Coalfish fillet Rockfish fillet	Zander fillet Haddock fillet Redfish fillet Pollack fillet
Haddock fillet	Whole fish	Whole fish
	Coalfish Alaska Pollack	Redfish Coalfish
Coalfish fillet	Whole fish	Whole fish
	Hake Alaska Pollack Poutassou In case of considerable price growth coalfish will not be in demand at all	Hake Alaska Pollack Poutassou
Spotted catfish fillet	Coalfish In case of considerable price growth catfish will not be in demand at all	Whole fish
		In case of considerable price growth catfish will not be in demand at all

Table 21: Possible substitutes for white fish fillet products in case of price increase

7. Market potential for Norwegian WFFP

All experts noted that Norwegian salmon and trout are well-known in the Russian market. Norwegian exporters have an image of providing products of superior quality. However, so far there are no regular deliveries of white fish fillet products from Norway to Russia. The reason seems to be rather obvious; since labor costs in Russia is considerably lower than in Norway. For Russian producers and distributors it is far more profitable to purchase quality raw material from abroad and make the relevant production domesticly. Almost all white fish fillets present in the market with label 'made in Norway' would most likely be made in this way. Otherwise white fillet products would probably not be competeable in the market.

7.1 Distribution channels for frozen Norwegian white fish fillet products

During interviews experts were offered an approximate price list with prices typical for Norwegian fish factories (table 22). The numbers represent wholesale prices from Norwegian exporters with correction for Russian customs duties and VAT.

Fillet type	Price, euros per kilogram
Cod	
Frozen fillet	
1. Whole, skinless, boneless, interleaved	8.4
2. Whole, skin on, pin bone in, interleaved	7.2
3. Loins	9.3
4. Center cut	7.8
5. Tails	7.0
Haddock	
Frozen fillet	
1. Whole, skinless, boneless, interleaved	7.8
2. Whole, skin on, pin bone in, interleaved	6.4
3. Loins	8.1
4. Center cut	7.2
5. Tails	6.1
Coalfish	
Frozen fillet	
1. Whole, skinless, boneless, interleaved	4.6
2. Whole, skin on, pin bone in, interleaved	3.5

Table 22: Price list for Norwegian white fish fillet products, offered to experts during interview

Experts both in Moscow and Saint-Petersburg consider the Norwegian prices to be aprx. 2 times, and in Moscow even up to three times higher than prices of 'competing products' in the market.

One of the most relevant alternatives for potential Norwegian exporters seems to be developing of a niche strategy specializing on delivery of exclusive fresh fillet products to the 'upper market'. Market segments which could be relevant in this respect are exclusive restaurants within HoReCa and some high price profiled Retailers.

Resuming the data received from experts, the most relevant market segments for frozen cod and haddock fillet products, would most likely be retail chains, and to some extent HoReCa.

Based on price indications of coalfish products from Norwegian exporters, it seems to be limited if any marked in Russia for such products, price level taken in consideration.

7.2Distribution channels for fresh Norwegian white fish fillet products

The research showed that fresh cod fillet, and to some extend haddock fillet, seems to have some potential in the Russian market. With the present level of prices, the market positioning should be as 'elite niche products'. Both HoReCa companies and retailers expressed during interviews that regarding import of fresh fillet, it would be a necessity to work directly with Norwegian producers and exporters, without any intermediary 'in between'.

Fresh coalfish fillet might be of interest by few specialized restaurants, but it is doubtful that volumes of demand would be sufficient to establish a profitable niche business solely based on coalfish fillet.

In general Moscow market is assessed to be potentially more capacious than the Saint-Petersburg market. The reason is generally bigger purchasing power of Moscow citizens, as well their 'big city mentality' of profiling social status by buying high priced and high quality foodstuff.

7.3Regional markets potential

Concerning regional market perspectives for Norwegian white fish fillets, the experts believe that only cities with population over 1 million persons may be of interest for European suppliers. The main trend observed by experts is that ‘the further geographical distance from Moscow and St. Petersburg, the less purchasing power’. Thus it’s some kind of necessity to have a relatively large regional population as basis to single out a market with sufficient purchasing power to demand high priced products like e.g. exclusive fresh fillets.

In table 23 cities with ‘sufficient population’ are enlisted[8]

City	Population	Region including the city
Moscow	10’391’500	-
Saint-Petersburg	4’624’100	-
Novosibirsk	1’413’000	Novosibisrskaya oblast
Nizhni Novgorod	1’296’800	Nizhegorodskaya oblast
Ekaterinburg	1’287’000	Sverdlovskaya oblast
Samara	1’144’200	Samarskaya oblast
Omsk	1’122’300	Omskaya oblast
Kazan	1’106’900	Republic of Tatarstan
Chelyabinsk	1’071’000	Chelyabinskaya oblast
Rostov-on-Don	1’062’100	Rostovskaya oblast
Ufa	1’040’600	Republic of Bashkorstan
Volgograd	1’004’200	Volgogradskaya oblast

Table 23: Russian cities with population over 1 million persons, 2004.

Although a list of 12 large cities might seem ‘promising’, every region has it’s own limitations:

- Novosibirsk, Ekaterinburg, Samara, Omsk, Chelyabinsk are supplied by fish products from the Far East region, as well as by cheap Asian seafood. On one hand, the distances are not too remote for the Far East suppliers, which allows them to offer better prices. On the other hand, the whole chain of transportation to the Asian part of Russia will be too expensive for European suppliers, and thus their products would most likely not be competitive in these regions.
- Nizhni Novgorod, Kazan, Rostov-on-Don, Ufa and Volgograd are dominated by supplies from the Astrakhan suppliers. Due to close location to this region, the Astrakhan producers can provide fish products at very competitive prices.

As it was concluded by the experts, at present the most prospective markets for Norwegian white fish fillets are more or less only Moscow and Saint-Petersburg. Some experts presumed that Siberian cities might be attractive, but the transportation costs will sharply boost the final consumer prices, while the consumers in the regions of the European part of Russia for the time being are considered not to be able to afford expensive quality foods. However, it is generally believed, that the regional market may follow the same pattern for Norwegian white fish fillets as it did for Norwegian salmon and trout and thus gradually develop.

[8] Data are obtained from the GosKomStat (Russian State Bureau of Statistics)

8. Import official regulations and tariffs

For official documents necessary for customs clearance and all relevant veterinary requirements, please refer to appendices 9 and 10.

8.1 Logistics chains relevant for Norwegian exporters

Fresh white fish fillet

Experts from HoReCa segment and retail chains insist that fresh fillet products should be delivered to them not later than 3 days after the catch of fish. That means the only possible way to deliver the products to Moscow is by air. It is an expensive way of delivery, but has an advantage that there is a considerable number of air customs crossing points, and they are not connected to certain countries like land customs crossing points. A typical lot size for air delivery is 400 kilograms.

Saint-Petersburg is situated closer to Norway than Moscow, so transportation of fresh fillets can be made by trucks as well.

Possible crossing points for Norwegian importers are represented in table 24

Name of customs crossing points	Location	Type
Borisoglebsk – Storskog	Murmansk oblast, Russian-Norwegian state border	Automobile
Brusnichnoe	Vyborg oblast Russian-Finnish state border	Automobile
Buslovskaya Stantsija	Vyborg oblast Russian-Finnish state border	Automobile
Torfyanovka posyolok	Vyborg oblast Russian-Finnish state border	Automobile
Baza Litke	Saint-Petersburg, Kronshtadt	Marine
Archangelsk	Archangelsk oblast	Marine
Brusnichnoe – Shljuz	Vyborg oblast Russian-Finnish state border	Marine
Vyborg	Vyborg oblast Russian-Finnish state border	Marine
Murmansk	Murmansk region	Marine
Saint-Petersburg	Saint-Petersburg	Marine

Table 24: Customs crossing points convenient for Norwegian importers

Frozen fish fillets

Frozen fish fillets could be delivered mainly by trucks or refers. Railway delivery is considered to be rather expensive.

Customs crossing points are the same as in case of fresh fillet products.

Typically customs clearance formalities should take not more than 1 day; however, long queues make these terms sometimes impossible to keep to.

8.2Customs duties and payments

Goods customs duty

Seafood import to Russia is subject to an import duty according to position of goods in the classification of 'Goods Nomenclature of Foreign-Economic Activity'. In the classification it is stated what part of customs value is to be paid extra for each type of products. For majority of goods, there are no tax preferences for goods originated from Norway, normal tax regime is applied.

In case of white fish fillet products the import duty at the rate of 10% of the customs value is imposed (Table 25).

Codes and corresponding tariff rates

TN VED Code (code in the Goods Nomenclature of Foreign-Economic Activity)	Products	Import duty rate (% out of customs value)
0304 10 310 0	Fresh fillet of cod species (Gadus morhua, Gadus ogac, Gadus macrocephalus) and Boreogadus saida	10
0304 10 330 0	Fresh fillet of pollack (Pollachius virens)	10
0304 10 380 0	Fresh fillet of other white fish species	10
0304 20 199 0	Frozen fillet of cod species (Gadus morhua, Gadus macrocephalus, Gadus ogac) and Boreogadus saida:	10
0304 20 210 0	Frozen fillet of cod species Gadus macrocephalus	10
0304 20 310 0	Frozen fillet of pollack (Pollachius virens)	10
0304 20 330 0	Frozen fillet of haddock (Melanogrammus aeglefinus)	10

Table 25: Import duty rates

Value added tax (VAT)

Goods imported to Russian Federation are subject to obligatory taxation, namely value added tax (VAT). VAT is calculated as a certain percentage of the sum of goods customs value and customs duties.

All types of white fish fillet products are considered to be everyday food which does that they are liable to reduced VAT at the rate of 10%.

9. Research main conclusions

Present market situation and potential

Current trends in Russian economy give basis to conclude that conditions for development of consumer market, in general are favorable. A constant growth of GDP, a gradual increase of the consumers' purchasing power, a rapid development of trade with consumer goods, especially in the segment of retail, are all factors that underline this development.

Further increase of seafood consumption in Russia in general, and in particular of white fish products, is expected the coming years. With regard to white fish fillets, the Russian market could be characterized as 'developing', where none of the market players has a significant market share and no predominant brands exist.

Moscow and Saint-Petersburg remain as the two most important markets for seafood in general and thus also for white fish fillets. Presently the annual capacity of Moscow market makes up about 1.4 thousand tons of fresh and chilled white fish fillets, and about 12.0 thousand tons of frozen white fish fillets. In Saint-Petersburg the respective figures are 1.1 thousand tons and 3.6 thousand tons per year. The consumption of white fish fillets in the other regions is believed to be significantly lower and at present mainly satisfied by products of domestic origin.

In Moscow fresh cod and haddock fillets are considered to be first-rate products for restaurants or upper-class consumers, in Saint-Petersburg they are mainly perceived as quality food, not a first-class, but rather products for the well-off persons who don't have time enough for ordinary cooking. As it was discovered during the study, in Saint-Petersburg white fish fillet products seem to lack necessary 'image' for price increase.

In the two cities there are differences in consumers' perception of white fish species. For Moscow buyers of fillet products it is quite important that the product is time-saving by cooking; so their most possible substitute choice would most probably be fillet of some other white fish species that could be considered 'ready to cook'. Saint-Petersburg consumers prefer just specific fish types; so in case of price increase or absence of a preferred fillet product, they would most likely prefer whole fish of the same species.

