



E U M O F A

European Market Observatory for
fisheries and aquaculture products

Case study

Price structure in the supply chain for Alaska Pollack fish fingers in Germany

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0 Case study scope

Reminder

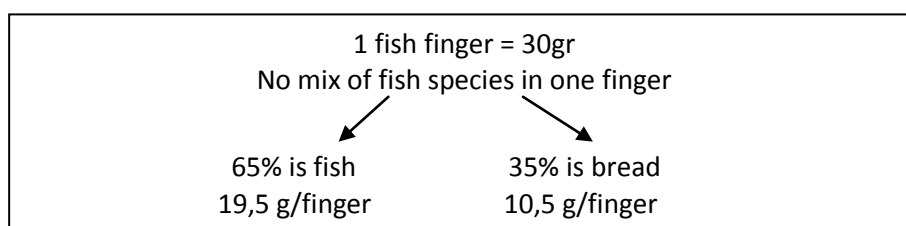
The rationale for choosing Alaska Pollack fish fingers for analysing price transmission and distribution of value in some EU supply chains is described in the following table.

Products	Origin	Characteristics	Market and price drivers
Alaska Pollack fish fingers	Raw material : Frozen fillets/blocks of Alaska Pollack Processed products : Mostly German companies	Final product : fish fingers, frozen, marketed by large-scale retailers in Germany. Most of the raw material is imported from USA, Russia and China	Substitutes : - fish fingers from other fish species, - other recipes for the breaded part. Currency rates (EUR/USD, EUR/CNY, EUR/RUB)

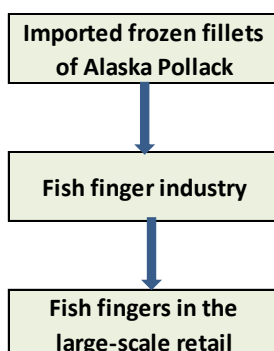
Key elements and limits of the analysis:

- Fish fingers are commodities produced through large processing facilities where costs management and margins equilibrium are major issues.
- Germany is the European largest processor of fish fingers. Processing techniques, costs and margins are very sensitive information in a highly concentrated industry. Therefore all data are not publicly available or shared by the industry.
- Competitive supply is a stake for the reformed Common Fishery Policy.
- The fish finger industry is also supplied by other whitefish species than Alaska Pollack (in fewer volumes), producing a wide range of breaded products (and sometimes other products).

According to experts of the fish finger industry, we will consider that:



The present case study focuses on the import of Alaska Pollack (frozen blocks) and on the fish finger supply chain in Germany:



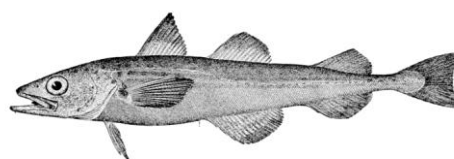
1 DESCRIPTION OF THE PRODUCT

1.1 Name, presentation, place in the nomenclature

The case study focuses on Alaska pollack products (frozen fillets, frozen blocks), which are the main raw material for the production of fish fingers.

Main product

Name: Alaska pollack (*Theragra chalcogramma*) is a North Pacific species of the cod family Gadidae.



Presentation: For a high quality product, single frozen whole Alaska pollack is layered into a block mold and deep frozen to produce fish blocks that are used in Europe and North America as the raw material for breaded and battered fish products. For a lower-quality, double-frozen fillets or minced pieces can be frozen in blocks forms and used as raw material for lower-cost breaded and battered fish fingers.

ERS code: ALK

Substitutes

Main substitutes to Alaska pollack for the fish finger production are other whitefish species:

- Hoki
- Saithe
- Hake
- Cod
- Pangasius.

Alaska pollack is the most common species used for the production of fish fingers.

Related codes in the product nomenclature.

Alaska pollack fish fingers are not identified in the COMEXT and PRODCOM nomenclatures. Nevertheless it can be concluded from market analysis that the main part of the fish fingers are made from Alaska Pollack.

Raw material:

- Alaska pollack, fresh or chilled – COMEXT : 03 02 55 00
- Alaska pollack, frozen – COMEXT : 03 03 67 00
- Alaska pollack, fillets, frozen – COMEXT : 03 04 75 00
- Alaska pollack, other meat (whether or not minced), frozen
 - surimi : COMEXT 03 04 94 10
 - other : COMEXT 03 04 94 90

Final products:

- Frozen raw fish fillets, merely coated with batter or breadcrumbs, whether or not pre-fried in oil (excluding salmonidae, herrings, sardines, sardinella, brisling or sprats, tunas, skipjack and bonito, mackerel, anchovies, eels, fish of the genus *Euthynnus* and fish of the species *Orcynopsis unicolor*) – COMEXT: 16 04 19 91
- Alaska pollack (*Theragra chalcogramma*) and pollack (*Pollachius pollachius*), prepared or preserved, whole or in pieces, (excluding finely minced and fillets, raw, merely coated with batter or breadcrumbs, whether or not pre-fried in oil, frozen) – COMEXT: 16 04 19 95
- Fish fillets in batter or breadcrumbs, including fish fingers (excluding prepared meals and dishes) – PRODCOM: 10 20 25 70.