The conclusion is that in Moscow cod fillets are the most demanded, both fresh and frozen. Fresh cod fillets would most likely have best potential in the HoReCa segment, while frozen in retail chains, as well as in the open markets. The same seems to be relevant prognosis for Saint-Petersburg.

The current state of the white fish fillet market may be characterized as a free competition market, where none of the market players has a significant market share, no predominant brands exist and there are not so many fixed relations between suppliers and customers. All these conditions imply that barriers to the market entry are relatively low and there are good opportunities for newcomers to consolidate their grip on the market.

Norwegian white fish fillets: concerns and recommendations

During the research the following important issues concerning export possibilities for Norwegian white fish fillets to Russia were focused:

- **Price level**

Norwegian white fish fillets are present in the Russian market in insufficient quantities. The deliveries made are rather occasional than regular. The research revealed that average Russian market prices, both for chilled and frozen fillets, are approximately 50-70% of Norwegian price level. Though the competition level in the Russian white fillet market is considered to be moderate, it's still mostly price-based. Therefore, it's expected to require considerable efforts from Norwegian exporters to promote fillets that are generally too expensive for ordinary consumers.

As a result, the most reasonable opportunity for developing the export of both fresh and frozen white fillets to Russia is believed to be through positioning of the fillet products as high quality niche products for the ‘upper market segment’. The Moscow market is believed to have more status-oriented consumers, focused on demanding high priced ‘extra quality’ foodstuffs.

- **Ban on import of fresh fish from Norway**

In November 2005 ‘The Russian Federal Agency of Veterinary and Fitosanitary Supervision’ (Rosselhoznadzor) imposed a ban on import of all fresh fish products from Norway.

Since the share of Norwegian fish products is considerable in the Russian market, especially in the European part of Russia, a certain deficit of fish products is expected. After the ban on import was in force a large information campaign in mass media was run, though not always containing correct information. As a consequence, some market participants expressed anxiety with regard to order of any fish products from Norway until the whole affair is settled down. Though only fresh fish is banned, there were during the interview process expressed certain doubts concerning all Norwegian fish products.

- **Channels of distribution**

As it was noted by the experts, the distribution of Norwegian fresh cod and haddock fillet to HoReCa segment, on the basis of delivery lots by air, could have some potential. Also retail chains represent a promising segment, especially with regard to their rapid development. On the other hand, with the present price level of Norwegian-made white fish fillets, they could only be positioned in the market as ‘elite niche products’.

It was expressed as preferably both for HoReCa companies and for retail chains to work with the Norwegian exporters directly, without any distribution company in-between. The demand in this situation would be additionally boosted by more or less reasonable level of prices, without any additional extra charges.

Another variant for Norwegian producers and exporters is to consider possibilities of supplying fresh and frozen h/g fish. Such an eventual step would probably allow widening the choice of potential intermediate consumers; processors and open markets might be interested in raw material with guaranteed quality.

- **Market positioning**

In the Russian market white fish fillet products lack distinct, understandable image. White fish species are perceived by the Russian consumers as ‘ordinary table foodstuffs’. This traditional image limits per now the potential of profiling white fillet as a high quality and high priced product in the market. Besides the Russian consumers lack knowledge how to prepare white fish species in a tasteful way by cooking.

Currently there are basically no special brands or even trademarks for white fish fillets in the Russian market. One strategy to promote Norwegian white fish fillets both in HoReCa and retail segments could be through creation of a special brand developed exclusively for Norwegian white fish fillet products. But a brand building process would require a long term strategy and considerable investments in marketing. However, the outcome of such a strategy would most likely be uncertain, the present market situation taken in consideration.

Appendix 1. Results of work itemized per companies' bases according to the scope of activities

Producers, importers, distributors, wholesalers, processors

Result of contact	Moscow	St.-Petersburg
Companies corresponding with the criteria of research		
Completed interviews	7	7
Refusal to give interview because respondent is being too busy or is not inclined to cooperate with research companies	31	39
Companies not corresponding with the criteria of research		
Don't produce or sell white fish fillet products	18	13
Total	**56**	**59**

HoReCa

Result of contact	Moscow	St.-Petersburg
Companies corresponding with the criteria of research		
Completed interviews	5	3
Refusal to give interview because respondent is being too busy or is not inclined to cooperate with research companies	45	17
Companies not corresponding with the criteria of research		
Don't produce or sell white fish fillet products	23	4
Total	**73**	**24**

Retailers

Result of contact	Moscow	St.-Petersburg
Companies corresponding with the criteria of research		
Completed interviews	6	3
Refusal to give interview because respondent is being too busy or is not inclined to cooperate with research companies	56	41
Companies not corresponding with the criteria of research		
Don't produce or sell white fish fillet products	27	26
Total	**89**	**70**

Appendix 2. List of experts

Producers, distributors, wholesalers

№	Company's name	Scope of activity	Expert's name	Expert's position	Contact information	Address
Moscow						
1.	Gulfstream	Fish wholesale company	Gerasimov Dmitry Viktorovich	Purchase Manager	Phone: +(7 495) 258 91 59 gdv@yandex.ru	Moscow, Paveletskaya naberezhnaya, 2, stroenie 7
2.	Fishtorg	Group of companies of wholesale trade, retail trade and restaurant business	Aleander Valerievich	Purchase Manager	Phone: +(7 495) 508 03 73	Moscow, Ryazansky prospect, 8a
3.	Cat Fish	Distributor of fish products	Lipitskaya Olga	General Manager	Tel. +(7 495) 505 58 24 Olgalip@rol.ru	Moscow, Proektiruemy proezd 1980,2
4.	METATR	Fish products processing and wholesale	Marina Nikolaevna Sergey Petrovich	Sales Manager Sales Director	Phone: +(7 495) 777 39 77	Moscow obals, 141070, Korolev, Frunzensky tupik. 1
5.	De-Fa	Fish products processing and wholesale	Atapina Natalia Nikolaevna	Sales Manager	Phone: +(7 495) 221 29 01	Moscow, Leningradskoe shosse, 65, stroenie 5

№	Company's name	Scope of activity	Expert's name	Expert's position	Contact information	Address
Saint-Petersburg						
6.	De-Fa Torgservice	Fish products processing and wholesale	Lysenko Valentina	Sales Director	Phone: +(7 812) 302 09 25, 302 09 26, 302 09 27, 302 09 28, 302 09 29 Fax: +(7 812) 327 35 28 info@defagroup.com	St-Petersburg, 198095, ul. Malaya Mitrofanievskaya, 9, litera A
7.	Baltijsky stil	Fish products wholesale	Matyashkin Alexey Nikolaevich	Director General	Mobile phone: +(7 901) 315 39 62 man@spb.skylink.ru	St-Petersburg, 196084, Moskovskiy prospect, 78
8.	Aqua-Fort	Fish production and wholesale	Anisimova Elena Vyacheslavovna	Sales Manager	Mobile phone: +(7 912) 330 05 78 elenafilippo@yndex.ru	St-Petersburg, 197374, ul. Savushkina, 83
9.	Polimorproduct	Fish production and wholesale	Saiko Leonid Viktorovich	Commercial Manager	Phone: +(7 812) 352 77 97, 336 63 69, 352 77 93 polimor@peterlink.ru	St-Petersburg, 199397, ul. Korablestroitelej, 31/2
10.	Fish Kompany	Fish importing and wholesale	Kalashnik Yuri Nikolaevich	Commercial Manager	Phone: +(7 812) 346 75 74, 346 75 73 info@fishcompany.ru	St-Petersburg, naberezhnaya Obvodnogo kanala, 24a

Processors

№	Company's name	Scope of activity	Expert's name	Expert's position	Contact information	Address
Moscow						
11.	Taldom Ryba (Rybopererabatyvajushchiy kombinat Minimarket Express)	Processing of fish and fish products	Poleshchyuk Albert Valentinovich	Commercial Manager	Phone: +(7 495) 611 38 00, 611 40 66 mail@m-express.ru	Moscow, Astradamskaya ul., 1, korpus 1
12.	Terekhin (Extra Fish)	Processing and wholesale of fish and fish products	Bukina Ludmila Alexandrovna	Purchase Manager	Phone: +(7 495) 781 29 70	Moscow, Kaukazsky bulevar, 59
Saint-Petersburg						
13.	Vek	Delicatessen production	Timoshenkova Olga Nikolaevna	Quality Director	Phone: +(7 812) 323 81 14, 327 86 02 vek@peterlink.ru	St-Petersburg, 194291, Lunacharskogo prospect, 72, korpus 1, office 21
14.	Orgkhimekologiya	Processing of fish and fish products	Malyukova Alina	Purchase Manager	Phone: +(7 812) 325 30 30, extension number 736 orghim@mail.wplus.net	St.-Petersburg, 192148, Elizarova prospect, 38

Retail trade

№	Company's name	Scope of activity	Expert's name	Expert's position	Contact information	Address
Moscow						
15.	Viktoria P	Convenience supermarket	Sakorodet Alexey Evgenievich	Director General	Phone: +(7 495) 421 29 88	Moscow, Novoyasenevsky prospect, 22
16.	ABK group	Retail chain of supermarkets	Soloviyova Olga	Senior Purchase Manager	Phone: +(7 495) 363 92 92, extension number 234	Moscow, 107150, Ivanteevskaya ul., 3 korpus 1
17.	Auchan Khimki	Retail chain of hypermarkets	Petrovsky Vladimir	Seafood Department Manager	Phone: +(7 495) 783 65 60	Moscow oblast, 141400, Khimki, 8th microregion, Mega-2
18.	Auchan Krasnogorsk	Retail chain of hypermarkets	Petrova Anna	Senior Fish Departmant Manager	Phone: +(7 495) 783 57 16, 258 97 10	Moscow, 143900, MKAD, 65 km
19.	Avos'ka	Retail chain of supermarkets of convenience and discounter type	Vlasenko Alexey	Key Specialist of Purchase Department	Phone: +(7 495) 189 22 27, 341 83 41	Moscow, 115408, Borisovskie prudy, 36, korpus 1
20.	Beri Sam	Retail chain of supermarkets	Pochernina Ludmila Georgievna	Commodity Expert	Phone: +(7 495) 753 21 10	Moscow, 125310 Pyatnitskoe shosse, 40

№	Company's name	Scope of activity	Expert's name	Expert's position	Contact information	Address
Saint-Petersburg						
21.	Super Siwa (Renlund)	Retail chain of supermarkets for upper class	Elena	Head of fish products department	Phone: +(7 812) 323 81 14	St-Petersburg, 197374, ul. Savushkina, 119
22.	Sezon	Retail chain of supermarkets of convenience and discounter type	Budyansky Mikhail Yurievich	Head of fish department	Phone: +(7 812) 331 79 86, ,331 79 85	St.-Petersburg, 197348, Kolomyazhsky prospect, 13
23.	Ramstor	Retail chain of hypermarkets	Romanova Marina	Purchase Director	Phone: +(7 812) 336 86 65	St.-Petersburg, 197348, Kolomyazhsky prospect, 3

HoReCa

№	Company's name	Scope of activity	Expert's name	Expert's position	Contact information	Address
Moscow						
24.	SAMMET	Restaurant	Ivashenko Irina Sergeevna	Restaurant Manager	Phone: +(7 495) 209 54 44	Moscow, Trekhprudny pereulok, 10
25.	Anfilada	Restaurant	Galina	Restaurant Manager	Phone: +(7 495) 688 68 05	Moscow, Olimpijsky prospect, 16

№	Company's name	Scope of activity	Expert's name	Expert's position	Contact information	Address
26.	Gans	Restaurant	Igrave Elena Nikolaevna	Purchase Manager	Phone: +(7 495) 298 58 25	Moscow, Yauzskaya ul., 1/15
27.	Alexander Blok	Restaurant	Alexey Perepelkin	Chef	Phone: +(7 495) 253 93 58	Moscow, Krasnopresnenskaya nabereezhnaya , 12a
28.	Hotel Ukraina	Hotel restaraunt	Kalyakin Denis Grigorjevich	Purchase Manager	Phone: +(7 495) 933 56 56	Moscow, Kutuzovsky prospect, 2/1
Saint-Petersburg						
29.	Flotilija	Fish restaurant	Blinova Svetlana Arkadjevna	Production Director	Phone: +(7 812) 251 48 73	St-Petersburg, 198020, Rizhsky prospect, 54/13
30.	Tinkoff	Chain of restaurants and bars	Andreeva Yana Igorevna	Purchase Manager	Phone: +(7 812) 718 55 66 y.andreeva@tinkoff.ru	St.-Petersburg, 191186, ul. Kazanskaya, 7
31.	Demjanova ukha	Fish restaurant	Lebedev Mikhail Lvovich	Production Manager	Phone: +(7 812) 232 80 90	St.-Petersburg, 197198, Kronvekrsky prospect, 53,

Appendix 3. Expert interview scheme

Producers – Saint-Petersburg market of white fish fillet

1. Interview date: ______________________________
2. Company's name: ______________________________
3. Company's specialization: ______________________________

____

____

4. Company's address: ______________________________
5. Respondent's name ______________________________
6. Respondent's position ______________________________
7. Contact phone number and e-mail address ______________________________

Saint-Petersburg market of WFFP

8. We are going to talk about the market of WHITE FISH FILLET PRODUCTS (WFFP) in Saint-Petersburg, specifically about fillets made from **COD, HADDOCK, COALFISH, SPOTTED CATFISH**, either FRESH (FR) OR FROZEN (FZ), **WITHOUT ANY ADDITIONAL PROCESSING**.
   Which WHITE FISH FILLET products are present currently in Saint-Petersburg market?

Type	Cod fillet		Haddock fillet		Coal fish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Whole, skinless, boneless, interleaved								
Whole, skin on, pin bone in, interleaved								
Loins								
Center cut								
Tails								
Other, specify								

9. Let's take current capacity of Saint-Petersburg market of ALL FISH PRODUCTS as 100%. Up to your opinion, what share belongs to FILLET PRODUCTS out of 100%? And what share belongs to WFFP?

10. How many TONS OF WFFP is sold on average in Saint-Petersburg annually nowadays? Is the demand for WFFP met completely or not?

11. Generally speaking, would you assess the current development of Saint-Petersburg market of WFFP optimistically or pessimistically? Will the capacity of WFFP market in Saint-Petersburg increase or decrease? By what degree? Can you say that demand for WFFP is flexible?

Supply

12. How many market players are there in Petersburg market of fish fillet products and WFFP?

Fish fillet products	White fish fillet products

13. What companies are the major market players? What market shares do they have?

Company	Approximate share
1.	
2.	
3.	
4.	
5.	

14. Are there any strong brands in Saint-Petersburg market of WFFP? If yes, what brands are they, and which producers own them?

Brand	Owner of the brand
1.	
2.	
3.	
4.	
5.	

15. How would you assess competition in Saint-Petersburg market of WFFP – very high, high, moderate, minor, none? What are the bases for competition (PRICE, QUALITY, TERMS OF DELIVERY, RANGE OF PRODUCTS ETC)

16. What are the average price and the range of prices for each product (RUBLES PER KILOGRAM)?

Price	Cod fillet		Haddock fillet		Coal fish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
Average price								
Range of prices								

17. Speaking about the products, what share of the market belongs to domestic products, and what share belongs to products of foreign origin?

Domestic WFFP	Foreign WFFP
_______ %	_______ %

18. Products of what countries of origin are present on the market?

____

____

Logistics

19. Speaking on the possible logistics schemes in the market of WFFP, which would you consider the best – time-saving and money-saving? FOR DOMESTIC AND FOREIGN PRODUCERS SEPATELY.

Demand

20. Please estimate AVERAGE distribution of WFFP sales among different market segments

Market segment	Share for FRESH WFFP out of 100%	Share for FROZEN WFFP out of 100%
1. Retail trade		
2. HoReCa		
3. Processing industry		
4. Wholesale companies and open markets		

21. Please assess the level of relevance of the following WFFP in different market segments (5-point scale, where 1 – not relevant at all, 5 – very relevant)

Segment	Cod fillet		Haddock fillet		Coal fish fillet		Spotted catfish fillet	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
1. Retail trade								
2. HoReCa								
3. Processing industry								
4. Wholesale companies and open markets								

22. Up to your opinion, what type of WFFP will be the most relevant in the next few years in different market segments? Please specify and explain.

Market segment	The most relevant WFFP
1. Retail trade	
2. HoReCa	
3. Processing industry	
4. Wholesale companies and open markets	

23. What niches do different WFFP take?

Segment	Cod fillet		Haddock fillet		Coal fish fillet		Spotted catfish f.	
	FR	FZ	FR	FZ	FR	FZ	FR	FZ
1. Upper market – expensive, delicatessen food								
2. Upper-middle market – quality food								
3. Mass market – everyday food								
4. Lower market – cheap food for poor and animals								

24. How important are the following criteria with respect to WFFP for different kinds of consumers? (5-point scale, where 1 – not important at all, 5 – very important)

	Factor	Retail trade	HoReCa	Processing industry	Wholesale and open markets
1	Price				
2	Terms of delivery				
3	Supply of non-standard lots (either small or huge)				
4	Range of products				
5	Quality of products				
6	Packaging of products				
7	Ecological reliability of products				
8	Accompanying forms for products (certifications, licenses etc.)				

25. Please describe general quality requirements for each type of product in Saint-Petersburg market.

WFFP	Quality requirements (size, packaging, type of fillet, color, meat texture)
1. Cod fillet	FR
	FZ
2. Haddock fillet	FR
	FZ
3. Coalfish fillet	FR
	FZ
4. Spotted catfish fillet	FR
	FZ

26. What substitutes are there for each WFFP enlisted? What advantages and disadvantages, if any, do they have?

WFFP	Possible substitutes, their advantages and disadvantages
1. Cod fillet	
2. Haddock fillet	
3. Coalfish fillet	
4. Spotted catfish fillet	

Norwegian WFFP

27. Up to your experience, are Norwegian WFFP well-known in Saint-Petersburg market? Please specify according to different segments – HoReCa, retail trade, processors, open markets.

28. Do you consider Norwegian WFFP to be serious competitors to other products in the market? Please explain your reasons.
29. Have a look at these specifications of WFFP and prices for them. Up to your opinion, will these prices be competitive in Saint-Petersburg?

30. Will these enlisted products be in demand? Will these products be mass consumption products, or niche products? Please specify and explain your reasons.

31. What difficulties can face Norwegian producers during exporting WFFP in Russia?

Regions

32. Up to your opinion, are regional markets of WFFP different from the one in Saint-Petersburg? If yes, please specify which regions and in what way different.

33. What regional markets would you consider the best for introducing of Norwegian WFFP?

Appendix 4. List of stores checked

Store's name	Store's features	Store's address
Saint-Petersburg		
Pjaterochka	A national product retail chain Type close to discounter 160 stores in Saint-Petersburg, 148 stores in Moscow	196084, Saint-Petersburg, Moskovskij pr., 109
Metro Cash and Carry	A national retail chain of food, daily goods, clothes and electric appliances Cash and carry type 3 stores in Saint-Petersburg, 4 stores in Moscow	197227, Saint-Petersburg, Komendantskij pr, d.3, litera A
Lenta	A large regional retail chain of food and daily goods Supermarket type 7 stores in Saint-Petersburg	192286, Saint-Petersburg, ul. Buharestskaja, 69
O'Key	A regional retail chain of food and daily goods Hypermarket type 4 stores in saint-Petersburg	196233, Saint-Petersburg, pr. Kosmonavtov, 45A
Paterson	A national retail chain of food and daily goods Supermarket type 9 stores in Saint-Petersburg, 17 stores in Moscow	192281, Saint-Petersburg, ul. Balkanskaja, 5: 192239, Saint-Petersburg, pr. Slavy, 15; 190031, Saint-Petersburg, Sennaja pl., 6
Algonik	A regional retail chain of food and daily goods Supermarket type 5 stores in Saint-Petersburg	191028, Saint-Petersburg, ul. Kirochnaja, 20
Moscow		
Pjaterochka	A national product retail chain Type close to discounter 160 stores in Saint-Petersburg, 148 stores in Moscow	Moscow, Altufevskoe sh, 60
Metro Cash and Carry	A national retail chain of food, daily goods, clothes and electric appliances Cash and carry type 3 stores in Saint-Petersburg, 4 stores in Moscow	Moscow, Jaroslavskoe sh, 211

Store's name	Store's features	Store's address
Perekrestok	A national retail chain of food and daily goods Supermarket type 5 stores in Saint-Petersburg, 31 stores in Moscow	Moscow, ul. Dekabristov, 12
Sed'moy kontinent	A regional retail chain of food and daily goods Supermarket type 25 stores in Moscow	Moscow, ul. Dekabristov, 15
Paterson	A national retail chain of food and daily goods Supermarket type 9 stores in Saint-Petersburg, 16 stores in Moscow	Moscow, ul. Hachaturjana, 7
Santorg (stanem druzjami)	A regional retail chain of products Supermarket type 2 stores in Moscow	Moscow, Semenovskaja pl., 1
Pjatnickij rybotorgovyj kompleks	A large specialized fish market	Moscow, Pjatnickij proezd, 2

Appendix 5. Retail audit results

Saint-Petersburg

#	Item	Fresh or frozen	Packaging	Weight netto, kg	Price, euro	Price per kg, euro	Trade mark	Producer	Store name
1	Catfish fillet whole	Fresh	None	1,00	€ 3,7	€ 3,7		Russia	Lenta
2	Catfish fillet whole	Fresh	None	1,00	€ 3,4	€ 3,4		Russia	Metro cash and carry
3	Catfish fillet whole	Frozen	Vacuum packaging	0,50	€ 2,4	€ 4,9		Argokomplex OOO, Russia, Moscow, ul. Sharikopodshipnikovskaja, d.15, str.4	Metro cash and carry
4	Coalfish fillet skinless whole	Frozen	Vacuum packaging	0,40	€ 1,9	€ 4,6	Mys udachi	Ryboobrabatyvajushhij kombinat №5,OOO, for Orghimjekologija, OOO Russia, Saint-Petersburg, Mitrofan'evskoe sh., 30	Lenta
5	Coalfish fillet whole	Fresh	None	1,00	€ 3,7	€ 3,7		Russia	Lenta
6	Coalfish fillet whole	Fresh	None	1,00	€ 3,3	€ 3,3		Norway	Metro cash and carry
7	Cod fillet a la karte	Frozen	Vacuum packaging	0,40	€ 1,9	€ 4,7	Mys udachi	Ryboobrabatyvajushhij kombinat №5,OOO, for Orghimjekologija, OOO Russia, Saint-Petersburg, Mitrofan'evskoe sh., 30	Algonik
8	Cod fillet a la karte	Frozen	Vacuum packaging	0,40	€ 1,9	€ 4,8	Mys udachi	Ryboobrabatyvajushhij kombinat №5,OOO, for Orghimjekologija, OOO Russia, Saint-Petersburg, Mitrofan'evskoe sh., 30	Lenta