1.2 Alaska pollack frozen blocks: processing steps

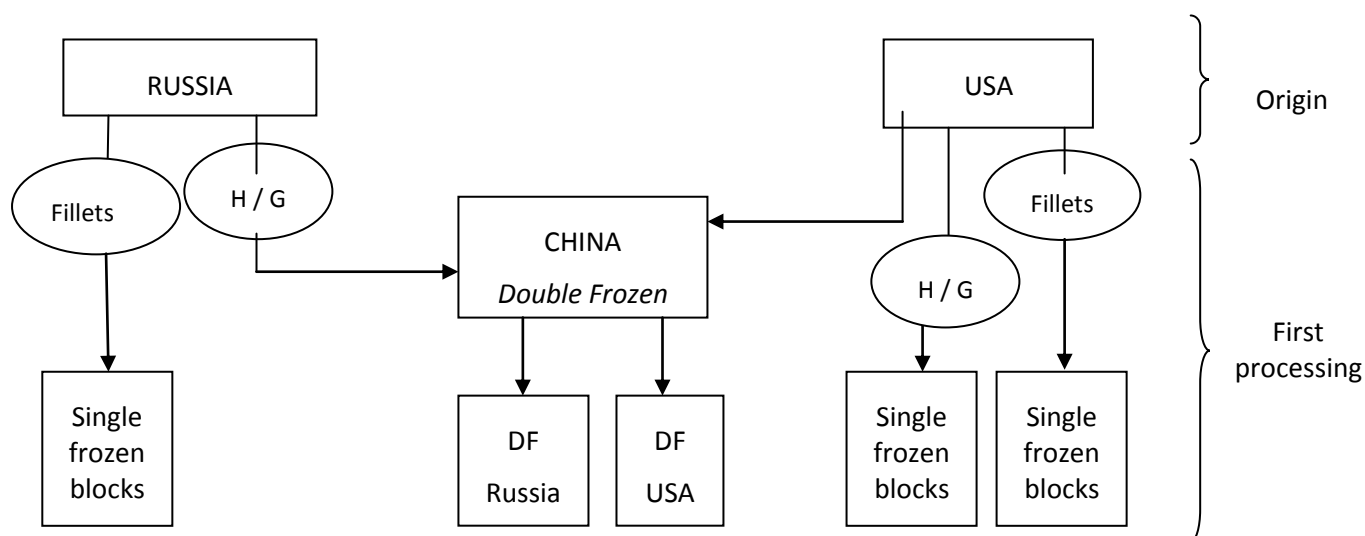
Single or double frozen blocks of Alaska pollack are obtained through 5 possible ways (cf. Figure 1).

For each one, client specifications can be added:

- Pin-bones in (PBI) / pin-bones out (PBO)
- Fillets, blocks, mixed-blocks, loin-less, meat
- Single frozen / double frozen.
- Certification on sustainability: MSC / non MSC

Import data from COMEXT identify the frozen fillets, the frozen meat and all frozen products.

Figure 1 – Alaska pollack : flows of production of blocks



H/G: headed/gutted - DF: double frozen

Minor species like hoki, saithe, hake or cod can be used occasionally by processors.

At the retail stage, various types of products, presentations and information can be found for Alaska pollack fish fingers:

- 10/15/30 pieces per pack,- origin
- different qualities of breeding,
- MSC or not MSC,
- omega-3 enriched,
- etc.

Market prices for the same consumer sale unit can be different according to the MS channels, the regions and the presentation.

Key analysis:

- Raw material type, specifications of the demand and quality of breeding lead to a wide range of final products in the fish finger category;
- The processing industry has developed the assortment of fish finger products according to the fish volume available and the demand requests.

Effects on price:

- The different processing techniques induce different yields on raw material (for example, China industry is working by hand, with very competitive personal costs and better yields than mechanical techniques). Prices of Alaska pollack raw material and final product as fish fingers may consequently vary significantly.

1.3 Production and availability of Alaska pollack

The availability of Alaska pollack has declined in the last years, at least until 2009 : between 2006 and 2009 world catches fell by 13% (i.e. a loss of 360 000 t).

But as from 2010 the trend has been inverted and the production rose to 2 830 00 t in 2010, Russia and USA providing 87% of the world catch.

In the years 2011-2013 the Alaska Pollack quota of the two main suppliers stabilized at around 3.000.000 t.

Table 1 – Alaska pollack quotas in USA and Russia (t)

1000 t	2006	2007	2008	2009	2010	2011	2012	2013
USA	1 599	1 476	1 071	884	915	1 367	1 336	1 387
Russia	1 081	1 300	1 420	1 441	1 652	1 620	1 620	1 620

Source: AIPCE – Finfish study 2013

Raw material is entirely imported mainly from USA, Russia and China. There is no catch of Alaska pollack in the EU.