#	Item	Fresh or frozen	Packaging	Weight netto, kg	Price, euro	Price per kg, euro	Trade mark	Producer	Store name
9	Cod fillet a la karte	Frozen	Vacuum packaging	0,80	€ 3,4	€ 4,3	Rybka po-botsmanski	Lankala, OOO. Russia, 107143, Moscow, Otkrytoe shosse, d 1/3	Pjaterochka
10	Cod fillet a la karte	Frozen	Vacuum packaging	0,50	€ 2,6	€ 5,2	Vkus severa	Krof OOO Russia, Saint-Petersburg, Kronshtadt, Kronshtadtskoe sh., 9	Algonik
11	Cod fillet a la karte	Frozen	Vacuum packaging	0,30	€ 1,2	€ 3,9	Vkus severa	Krof OOO Russia, Saint-Petersburg, Kronshtadt, Kronshtadtskoe sh., 9	Lenta
12	Cod fillet a la karte	Frozen	Vacuum packaging	2,00	€ 7,9	€ 3,9	ARO	Nov-mor OOO, for Cyros, NP Russia, Saint-Petersburg, Pushkin, Kuz'minskoe sh., 66	Metro cash and carry
13	Cod fillet skinless	Fresh	None	1,00	€ 4,9	€ 4,9		Donskaja ryba	Metro cash and carry
14	Cod fillet skinless	Frozen	Vacuum packaging	1,00	€ 5,4	€ 5,4	Krugly god	Nov-mor OOO, for Cyros, NP Russia, Saint-Petersburg, Pushkin, Kuz'minskoe sh., 66	Paterson
15	Cod fillet whole	Fresh	None	1,00	€ 4,8	€ 4,8	Nov-Mor	Nov-mor OOO, for Cyros, NP Russia, Saint-Petersburg, Pushkin, Kuz'minskoe sh., 66	O'Key
16	Cod fillet whole	Fresh	None	1,00	€ 6,2	€ 6,2		Russia	Lenta
17	Cod fillet whole	Frozen	Vacuum packaging	2,00	€ 6,1	€ 3,0	BonDeLaMar	Lankala, OOO. Russia, 107143, Moscow, Otkrytoe shosse, d 1/3	Metro cash and carry
18	Cod fillet whole	Frozen	Vacuum packaging	0,30	€ 1,9	€ 6,4	Gulfish	Homjakovskij hladokombinat, ZAO. Russia, Tula, pos. Homjakovo, ul. Homjakovskaja, d. 16-V	Pjaterochka

#	Item	Fresh or frozen	Packaging	Weight netto, kg	Price, euro	Price per kg, euro	Trade mark	Producer	Store name
19	Cod fillet whole	Frozen	Vacuum packaging	0,40	€ 1,7	€ 4,2	Nov-Mor	Nov-mor OOO, for Cyros, NP Russia, Saint-Petersburg, Pushkin, Kuz'minskoe sh., 66	O'Key
20	Haddock fillet a la karte	Frozen	Vacuum packaging	0,50	€ 2,6	€ 5,1	Polimor product	Krof OOO Russia, Saint-Petersburg, Kronshtadt, Kronshtadtskoe sh., 9	Paterson
21	Haddock fillet a la karte	Frozen	Vacuum packaging	0,50	€ 2,2	€ 4,3	Vkus severa	Krof OOO Russia, Saint-Petersburg, Kronshtadt, Kronshtadtskoe sh., 9	Algonik
22	Haddock fillet a la karte	Frozen	Vacuum packaging	0,50	€ 2,7	€ 5,4	Vkus severa	Krof OOO Russia, Saint-Petersburg, Kronshtadt, Kronshtadtskoe sh., 9	Paterson
23	Haddock fillet a la karte	Frozen	Vacuum packaging	0,30	€ 1,8	€ 5,9	Vkus severa	Krof OOO Russia, Saint-Petersburg, Kronshtadt, Kronshtadtskoe sh., 9	Paterson
24	Haddock fillet whole	Frozen	Vacuum packaging	1,00	n/a	n/a	Krugly god	Nov-mor OOO, for Cyros, NP Russia, Saint-Petersburg, Pushkin, Kuz'minskoe sh., 66	Paterson

Table 26

Moscow

#	Item	Fresh or frozen	Packaging	Weight netto, kg	Price, euro	Price per kg, euro	Trade mark	Producer	Store name
1	Catfish fillet skinless whole	Frozen	None	1,00	€ 4,35	€ 4,35			Pjatnickij rybotorgovyj kompleks
2	Cod fillet skin on portions	Fresh	None	1,00	€ 5,19	€ 5,19			Perekrestok
3	Cod fillet skin on whole	Frozen	Vacuum packaging	0,50	€ 2,49	€ 4,98	Shturman	Talisian VVV, OOO. Moscow, ul. Bulatnikovskaya, 14 For Shturman KF, OOO. Moscow, Beregovoy proezd, 4/6	Sed'moy kontinent
4	Cod fillet skinless whole	Frozen	Vacuum packaging	0,30	€ 5,42	€ 18,06	Emborg	Nordic Seafood A/S Denmark, Søren Nordbysvej 15 DK-9850 Hirtshals	Sed'moy kontinent
5	Cod fillet skinless whole	Frozen	Vacuum packaging	0,30	€ 5,83	€ 19,42	Emborg	Nordic Seafood A/S Denmark, Søren Nordbysvej 15 DK-9850 Hirtshals	Perekrestok
6	Cod fillet skinless whole	Frozen	Polyethylene packaging	0,40	€ 1,94	€ 4,86	Severny gorod	Severny gorod, OOO. Moscow Oblast, Chekhov, ul. Komsomolskaya, 13a	Santorg (stanem druzjami)
7	Cod fillet skinless whole	Frozen	Vacuum packaging	0,50	€ 2,55	€ 5,10	Shturman	Talisian VVV, OOO. Moscow, ul. Bulatnikovskaya, 14 For Shturman KF, OOO. Moscow, Beregovoy proezd, 4/6	Sed'moy kontinent
8	Cod fillet whole	Frozen	Polyethylene packaging	0,40	€ 2,79	€ 6,99	Bon De La Mar	Lankala, OOO. Russia, 107143, Moscow, Otkrytoe shosse, d 1/3	Paterson

#	Item	Fresh or frozen	Packaging	Weight netto, kg	Price, euro	Price per kg, euro	Trade mark	Producer	Store name
9	Cod fillet whole	Frozen	Vacuum packaging	0,60	€ 2,98	€ 4,97	Gulfish	Homjakovskij hladokombinat, ZAO. Russia, Tula, pos. Homjakovo, ul. Homjakovskaja, d. 16-V	Pjaterochka
10	Cod fillet whole	Frozen	Vacuum packaging	1,00	€ 3,59	€ 3,59	Rybka po-botsmanski	Lankala, OOO. Russia, 107143, Moscow, Otkrytoe shosse, d 1/3	Pjaterochka
11	Cod fillet whole	Frozen	None	1,00	€ 4,20	€ 4,20			Pjatnickij rybotorgovyj kompleks
12	Cod fillet whole	Frozen	None	1,00	€ 4,64	€ 4,64			Pjatnickij rybotorgovyj kompleks
13	Haddock fillet skinless whole	Frozen	Vacuum packaging	0,30	€ 5,16	€ 17,19	Emborg	Nordic Seafood A/S Denmark, Søren Nordbysvej 15 DK-9850 Hirtshals	Sed'moy kontinent
14	Haddock fillet skinless whole	Frozen	Vacuum packaging	0,50	€ 2,42	€ 4,84	Shturman	Talisian VVV, OOO. Moscow, ul. Bulatnikovskaya, 14 For Shturman KF, OOO. Moscow, Beregovoy proezd, 4/6	Perekrestok
15	Haddock fillet skinless whole	Frozen	Vacuum packaging	0,50	€ 2,84	€ 5,68	Shturman	Talisian VVV, OOO. Moscow, ul. Bulatnikovskaya, 14 For Shturman KF, OOO. Moscow, Beregovoy proezd, 4/6	Sed'moy kontinent
16	Haddock fillet skinless whole	Frozen	None	1,00	€ 4,23	€ 4,23		Russia	Santorg (stanem druzjami)

Table 27

Appendix 6. Photos of WFFP in retail outlets

Saint-Petersburg

Paterson

Frozen cod and hake fillet

Frozen catfish fillet

Lenta

Fresh haddock and coalfish fillets (along with perch, sander and pike filets)

Fresh spotted catfish fiilet (along with sazan, pike and sander fillets)

General view of fresh fillets counter

Frozen cod fillet

O'Key

Frozen cod fillet

Frozen haddock fillet

Metro

Fresh cod fillet

Frozen cod fillet

General view of frozen fillets counter

Pyaterochka

Frozen cod fillet

General view of frozen fish products counter

Moscow

Perekrestok

Fresh cod fillet (along with salmon and trout fillets)

Frozen cod fillets

Frozen haddock fillet

Frozen cod fillet

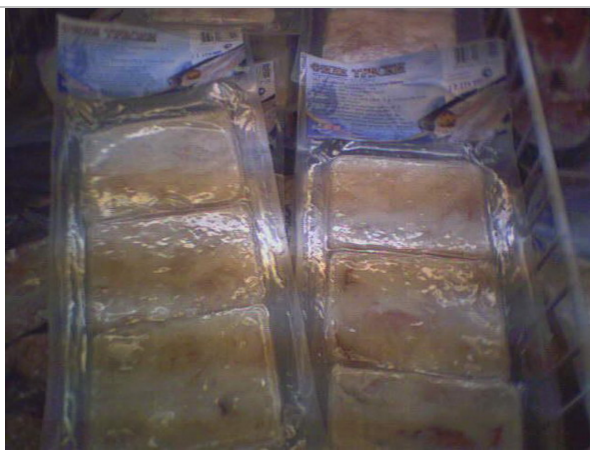
Paterson

General view of fillets counter

Frozen cod fillet

Santorg (stamen druzjami)

Frozen cod fillet



Counter with frozen haddock fillet (in front)

Sed'moy kontinent

General view of frozen fish products counter

Frozen haddock fillet

Pyaterochka

Frozen cod fillet	Counter with frozen cod fillet (in the left)

Pjatnickij rybotorgovyj kompleks

Frozen cod fillet	Counter with frozen cod fillet (in the center)

Appendix 7. Main indicators of Russian economics

Population

Years	Total population	of which		As percentage of the total population	
	mln. persons	urban	rural	urban	rural
1989	147.0	108.0	39.0	73	27
1993	148.6	108.7	39.9	73	27
1996	148.3	108.3	40.0	73	27
2001	146.3	107.1	39.2	73	27
2002	145.2	106.4	38.8	73	27
2003	145.0	106.3	38.7	73	27
2004	144.2	105.8	38.4	73	27
2005	143.5	104.7	38.8	73	27

Table 28: Resident population

	Thou. persons			Percentage of the total			Females per 1000 males of given age		
	2001	2003	2004	2001	2003	2004	2001	2003	2004
Total population	146303	144964	144168	100	100	100	1141	1148	1151
including by age of, years:									
0-4	6367	6472	6632	4.4	4.5	4.6	950	953	951
5-9	7762	6876	6733	5.3	4.8	4.7	955	956	956
10-14	11789	10206	9247	8.1	7.0	6.4	961	958	957
15-19	12321	12796	12579	8.4	8.8	8.7	966	968	969
20-24	11106	11557	11941	7.6	8.0	8.3	983	981	978
25-29	10451	10637	10796	7.1	7.3	7.5	985	997	1000
30-34	9620	9898	10024	6.6	6.8	7.0	997	1001	1004
35-39	11333	10112	9664	7.8	7.0	6.7	1025	1032	1035
40-44	12651	12493	12166	8.6	8.6	8.4	1055	1063	1065
45-49	11434	11664	11876	7.8	8.1	8.2	1104	1114	1119
50-54	9409	10185	10416	6.4	7.0	7.2	1157	1173	1183
55-59	4995	5487	6435	3.4	3.8	4.5	1287	1263	1269
60-64	8906	7703	6368	6.1	5.3	4.4	1421	1462	1477
65-69	5904	6416	6999	4.0	4.4	4.9	1591	1599	1624
70 and over	12255	12462	12292	8.4	8.6	8.5	2549	2476	2474

	Thou. persons			Percentage of the total			Females per 1000 males of given age		
	2001	2003	2004	2001	2003	2004	2001	2003	2004
Total population	146303	144964	144168	100	100	100	1141	1148	1151
Out of total population:									
under working age	28387	26115	25014	19.4	18.0	17.3	958	957	956
Working age *Males - 16-59 years, females - 16-54 years*	88040	89206	89896	60.2	61.5	62.4	982	984	978
over working age	29876	29643	29258	20.4	20.5	20.3	2175	2228	2334

Table 29: Population by age groups

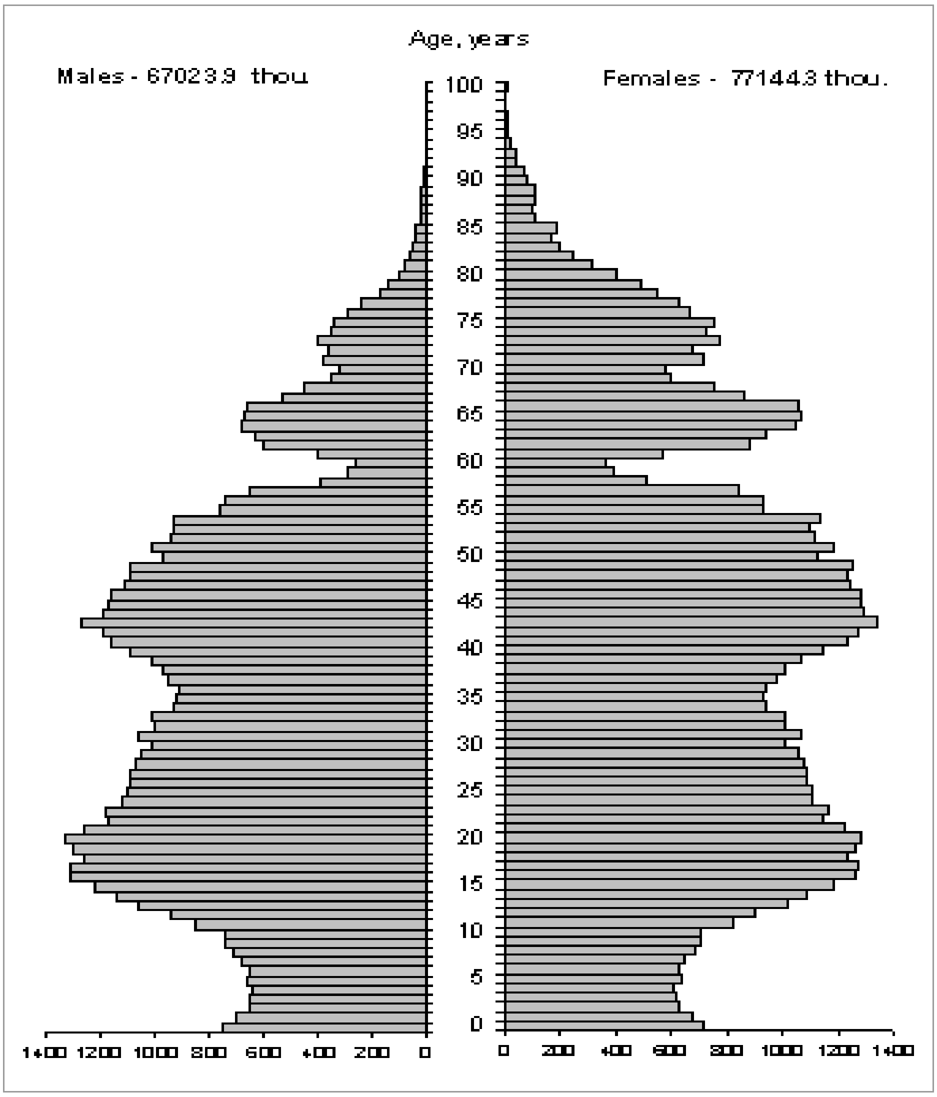


Diagram 13: Sex and age structure of population, 2004

Labor and income

	1992	1995	2000	2001	2002	2003	2004
Thousand persons							
Economically active population, total	74946	70861	71464	70968	71919	72835	72909
of which:							
employed in the economy	71068	64149	64465	64664	65766	67152	67134
unemployed	3877	6712	6999	6303	6153	5683	5775
Men	39171	37336	37154	36846	36937	37206	37079
of which:							
employed in the economy	37145	33720	33379	33435	33615	34199	34177
unemployed	2026	3616	3781	3411	3322	3007	2902
Women	35774	33525	34310	34122	34982	35629	35831
of which:							
employed in the economy	33923	30429	31091	31229	32151	32953	32958
unemployed	1851	3096	3219	2893	2831	2676	2873
As percentage of the total							
Economically active population, total	100	100	100	100	100	100	100
of which							
employed in the economy	94.8	90.5	90.2	91.1	91.4	92.2	92.1
unemployed	5.2	9.5	9.8	8.9	8.6	7.8	7.9
Men	100	100	100	100	100	100	100
of which:							
employed in the economy	94.8	90.3	89.8	90.7	91.0	91.9	92.2
unemployed	5.2	9.7	10.2	9.3	9.0	8.1	7.8
Women	100	100	100	100	100	100	100
of which:							
employed in the economy	94.8	90.8	90.6	91.5	91.9	92.5	92.0
unemployed	5.2	9.2	9.4	8.5	8.1	7.5	8.0

Table 30: Economically active population

	1992	1995	2000	2001	2002	2003	2004
As percentage of the total							
Total employment in the economy	100	100	100	100	100	100	100
including by type of ownership:							
state, municipal	68.9	42.1	37.9	37.4	37.0	36.4	36.0
private	19.5	34.4	46.1	47.6	49.7	50.2	50.7
ownership of public and religious organizations (associations)	0.8	0.7	0.8	0.8	0.8	0.7	0.7
mixed Russian	10.5	22.2	12.5	11.6	9.4	9.2	8.9
foreign, joint Russian and foreign	0.3	0.6	2.7	2.6	3.1	3.5	3.7

Table 31: Average annual employment in economy by ownership

	1992	1995	2000	2001	2002	2003	2004
As percentage of the total							
Total employment in the economy	100	100	100	100	100	100	100
of which:							
industry	29.6	25.8	22.6	22.7	22.2	21.9	21.4
agriculture	14.0	14.7	13.0	12.3	11.8	11.0	10.3
forestry	0.3	0.4	0.4	0.4	0.4	0.4	0.4
construction	11.0	9.3	7.8	7.8	7.6	7.7	7.8
transport	6.6	6.6	6.4	6.4	6.3	6.4	6.4
communications	1.2	1.3	1.4	1.4	1.4	1.4	1.4
wholesale and retail trade, catering	7.9	10.1	14.6	15.4	16.6	16.8	17.2
housing and public utilities, non-production everyday services	4.1	4.5	5.2	5.0	4.9	4.9	4.8
public health, physical culture and social security	5.9	6.7	7.0	7.0	7.0	7.1	7.3
education	8.9	9.3	9.1	9.0	9.0	9.1	9.2
culture and art	1.5	1.7	1.8	1.8	1.8	1.9	2.0
science and related services	3.2	2.5	1.9	1.8	1.8	1.9	1.8
finances, credits and insurance	0.7	1.2	1.2	1.2	1.3	1.3	1.4
administration	1.9	2.9	4.5	4.5	4.5	4.7	4.8
other industries	3.2	3.0	3.1	3.3	3.4	3.5	3.8