Figure 2 – World production of Alaska Pollack (tonnes)

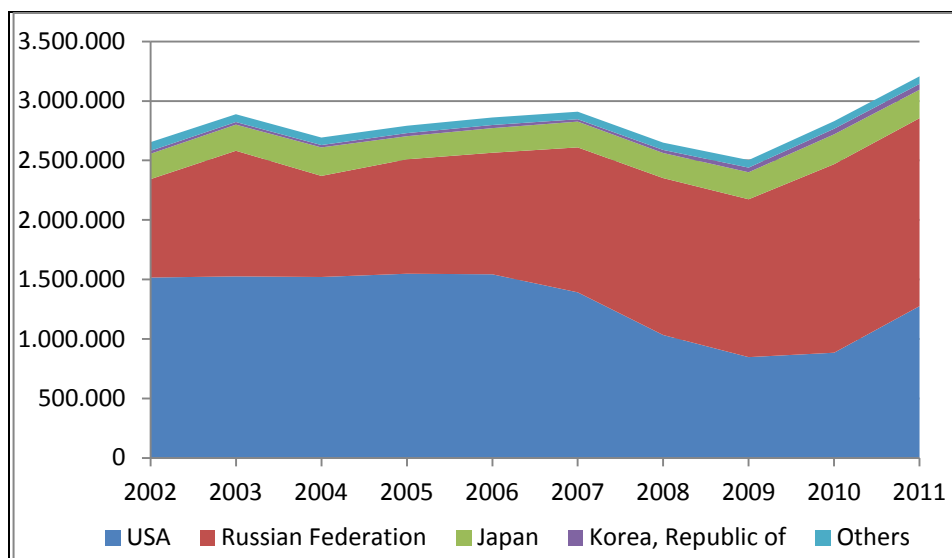


Table 2 – World production of Alaska Pollack (tonnes)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
USA	1 515 515	1 524 904	1 519 928	1 547 359	1 542 598	1 390 797	1 032 452	846 504	883 416	1 274 969
Russian Federation	826 707	1 055 886	849 646	961 659	1 021 652	1 218 453	1 318 740	1 326 537	1 584 527	1 579 792
Japan	213 254	219 652	239 372	194 049	206 794	216 636	211 038	227 261	251 166	238 920
Korea	24 772	22 125	20 061	26 029	26 329	20 144	25 613	38 997	46 795	48 793
Others	72 965	65 395	62 932	61 878	63 114	63 183	61 312	63 362	63 666	64 039
TOTAL	2 653 213	2 887 962	2 691 939	2 790 974	2 860 487	2 909 213	2 649 155	2 502 661	2 829 570	3 206 513
%USA	57%	53%	56%	55%	54%	48%	39%	34%	31%	40%
%Russia	31%	37%	32%	34%	36%	42%	50%	53%	56%	49%

Source: FAO

2 THE EU MARKETS FOR ALASKA POLLACK FISH FINGERS

2.1 Structure of the EU markets

2.1.1 Apparent market by Member State

The EU apparent market for breaded fish and fish fingers can be estimated at 370 000 tonnes in 2012.

UK is the largest consumption market, closely followed by Germany. France ranks third.

These 3 countries account for almost 80% of the EU market in volume.

Germany provides 45% of the EU production and 53% of EU exports.

Table 3 – The EU market for breaded fish and fish fingers in 2012 (volume in tonnes)

Member States	Production	Import	Export	Apparent market	%
Germany	170 422	13 252	63 556	120 118	33
United Kingdom	92 358	31 146	2 652	120 852	33
France	48 054	7 471	4 872	50 653	14
Italy	3 276	19 375	225	22 427	6
Spain	16 114	1 680	587	17 207	5
Estonia	8 476	29	601	7 904	2
Belgium	2 807	4 493	741	6 559	2
Others	36 703	35 576	47 503	24 776	6
TOTAL	378 210	113 022	120 737	370 495	100

Sources:

PRODCOM : code 10 20 25 70 (production of fish fillets in batter or breadcrumbs including fish fingers - excluding prepared meals and dishes)

COMEXT : CN code 16 04 19 91 (frozen raw fish fillets, merely coated with batter or breadcrumbs, whether or not pre-fried in oil (excluding salmonidae, herrings, sardines, sardinella, brisling or sprats, tunas, skipjack and bonito, mackerel, anchovies, eels, fish of the genus *Euthynnus* and fish of the species *Orcynopsis unicolor*).

Apparent domestic market for each Member State is calculated as follows : production – exportation + importation

Alaska pollack is also used, mainly in the German industry, for the production of other fish products (e.g. “Schlemmer-Filets”, i.e. fish-based frozen ready meals).