Table 32: Average annual employment in economy by industries

Average annual employment in the economy by industries

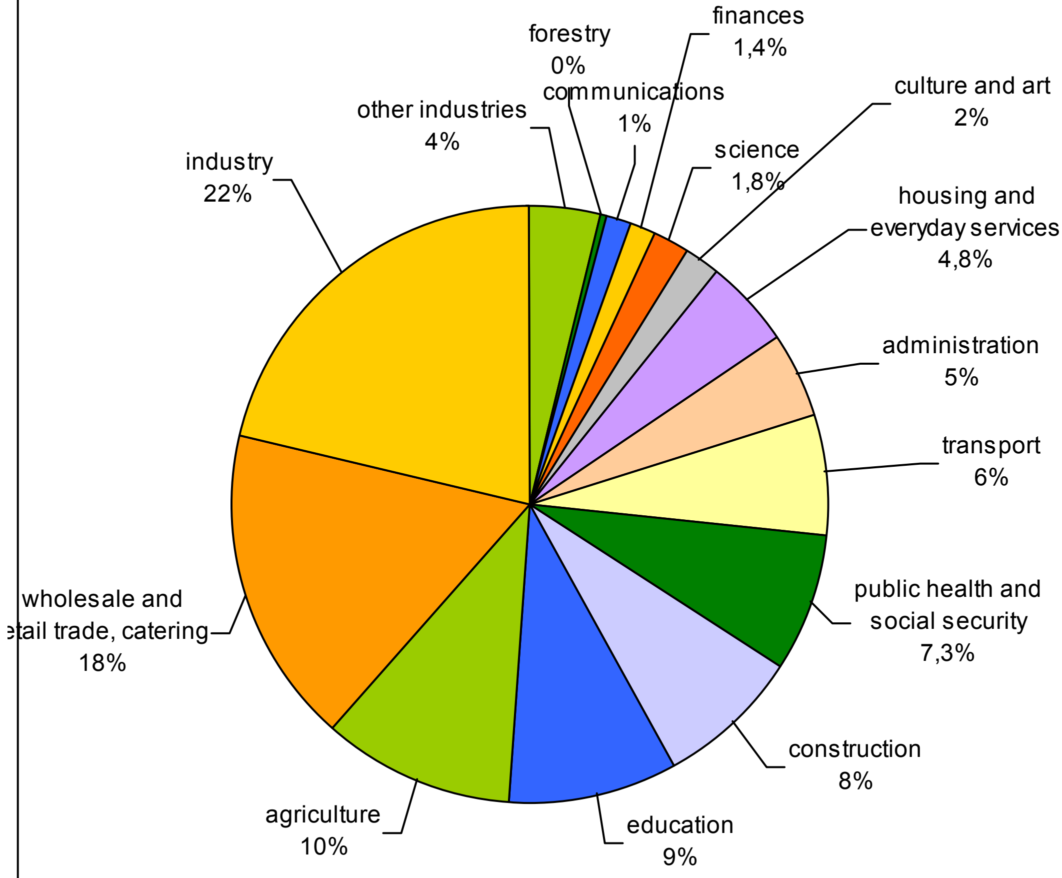


Diagram 14

Share of expenditures in population incomes

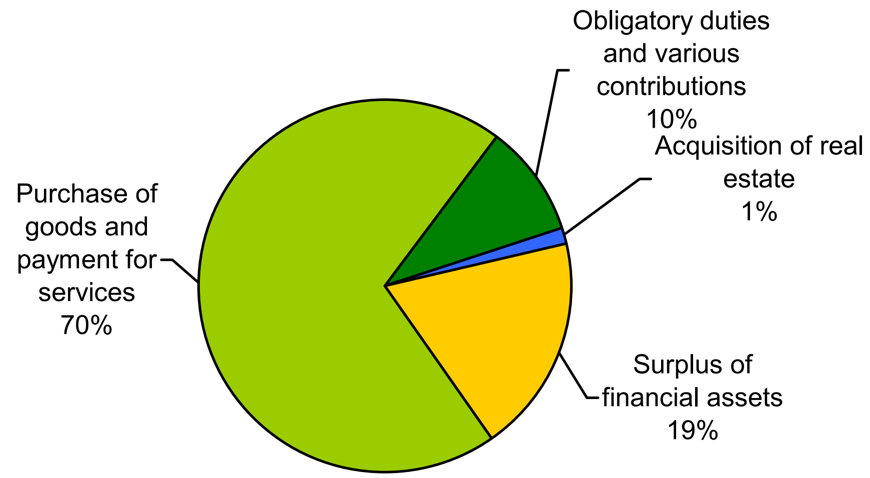


Diagram 15

	1992	1995	2000	2001	2002	2003	2004
Actual final consumption of households, bln. RUR (trln. RUR before 2000)	7.9	871.6	3813.5	5013.8	6394.5	7701.8	9375.1
percentage of GDP	42.8	61.1	52.3	55.8	59.2	58.1	56.7
per capita, RUR (thou. RUR -before 2000)	53	5884	26200	34637	44440	53276	65186
Average per capita incomes of population, monthly , RUR (thou. RUR before 2000)	4.0	515.5	2281	3061	3947	5171	6337
Average accrued monthly wages, employed in the economy, RUR (thou. RUR before 2000)	6.0	472.4	2223.4	3240.4	4360.3	5498.5	6831.8
Average fixed pension size, RUR (thou. RUR before 2000)	1.6	188.1	694.3	1024	1379	1637	1915
Subsistence minimum level (average per capita): RUR per month (thou. RUR before 2000)	1,9	264	1210	1500	1808	2112	2376
Population with incomes below subsistence minimum level: percentage of the total population	33.5	24.7	28.9	27.3	24.2	20.3	17.8
Minimum wages (annual average), RUR (thou. RUR before 2000)	0.7	42.5	107.8	250.0	400.0	487.5	600.0
Real minimum wages, as percentage of the previous year	41.5	81.4	106.9	190.9	138.2	107.2	111.0

Table 33: Main socio-economic indicators of living standard of population

	2001	2002	2003	2004
Population, total	100	100	100	100
of which with average per capita monthly income, RUR:				
less than 1000.0	12.4	6.6	3.4	1.9
1000.1- 1500.0	14.9	10.4	6.6	4.3
1500.1-2000.0	14.3	11.7	8.6	6.2
2000.1-3000.0	21.7	20.9	17.9	14.6
3000.1-4000.0	13.5	15.2	15.2	13.9
4000.1-5000.0	8.2	10.5	11.8	11.8
5000.1-7000.0	8.2	12.0	15.3	17.0
over 7000.0	6.8	12.7	21.2	30.3

Table 34: Distribution of population by per capita average income (percentage to the total)

	1992	1995	2000	2001	2002	2003	2004
Incomes - total	100	100	100	100	100	100	100
of which:							
income from entrepreneurial activities	8.4	16.4	15.4	12.6	11.9	12.0	11.7
labour remuneration	73.6	62.8	62.8	64.6	65.8	63.9	63.2
social transfers	14.3	13.1	13.8	15.2	15.2	14.1	13.8
property incomes	1.0	6.5	6.8	5.7	5.2	7.8	9.1
other incomes	2.7	1.2	1.2	1.9	1.9	2.2	2.2
Money expenditures and savings - total	100	100	100	100	100	100	100
of which:							
purchase of goods and payment for service	72.9	70.5	75.5	74.6	73.2	69.1	70.1
obligatory dues and various contributions	8.1	5.6	7.8	8.9	8.6	8.3	9.7
acquisition of real estate	0.1	0.1	1.2	1.4	1.8	2.0	1.4
surplus of financial assets	18.9	23.8	15.5	15.1	16.4	20.6	18.8
of which increase, decrease (-) of currency in hands	13.6	3.6	2.8	2.0	1.8	2.7	1.7

Table 35: Structure of incomes and share of expenditures in incomes of population (percentage)

Gross domestic product

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Gross domestic product in market prices	1428,5	2007,8	2342,5	2629,6	4823,2	7305,6	8943,6	10817,5	13201,1	16778,8
In constant prices (incl. indirectly measured financial intermediation)	1335,1	1833,4	2135,3	2389,6	4339,3	6530,4	7975,8	9751,1	11821,3	14939,5
including:										
Production of commodities	596,9	855,1	965,7	1047,3	1959,5	2939,6	3434,8	3971,3	4761,3	6133,8
of them:										
industry	372,1	545,2	633,7	716,2	1348,8	2049,2	2258,4	2651,3	3161,3	4174,6
agriculture	95,6	131,5	137,5	134,2	317,4	420,2	525,5	558,4	635,2	753,0
construction	121,3	164,5	178,9	176,4	266,8	428,8	589,0	670,2	854,3	1079,5
Production of	738,2	978,3	1169,6	1342,3	2379,8	3590,8	4541,0	5779,8	7060,0	8805,7

services										
including:										
Market services	591,6	777,6	915,0	1061,5	1995,1	3041,3	398,1	4705,0	5758,1	7227,0
of them:										
transport and communication	162,9	230,8	264,7	259,7	411,1	586,4	717,2	875,3	1056,1	1284,1
trade (wholesale, retail), catering and intermediates	282,4	360,2	398,2	490,0	1005,1	1545,5	1775,6	2155,6	2622,1	3274,2
Nonmarket services	146,6	200,7	254,6	280,8	384,7	549,5	742,9	1074,8	1301,9	1578,7

Table 36: Nominal volume of GDP produced in current prices, bln rubles, until 1998 - trln rubles

Industry

	1992	1995	2000	2001	2002	2003	2004
Total industry	100	100	100	100	100	100	100
of which:							
electric power industry	8.1	10.5	9.2	8.8	8.5	8.1	7.6
fuel industry	14.0	16.9	15.8	15.9	16.4	16.9	17.1
of which:							
oil extraction	9.0	10.9	10.4	10.7	11.3	11.8	12.1
oil refining	2.3	2.6	2.3	2.2	2.3	2.2	2.1
gas	1.4	1.8	1.7	1.6	1.6	1.6	1.5
coal	1.2	1.5	1.4	1.4	1.3	1.3	1.3
ferrous metallurgy	6.7	7.7	8.6	8.1	8.1	8.3	8.2
non-ferrous metallurgy	7.3	9.0	10.3	10.3	10.5	10.5	10.3
chemical and petrochemical industry	6.4	6.3	7.5	7.4	7.3	7.1	7.2
machine-building and metal working	23.8	19.2	20.5	20.8	20.5	21.1	22.2
logging, woodworking and pulp-and-paper industry	5.9	5.1	4.8	4.7	4.7	4.5	4.3
building materials industry	4.4	3.7	2.9	2.9	2.9	2.9	2.9
light industry	5.2	2.3	1.8	1.8	1.7	1.5	1.4
food industry	14.5	15.3	14.9	15.3	15.8	15.6	15.4
flour-groats and mixed forage industry	2.1	2.0	1.6	1.6	1.4	1.3	1.2

Table 37: Structure of production by main branches of industry (in prices of 1999; percentage of the total)