Germany provides 70% of the EU exports in this segment.

Table 4 - EU trade for prepared/preserved products of Alaska pollack (excluding Alaska pollack fish fingers) in 2012 (volume in tonnes)

Member States	Import	Export
Germany	5 601	20 148
United Kingdom	1 203	56
France	5 890	404
Spain	487	0
Estonia	71	9
Italy	1 924	19
Belgium	1 996	516
Netherlands	1 181	217
Poland	397	3 812
Sweden	628	1 621
Others	4 236	1 797
TOTAL	23 614	28 599

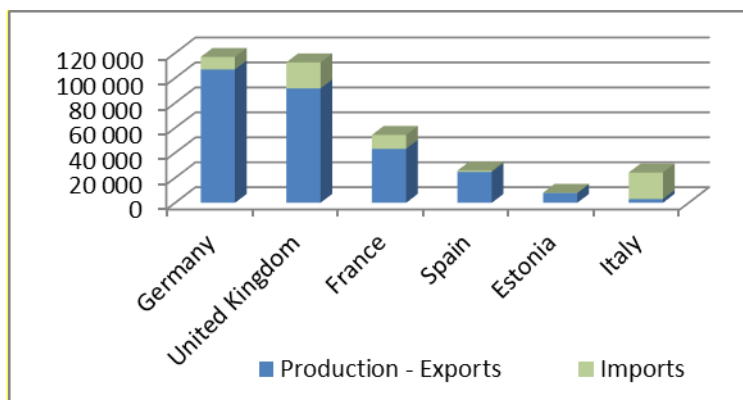
Sources:

COMEXT – CN code 16 04 19 95 : Alaska pollack "*Theragra chalcogramma*" and pollack "*Pollachius pollachius*", prepared or preserved, whole or in pieces (excl. finely minced and fillets, raw, merely coated with batter or breadcrumbs, whether or not pre-fried in oil, frozen)

2.1.2 Supply of the main EU market for breaded fish products

The structure of supply is similar in the 3 main countries of the EU market : the domestic supply is the main part of the global supply (more than 90%).

Figure 3 – Supply of the main EU markets for breaded fish in 2012 (volume in tonnes)



Sources:

PRODCOM – 10 20 25 70 : production of fish fillets in batter or breadcrumbs including fish fingers (excluding prepared meals and dishes)

COMEXT – 16 04 19 91 : frozen raw fish fillets, merely coated with batter or breadcrumbs, whether or not pre-fried in oil (excluding salmonidae, herrings, sardines, sardinella, brisling or sprats, tunas, skipjack and bonito, mackerel, anchovies, eels, fish of the genus *Euthynnus* and fish of species *Orcynopsis unicolor*)

2.1.3 Main importing and exporting countries within the EU

Statistical trade public data do not identify separately “Alaska pollack fish fingers”. Statistical items refer either to all kind of fish fingers (including of Alaska pollack) or to all prepared/preserved products from Alaska pollack (including fish fingers).

Figure 4 represents the main importing and exporting countries for these products.

Germany appears as the main exporter for both product categories.

The United Kingdom and Italy are the main importers of breaded products.

Figure 4 – Main importers (left side) and main exporters (right side) of fish fingers and Alaska pollack prepared products (volumes in tonnes - 2012)



Sources:

COMEXT – 16 04 19 91 : frozen raw fish fillets, merely coated with batter or breadcrumbs, whether or not pre-fried in oil (excluding salmonidae, herrings, sardines, sardinella, brisling or sprats, tunas, skipjack and bonito, mackerel, anchovies, eels, fish of the genus *Euthynnus* and fish of species *Orcynopsis unicolor*)

COMEXT – 16 04 19 95 : Alaska pollack and pollack, whole or in pieces, but not minced, prepared or preserved

UK, the main importer of frozen raw coated fillets, imports mainly from EU partners, primarily Germany (18 200 t), Poland (6 200 t), Denmark (2 800 t) and the Netherlands (2 300 t). Its extra-EU imports are very limited (600 t) and come mainly from China.

Germany, the main importer of Alaska pollack fish fingers, imports exclusively from EU partners (mainly Poland and Denmark).

Germany, as main exporting country for both products, sells at more than 95% to EU Member States, mainly UK, Austria, the Netherlands, Italy and Belgium. Switzerland is the only significant extra-EU destination.

2.2 The German market

2.2.1 A market supplied by the domestic production

The German market for fish fingers and Alaska pollack prepared products exceeds 120 000 t in 2012, in slight decrease (-3,9%) compared to 2010.

It is supplied at 89% by the national processors.

Table 5 – The German market for breaded fish products and Alaska Pollack prepared/preserved products in 2012

t	Breaded fish products
Production	170 422
Import	13 252
Export	63 556
Market 2012	120 118
<i>Market 2010</i>	<i>125 007</i>
<i>Evolution 2012/2010</i>	<i>-3,91%</i>

Sources:

PRODCOM – 10 20 25 70 : production of fish fillets in batter or breadcrumbs including fish fingers (excluding prepared meals and dishes)

COMEXT – 16 04 19 91 : frozen raw fish fillets, merely coated with batter or breadcrumbs, whether or not pre-fried in oil (excluding salmonidae, herrings, sardines, sardinella, brisling or sprats, tunas, skipjack and bonito, mackerel, anchovies, eels, fish of the genus *Euthynnus* and fish of species *Orcynopsis unicolor*)

The statistics of the German Frozen Food Institute (DTI) differentiate the market according to the product categories (fish fingers, breaded fish) but not according to the fish species used.

After a +5,3% increase of during the period 2007-2011, the market for fish fingers decreased in 2012 (-2,0% compared to 2011).

The domestic sales of breaded fish dwindle (-8,0% since 2007).

Table 6 – German market for frozen fish fingers and breaded fish

Product category	2007	2008	2009	2010	2011	2012
Fish fingers ("Fischstäbchen")	56 577	57 341	56 925	59 312	59 603	58 481
Breaded fish ("Panierter Fisch")	84 811	84 838	81 745	82 587	82 270	77 919
Total	141 388	142 179	138 670	141 899	141 873	136 400

Source: DTI (Deutsches Tiefkühlkostinstitut) – Yearly sales statistics

2.2.2 Structure of the supply chain

Fish fingers are products mainly sold in the retail trade (92,4% of sales in 2012), whereas breaded fish goes firstly to the HORECA sector (52,6%).

Figure 5 – The German market for fish fingers (2012)

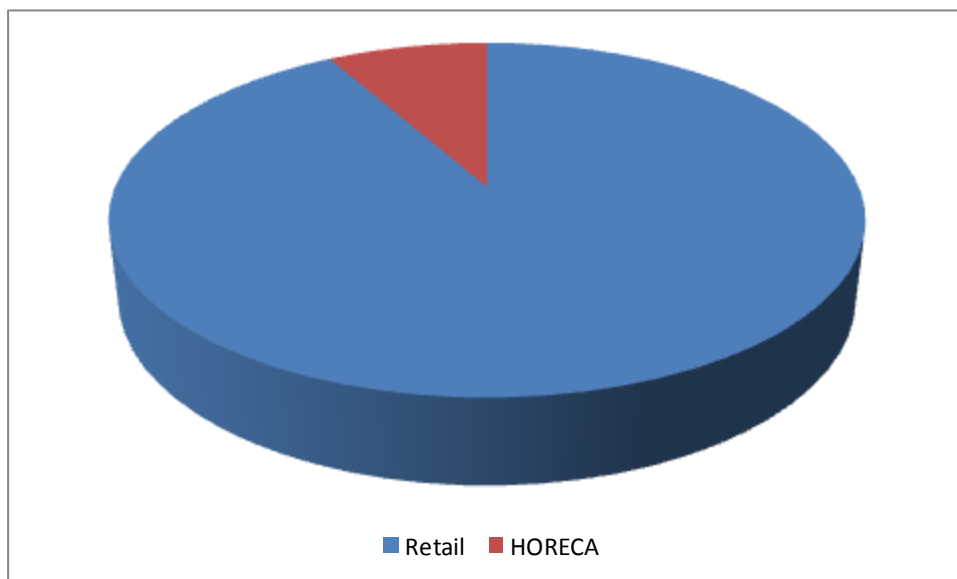
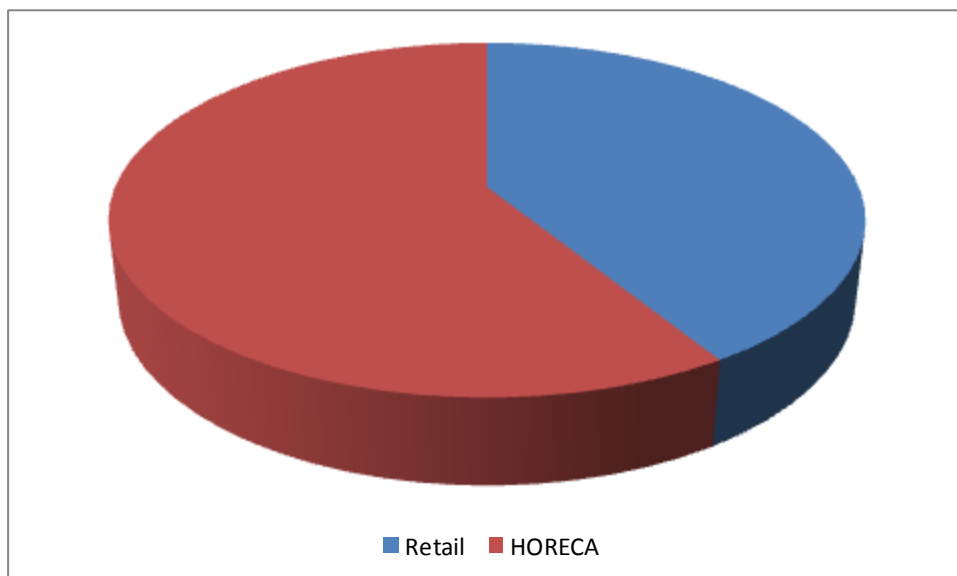