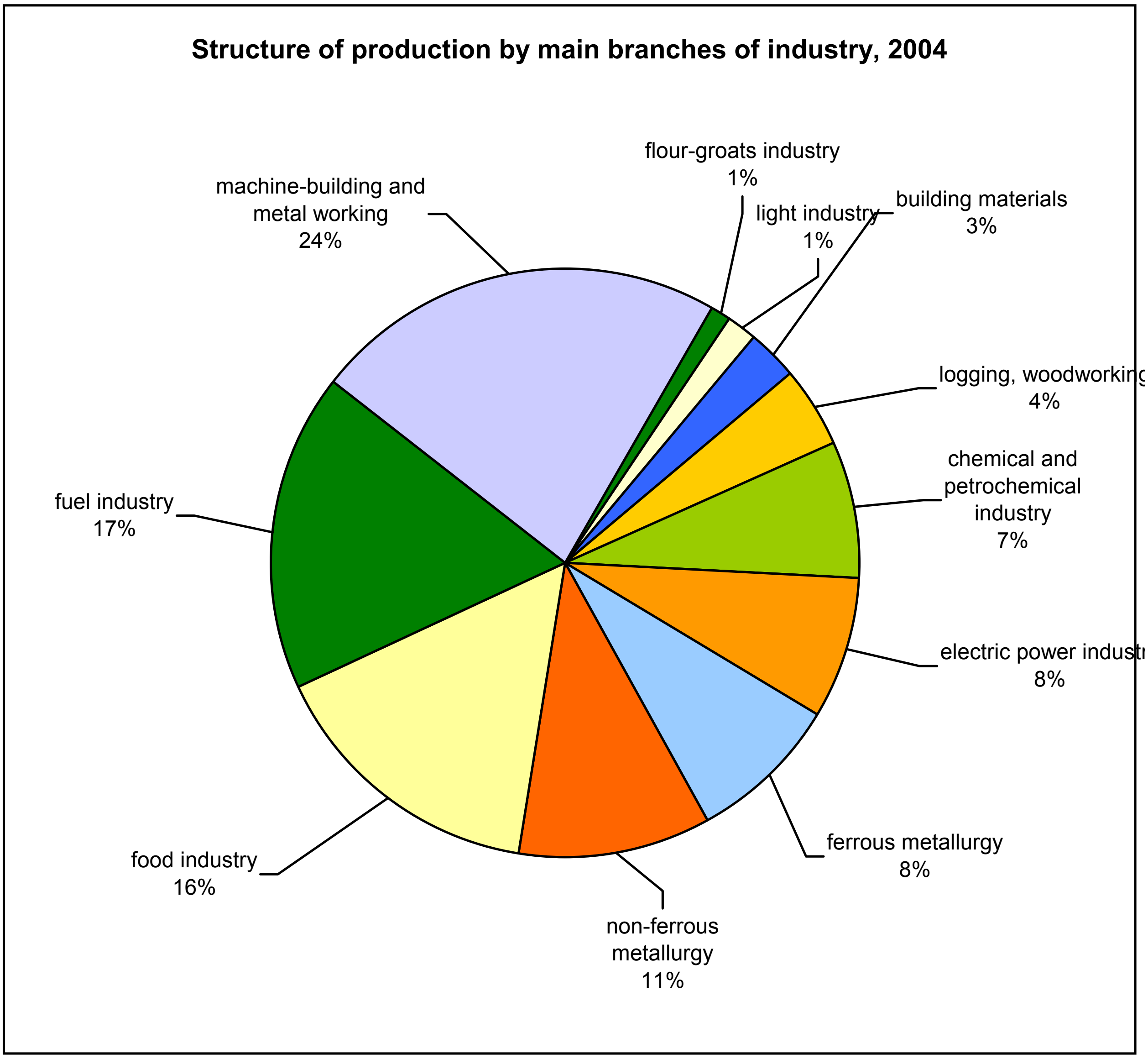


Diagram 16

Trade

	1999	2001	2002	2003	2004	2005
Retail trade organizations, total, thousand	184.9	204.2	211.9	204.9	202.2	212.0
out of them large and medium	26.3	25.5	25.2	24.2	23.0	24.5
Commodity, mixed and food markets, thou.	4.8	5.8	5.9	6.0	6.1	6.4

Table 38: Number of retail trade organizations

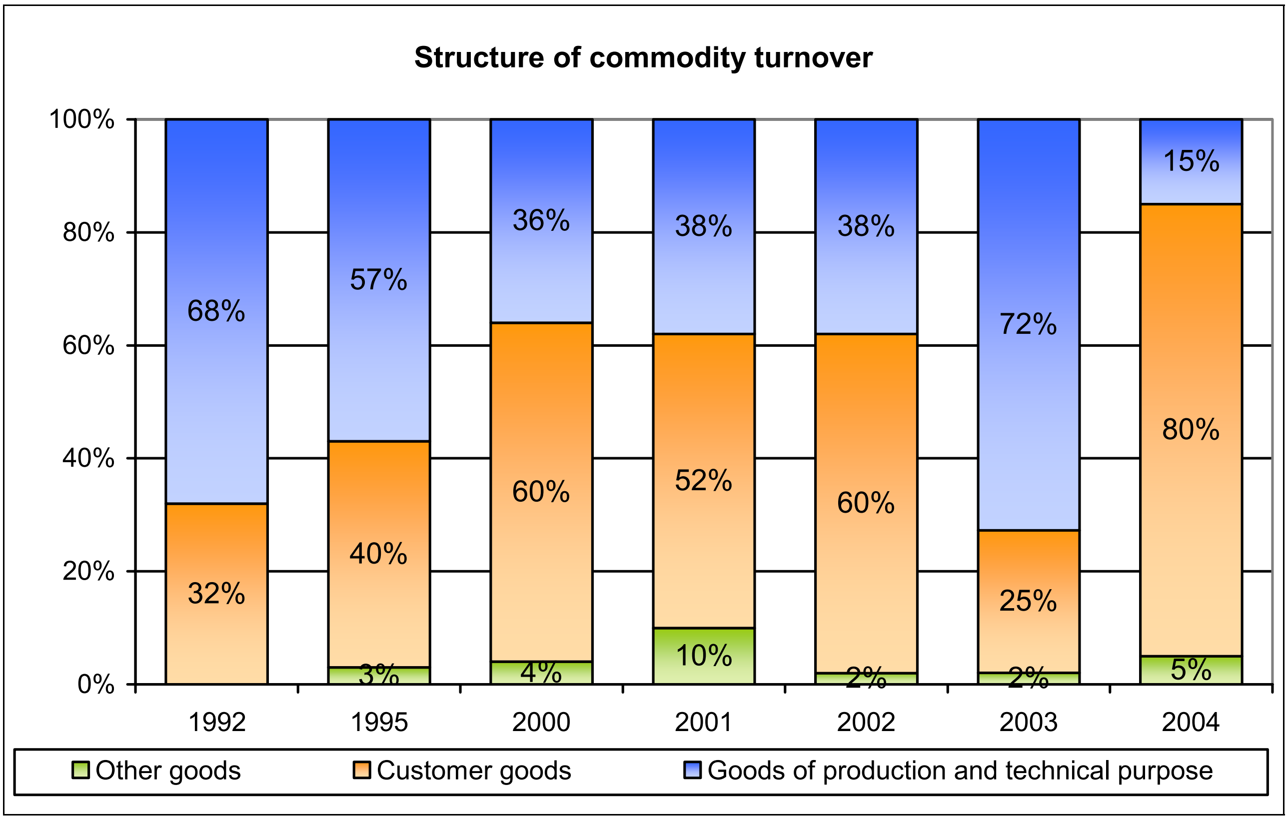

Structure of commodity turnover
100%
80%
60%
40%
20%
0%
68%
32%
57%
40%
3%
36%
60%
4%
38%
52%
10%
38%
60%
2%
72%
25%
2%
15%
80%
5%
1992
1995
2000
2001
2002
2003
2004
Other goods
Customer goods
Goods of production and technical purpose

Diagram 17

Appendix 8. Main market participants in Moscow and Saint-Petersburg

Moscow

Company's name	Origin	Description
Agama Trade	Moscow	Importer and wholesaler of fish products
Atlant Pacific Group	Moscow	Importer and wholesaler of Norwegian fish products
Bagira Group	Moscow	Importer of Norwegian fish products
Catfish	Moscow	Large distribution company
Cyros	Saint-Petersburg	Importer and distributor of frozen foods: vegetables, seafood
De-Fa	Saint-Petersburg	Importer of Norwegian fish products
Delika	Saint-Petersburg	Fish processing factory
Delta plus	Astrakhan	Large-scale national producer
Glavryba	Moscow	A large scale fish products producer
Gulfstream	Moscow	Fish wholesale company
Greentrust Fish Company	Moscow	Importers and distributors of frozen foods, seafood.
Homjakovskij hladokombinat (SP Kholod)	Moscow	Processing factory
Khladproduct / Fresh and Frozen Foods	Moscow	Importer and wholesaler of frozen fish and meat
Mir Okeana	Moscow	Distribution company to HoReCa
Orghimecologiya	Saint-Petersburg	Fish processing factory
ROK-1	Saint-Petersburg	Fish processing factory
ROK-5	Saint-Petersburg	Fish processing factory
Russkaya rybnaya kompania	Moscow	Importers and wholesalers of seafood of Russian and foreign origin
Severnaya Companiya		
Severny Mir	Saint-Petersburg	Processing factory
Sky-F	Moscow	Importer and wholesaler of frozen fish
Tunaycha	Moscow	Importer and wholesaler of frozen fish
Viciunai	Kaunas, Lithuania	Large-scale producer

Table 39: List of major white fish fillet market players in Moscow

Saint-Petersburg

Company's name	Origin	Description
Aquafort	Saint-Petersburg	Fish processing factory
Cat fish	Moscow	Large distribution company
Cyros	Saint-Petersburg	Importer and distributor of frozen foods: vegetables, seafood.
De-Fa	Saint-Petersburg	Importer of Norwegian fish products
Delika	Saint-Petersburg	Fish processing factory
Delta plus	Astrakhan	Large-scale national producer
Gulfstream	Moscow	
Krof	Saint-Petersburg, Kronshtadt	Large-scale local producer, is now in joint cooperation with a Moscow subsidiary of *Polimorproduct*
Lankala	Moscow	Large-scale national producer
Lenryba	Saint-Petersburg	A large scale fish products producer; some experts believe this company may own up to 25% of the white fish fillet market
Lenryba product	Saint-Petersburg	A large scale fish products producer; some experts believe this company may own up to 20% of the white fish fillet market
Neptun	Saint-Petersburg	Processing factory
Nov-Mor	Saint-Petersburg, Pushkin	Large-scale local producer, is now in joint cooperation with *Cyros*
Okeanproduct	Moscow	Wholesale company
Oktan	Saint-Petersburg	Large-scale local producer
Orghimecologiya	Saint-Petersburg	Fish processing factory
Petrooil International		Importer of Norwegian fish products
PROK-94	Saint-Petersburg	Fish processing factory
Revansh-95	Saint-Petersburg	Processing factory
ROK-1	Saint-Petersburg	Fish processing factory
ROK-5	Saint-Petersburg	Fish processing factory
Severny Mir	Saint-Petersburg	Processing factory
Skinef	Saint-Petersburg	Wholesale company
Viciunai	Kaunas, Lithuania	Large-scale producer

Table 40: List of major white fish fillet market players in Saint-Petersburg

Appendix 9. Documents for customs clearance procedure

In order to pass through the customs, the following basic documents must be presented for goods imported in the Russian Federation:

1. Documents that confirm the authority of importer to proceed customs operations;
2. Customs declaration in the form of goods customs declaration (GCD). For the form of GCD of the Russian Federation please refer to Appendix 8. The information includes:
    - freight forwarder
    - consignee
    - list of goods imported
    - means of transportation used
    - customs value
    - customs duties relevant
3. Veterinary certificate;
4. Documents that confirm legal capacity of importers in the territory of the Russian Federation
    - constituent documents
    - certificate of accreditation of a subsidiary or a representative office of a foreign legal entity
    - passport (in case the declaration is done by an individual person)
    - certificate of state registration of a legal entity or either a physical person as individual entrepreneur
5. Documents testifying that importers are registered in taxation authorities of the Russian Federation;
6. Documents testifying declared information on customs value;
7. Commercial contract (including any addendums and agreements relevant for the goods imported) or an extract from the contact in case it contains all necessary data for customs clearance, if goods transference is proceeded to satisfy the agreement;
8. Passport of import business, or passport of barter transaction, formalized in accordance with the Russian Federation law;
9. Invoice for the imported goods;
10. Permission given by the Bank of the Russian Federation to establish an account abroad or to carry out currency transactions;
11. Documents testifying the right of importers to get tariff preferences or preferential taxation if any are authorized;
12. Preliminary decision about classification of imported goods in accordance with the Goods Nomenclature of Foreign-Economic Activity (TN VED) or about the country of origin of goods;
13. Payment documents on the payment of customs duties;
14. Transportation documents;
15. List of documents accompanying the customs declaration.