Figure 6 – The German market for breaded fish (2012)



Source : DTI (Deutsches Tiefkühlkostinstitut) – Yearly sales statistics

3 PRICES ALONG THE SUPPLY CHAIN

This section analyses price data available (from other EUMOFA modules) and price trends at different levels of the fish finger supply chain in Germany, with the objective to set the framework for price transmission analysis (chapter 4).

3.1 Price of raw material

3.1.1 Evolution of average import prices

The German processing industry purchases Alaska pollack mostly in the form of blocks of frozen fillets. They are invoiced in US dollars.

Table 7 – Structure of the German imports of Alaska pollack in 2012 (t)

	t product weight	t live weight	% <i>live weight</i>
Fresh whole	491	570	0,1%
Frozen whole	29	44	0,0%
Frozen fillets	157 079	463 383	93,5%
Frozen meat	7 558	19 953	4,0%
Prepared	5 601	11 426	2,3%
Total	170 758	495 376	100,0%

Source: COMEXT

CN codes : 03 25 55 00, 03 03 67 00, 03 04 75 00, 03 04 94 10 + 03 04 94 90, 16 04 19 95

Conversion factors (source EUMOFA) :

Fresh whole	1,16
Frozen whole	1,59
Frozen fillets	2,64
Prepared	2,04

In the last years German imports of frozen Alaska pollack fillets remained close to the peak of 2008.

The price increase in 2009 can be attributed, at least partly, to the decline of quotas in the USA (US exports fell from 53 300 t in 2008 to 28 000 t in 2009) and to the resulting price rise (from 2,34 €/kg in 2008 to 3,00 €/kg in 2009 for US Alaska pollack). Higher availability of major stocks led to a lower prices in the years 2010-2012.

The main supplier is China (86 100 t in 2012), which reprocesses Alaska pollack caught by the Russian fleet, followed by USA.

Table 8- Average prices of imported frozen Alaska pollack fillets in Germany

	2006	2007	2008	2009	2010	2011	2012
IMPORT (value - 1000 €)	333 160	326 984	373 824	373 273	364 289	357 022	372 889
IMPORT (volume - tonnes)	161 363	164 487	178 226	142 505	146 591	155 127	157 079
IMPORT (price – €/kg)	2,06	1,99	2,10	2,62	2,49	2,30	2,37

Source: COMEXT

CN codes : 03 04 20 85 (2006) then 03 04 29 85 (2007-2011) then 03 04 75 00 (from 2012 onwards)

3.1.2 Evolution of import prices by origin

Prices of frozen fillets have progressed at the same pace independently from the origin, as can be seen in Figure 7 below, with one exception : the price of Russian fillets decreased faster than the other two main trading partners for the years 2009-2011.

China is the main provider with some 60% of total Alaska Pollack frozen fillets imported by Germany.

The price decrease of this period follows the recovery in catches and the larger quotas (see §1.3 above).

Table 9 - Imports of frozen Alaska pollack fillets in Germany by main origin

		2006	2007	2008	2009	2010	2011	2012
China	t	87 993,4	78 198,6	89 521,3	85 464,4	87 699,4	83 234,4	86 123,0
	1 000 €	165 677	143 247	167 072	203 981	208 025	184 116	197 508
	€/kg	1,88	1,83	1,87	2,39	2,37	2,21	2,29
Russia	t	27 552,7	25 243,1	28 919,5	21 475,1	17 644,1	17 626,5	9 904,1
	1 000 €	62 768	53 778	66 456	64 032	43 699	37 652	23 561
	€/kg	2,28	2,13	2,30	2,98	2,48	2,14	2,38
USA	t	39 213,0	55 061,5	53 281,3	28 020,3	36 285,0	48 111,2	53 381,7
	1 000 €	89 370	116 324	124 474	83 932	99 184	118 356	131 430
	€/kg	2,28	2,11	2,34	3,00	2,73	2,46	2,46

Source: COMEXT

CN codes : 03 04 20 85 (2006) then 03 04 29 85 (2007-2011) then 03 04 75 00 (from 2012 onwards)

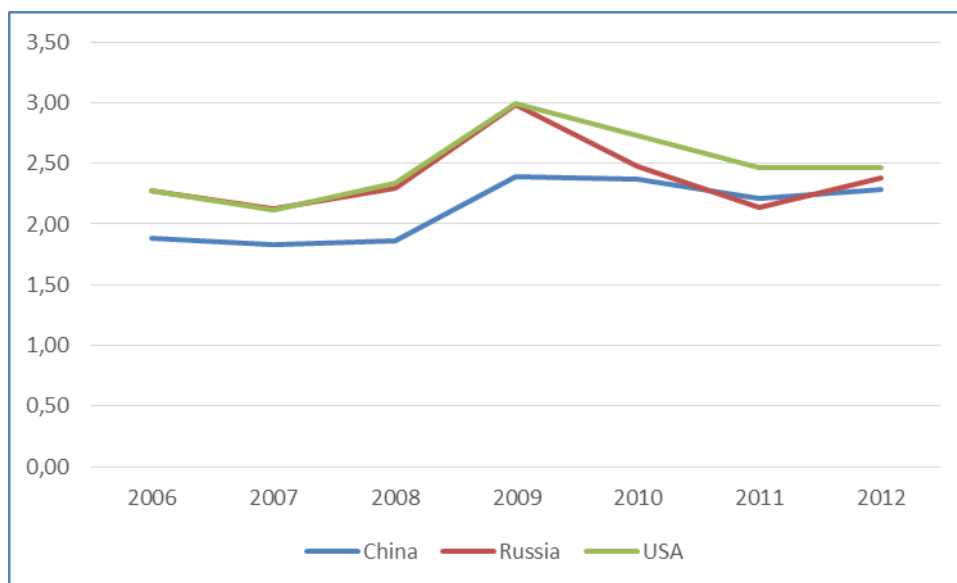
Imports from USA have increased in 2012 for the third year in a row (+29,5% in 2010, +32,6% in 2011, +11,0% in 2012 - in volume), whereas other imports stabilize at around 85.000 t (China) or plummet (Russia :-43,8% in 2012).

The fall of Russian deliveries to the German processing industry can be attributed to two main factors :

- the increased competition for Alaska pollack in other markets,

- the long assessment process to obtain MSC certification : the first one of the 3 main Russian Alaska pollack fisheries (Russia Sea of Okhotsk fishery) reached the certification in September 2012 and the other two (Russian West Bering Sea fishery and Russian Navarinsky fishery) should get in January 2014.

Figure 7 – Import prices of frozen Alaska pollack fillets in Germany by main origin (€/kg)



Source: COMEXT

CN codes : 03 04 20 85 (2006) then 03 04 29 85 (2007-2011) then 03 04 75 00 (from 2012 onwards)

In 2013 (first 11 months of the year prices have slightly decreased, from -2,0% for USA to -4,8 % for China (compared to same period of the previous year).

Table 10 – Import prices of Alaska pollack blocks of fillets in Germany in 2013 (January-November) (EUR/kg)

Origin	January-November 2012	January-November 2013
China	2,30	2,19
Russia	2,37	2,27
USA	2,45	2,40

Source : COMEXT

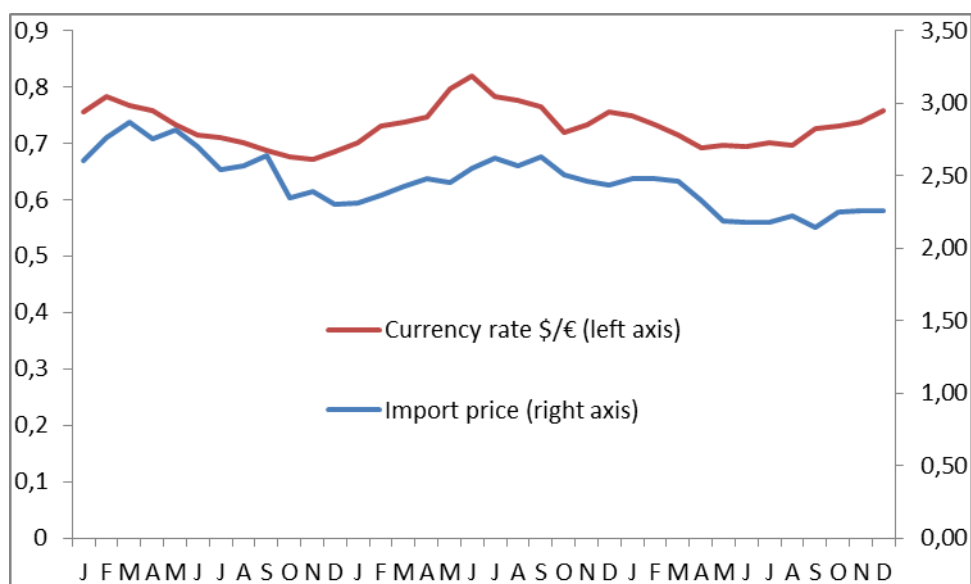
CN code : 03 04 75 00

3.1.3 Impact of exchange rate fluctuations

The analysis of import prices and exchange rates by month shows that the exchange rate fluctuations are the main driver of import price volatility : the two lines in the following charts (in blue : evolution of import prices, in red : evolution of the exchange rate US Dollar vs. Euro) are parallel.