Documents necessary for receiving party (either Russian partner or Russian subsidiary of the foreign company:

- Company Charter, with certificates of registration in the Registry Chamber – 2 notarized copies;
- Constituent contract (OKPO code (OKPO – Russian Classification of Enterprises and Organizations) and TIN (Taxpayer Identification Number) of founders), any changes in it along with documents of their registration in the Registry Chamber – 2 notarized copies;
- Certificate of State Registration – 2 notarized copies;
- Reference from GosKomStat of Russia (Russian Sate Bureau of Statistics) about receiving codes – 2 notarized copies;
- Reference from tax inspectorate – 2 notarized copies;
- Certificate from the Bank of Russia about opening of accounts, ruble or euro, not older than 1 month, containing the following information on each bank: name, code OKPO, TIN, BIC (Bank Identifier Code), bank account, actual address of bank;
- Document confirming authority of Director General and Chief Accountant (commissions with signatures of the persons named) – 1 copy with company's stamp;
- Copies of 4 sheets from passports of General Director, Chief Accountant, Agent, Founder (1^{st}, 2^{nd}, the latest photo with signature sample, registration);
- Letter of Power of Attorney for the Agent;
- Passport of arrangement – original document and 1 copy;
- Contract – original and 1 copy;
- Invoice – 3 original copies;
- Certificates of goods origin, conformance and quality;
- Payment order for goods – original document and 1 copy;
- Payment order for customs duties.

Appendix 10. Veterinary control and requirements

Specific requirements for fish product conformance, quality, output, transportation and declaration are stated in special technical regulations[9]. The requirements that figure further in the report are obligatory in the territory of the Russian Federation.

The state structures authorized to check up and control production and turnover of fish products and non-fish fishery subjects is the Federal agency of fishery (Rosrybolovstvo), in case needed along with the Federal agency of veterinary and fitosanitary supervision and the Federal service of supervision of consumers protection and human wellbeing.

The Federal agency of fishery is responsible for the following spheres of activity:

- Register of fishing ships and fish-processing enterprises, certifies their productive activity;
- Regular control of fish production in companies;
- Check up of implementation of the technical regulations on fishing ships, fish-processing coasting companies and ships, including their refrigerators and transport means;
- Testing of fish products imported in the Russian Federation.

Elements of veterinary control:

1. Organoleptic control:
    - freshness of products, compliance with serviceable life
    - proper appearance, odor, taste, consistence
    - wholeness of products, absence of damages
    - control of toxic species: *Tetraodontidae*, *Molidae*, *Diodontidae* and *Canthigastridae*.
2. Biological control
    - Microbiological control
    - Parasite control
3. Chemical control
    - toxic control
    - pesticides control
    - antibiotics control
    - control of food supplements (preservatives, colorants, antioxidants etc.) that are not allowed for use in the territory of the Russian Federation
4. Radiological control

In case fish products on any stage (output, storage, transportation, selling) don't meet at least one of the requirements, they are considered to be unsuitable for consumtion.

Specific veterinary requirements are described in the tables on the next pages.

[9] Technical regulations 'Fish, non-fish objects of fishery, and processed products from them: production and treatment' / Moscow, 2004.

Quality requirements

Feature	Requirements
General description	Fish products, cut or whole, washed and cleaned from slime, remains of scale and other impurities; chilled up to temperature at minus 1 to 5° C in the depth of muscular tissue; placed in labeled transportation container, interspersed with clean ice by rows.
Appearance	Without external damages. The surface should be clean, of natural color. Some traces from gilling are allowed, if without skin injuries. Gills color is from dark-red to pink.
Odor	Peculiar to fresh fish of a given species, without any extraneous smells. In places of selling fish may have acidulous odor in gills, if easily removed with washing. Slight smell of silt is allowed.
Consistence	Dense, in places of selling may be slightly weaker, but not flabby.
Taste after heat-treatment	Palatable, peculiar to a given species, without any extraneous after-tastes or smells.

Table 41: Quality requirements for fresh/chilled fish products

Feature	Requirements
General description	Fish products, cut or whole, washed and cleaned from slime, remains of scale, silt, grumes and other impurities; frozen up to temperature at not higher than minus 18° C in the depth of muscular tissue; placed in labeled transportation container.
Appearance	Fish (fillet) surface after defrosting should be clean, of natural color peculiar to a given species. Slightly dim surface is allowed as well as slight hypodermic yellowing, if not in meat depth penetrated, some small bruises.
Odor after defrosting	Peculiar to fresh fish of a given species, without any extraneous smells. Admitted: acidulous odor in gills; smell of aged fat, if not in meat depth penetrated; slight iodic odor in case of sea fish; slight silt odor for fresh-water fish.
Consistence after defrosting	Dense, in places of selling may be weaker, but not flabby. Partial dissection by septs in case of fillet is allowed.
Taste after heat-treatment	Palatable, peculiar to a given species, without any extraneous after-tastes or smells.

Table 42: Quality requirements for frozen fish products

Microbiological requirements

Product type	Indicator	Standard (allowance)[10]	
		1st day of expiration period	Last day of expiration period
Alive, fresh, chilled, frozen fish; chilled and frozen fish products to be heat-treated	Mesophilic microorganisms, aerobian and facultatively anaerobic microorganisms colony-forming units per 1 gram	$5 \times 10^4 - 10^5$ n=5 c=3	$10^5 - 10^6$ n=5 c=3
	Termotolerant coliforms 44° cells per 1 gram[11]	10 – 50 n=5 c=3	50 – 100 n=5 c=3
	Staphylococcus aureus cells per 1 gram[12]	10 – 100 n=5 c=3	100 – 300 n=5 c=3
	Salmonella per 25 gr	0 n=5 c =0	
	L.monocytogenes cells per 1 gram[13]	0 – 1 n=5 c=3	1 – 10 n=5 c=3
	V.parahaemolyticus per 25 gr	0 n=5 c =0	

Table 43: Indicators of microbiological safety of fish products

Product type	Indicator	Standard (allowance), critical quantity, milligram per kilogram	Comment
Alive, fresh, chilled, frozen fish; chilled and frozen fish products to be heat-treated	**Toxic agents**		
	Lead	1.0	
	Arsenium	1.0	Fresh-water fish
		5.0	Salt-water fish
	Cadmium	0.2	
	Hydrargyrum	0.3	Fresh-water non-carnivorous fish
		0.6	Fresh-water carnivorous fish
		0.5	Salt-water fish
	Total nitrogen of volatile bases	350.0	For cod group

[10] Standards (allowances) are represented by the minimum and the maximum values; n – number of analyzed point tests (usually 5); c – number of tests during which the results may be between the minimum and the maximum value; all the rest test up to necessary number must have results either less or equal to the minimum value of the interval.

[11] Method of most probable values

[12] Method of most probable values

[13] Method of most probable values

Product type	Indicator	Standard (allowance), critical quantity, milligram per kilogram	Comment
Alive, fresh, chilled, frozen fish; chilled and frozen fish products to be heat-treated	**Pesticides**		
	Hexachlorocyclohexane (α, β, γ isomers)	0.003	Fresh-water fish
		0.2	Salt-water fish
	DDT and its metabolites	0.3	Fresh-water fish
	2,4-D acid, its salts and ethers	None	
	Polychloride xenyl	2.0	
	Antibiotics		
	Chloramphenicol (Levomycetin)	Less than 0.01 unit per 1 gram	Cultured fish only
	Tetracycline group	Less than 0.01 unit per 1 gram	
	Grisinum	Less than 0.5 unit per 1 gram	
	Bacitracin	Less than 0.02 unit per 1 gram	
	Radionuclides		
	Cesium-137	130	Bq/kg
	Strontium-90	100	Bq/kg

Table 44: Indicators of chemical and radiological safety of fish products

Documents accompanying fish products

Each consignment of products should be accompanied by the Conformance declaration, consisting of the following parts:

1. Name of producer (supplier), company's requisites, signature of the company's owner, company's stamp;
2. Reference number of the Declaration, number of its form, name and address of regional office of the Federal agency of fishery, and name of inspector who issued the Declaration;
3. Storage conditions and expiration date;
4. Origin of fish (region of catch) and specific name;
5. Name and address of organization buying this consignment.

Import of fish products

The Federal agency of fishery confirms a state body and an inspection service that are responsible for representation of importing country, control the production conformance, hold the Register of importing companies, and issue Health Certificates for each shipment of fish products.

Labels on distribution packaging and consumers packaging must have the following data:

- Reference number and name of enterprise included in the Register of importing companies;

- Country of origin;
- Origin of the products;
- Presence of genetically modified objects and their percentage

Requirements to production process

Fresh/chilled fish products

1. For production of chilled fish products alive fish, fresh fish and chilled fish may be used.
2. Fresh fish fillet may be made from frozen fish. Fresh whole fish cannot be produced from frozen one.
3. Factory producing chilled fish products should be equipped with ice generator.
4. Before cooling, fish products are to be carefully washed through with water with temperature not more than 15° C in order to remove slime and surface impurities. If necessary, sanation is carried out.
5. Caught fish is to be chilled without delay up to the temperature from minus 1° C to 5° C not later than 1 hour after the catch.
6. The amount of ice in the container for icing should be from 30% to 100% from fish weight, depending on the air temperature. During transportation of the fish, the amount of ice should be not less than 30%.
7. While storage and transportation of fish, accumulation of melt water and its contact with fish products is not allowed.

Frozen fish products

1. For production of frozen fish products alive fish, fresh fish, chilled fish and frozen fish may be used.
2. Before cooling, fish products are to be carefully washed through with running water (or often changed water) with temperature not more than 15° C in order to remove slime, knocked down scales and surface impurities.
3. Duration of freezing is determined individually by company production managers depending on fish species, their size, block size, and production capacity of equipment used.
4. Freezing should be done at temperature not higher than minus 33° C in order to achieve the resulting temperature of fish meat not higher than minus18° C.
5. Freezing may be done on the spot of catch of navaga (Eleginus navaga) at temperature not higher than minus 15° C on ice well ventilated grounds.

Labeling requirements

Production label should contain full and reliable information for consumers. The data are to be marked on distribution packiaging or consumers packaging in the Russian language, and/or in the official language of the country where producer is located, and/or in the official language of the country that ordered the production.

Label should be clean, distinct, and easy to read; the following data are to be presented:

- Name and address of producer
- Register number of producer and trademark
- Description (name) of the product and the region of its origin
- Length and weight of fish
- Type of cutting

- Type of processing
- Own weight
- Date of production (day, month, year)
- Storage conditions
- Expiration date

Label on distribution packaging should additionally contain the following data:

- Number of consumer packages
- Number of carload shipment (if any)
- Reference number of packer or name of foreman

Label on consumer package should additionally contain the following data:

- Directions for use
- Product composition (raw stuff in decreasing order of percentage)
- Storage conditions
- Expiration date
- Presence of vacuum in the package
- Nutritional value
- Energy value
- If product contains genetically modified sources in amount more than 0.9%, there should be notice on the GMO

Storage requirements

Fresh (chilled) fish should be stored at temperature from 0° C to minus 20° C.

Frozen fish should be stored at temperature not higher than minus 18°C and relative humidity 95-100%.

Transportation requirements

In case of any way of transportation, including loading and unloading, fish products should have reliable package that protects them from mechanical damages or unfavorable influence of environment.

While transportation of fish products chilled with ice, proper drain of melt water should be organized. Chilled fish fillet is to be carried in closed plastic containers or plastic bags that don't allow any contact with melt water.

While transportation of frozen fish some short periods of rise in temperature are allowed, if not more than for 3° C, with the exception of fish products carried at the temperature of not higher than plus 4° C if transportation lasts no more than 5 hours.

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