This appears quite logical for a product stemming from industrial fishing fleets and traded in US dollars.

Figure 8 – Evolution 2009-2011 of import prices of Alaska pollack frozen fillets imported from third countries (in €/kg) and currency rate \$/€



Sources:

- Import prices : average monthly import prices of frozen fillets of Alaska Pollack imported from third countries : COMEXT - CN code 0304298p

- Currency rate \$/€ : European Central bank – Statistical Data Warehouse - Dataset “Exchange Rates” ; Frequency: Monthly ; Currency: US dollar ; Currency denominator: Euro ; Exchange rate type: Spot ; Series variation - EXR context: Average or standardized measure for given frequency

3.2 Ex factory prices

PRODCOM data allow calculating an annual average ex-factory price (value/volume) for battered and breaded products (code 10 20 25 70).

Limits : A wide range of products is concerned as well as different markets : export/domestic market, HORECA/home consumption,

The German industry clearly shows the lowest production prices, in relation with its huge processing capacities in Bremerhaven (bigger frozen fish factory in the world).

Table 11 : Ex-factory prices for “fish fillets in batter or breadcrumbs including fish fingers” (€/kg)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
France	3,95	4,07	4,38	4,39	4,31	5,06	4,63	4,16	4,12	4,35	4,63
Germany	2,61	2,46	2,28	2,53	2,65	2,69	nd	3,06	2,97	2,97	2,97
Italy	4,13	4,37	4,22	4,01	4,09	4,89	4,78	4,17	4,60	4,64	4,97
United Kingdom	na	na	na	na	na	na	4,89	4,45	4,74	4,69	5,83
Denmark	4,45	4,33	4,27	4,09	4,19	4,48	na	na	na	na	na
Poland	na	na	na	1,8	na	1,85	1,95	na	na	na	na

Source : EUROSTAT-PRODCOM

Code : 15 20 14 17 for the period 2002-2007, 10 20 25 70 for the period 2008-2012

3.3 Retail prices

In the absence of available price data at the retail level on fish fingers we give in the table below the prices of fish fingers collected in different types of retail outlets.

This price survey has been made in February 2012 but prices have not changed a lot since then. For instance the 450 gram pack of MSC fish fingers is still sold at 1,39 € by ALDI.

Table 12 : Comparison of fish fingers 100% Alaska pollack retail prices – February 2012

Retailer's type	Channel	Presentation	Pieces	Weight (gr)	Price (€)	Price (€/kg)	Average price/100gr
Discounters	LIDL	Fish fingers MSC	15	450	2,89	6,42	0,64
		Fish fingers MSC	15	450	1,39	3,09	0,31
	ALDI	Fish fingers MSC	15	450	1,39	3,09	0,31
Large supermarket	TOOM	Fish fingers MSC	10	300	1,99	6,03	0,60
		Fish fingers MSC	15	450	2,79	6,20	0,62
		Fish fingers, om-3, MSC	12			8,31	0,83
		Fish fingers, Chili, MSC	12	360	1,99	5,53	0,55
		Fish fingers	15	450	1,39	3,09	0,31
Cash & carry	FEGRO	Fish fingers	15	450	1,38	3,07	0,31
		Fish fingers	30	900	4,27	4,74	0,47
		Fish fingers MSC	10	300	1,98	6,60	0,66
		Fish fingers MSC	15	450	2,77	6,16	0,62
		Fish fingers MSC, special offer	30	900	3,95	4,39	0,44

Source : Bundesverband der Deutschen Fischindustrie

It is interesting to note the weight of MSC certified products in the product range. It is clear that sustainability claims are an important feature on the German market. This explains why US certified products can be the preferred option for some major processors and can reach the highest prices among the top-3 suppliers. This can also explain the decrease of Russian deliveries to Germany during the long MSC certification process, which only found the beginnings of a successful solution in autumn 2013.

3.4 Export prices

Germany exports large quantities of breaded fish and fish fingers (respectively 63 640 t of frozen raw coated fish fillets in 2012) and 30 200 t of fish fingers (out of which 20 148 t, i.e. 67%, from Alaska Pollack).

Table 13 : Evolution of German exports of frozen breaded fish fillets (in tonnes)

	Coated fillets
2006	54 450
2007	71 879
2008	79 044
2009	62 998
2010	54 738
2011	54 825
2012	63 640

Source : COMEXT

Code : 16 04 19 91 (fillets, raw, merely coated with batter or breadcrumbs, whether or not pre-fried in oil, frozen)

Table 14 : Evolution of German exports of frozen Alaska Pollack fish fingers (in tonnes)

	Alaska pollack fish fingers
2006	9 874
2007	10 761
2008	10 652
2009	9 941
2010	13 609
2011	20 203
2012	20 148

Source : COMEXT

Code : 16 04 19 95

The export price decreased in the last years, from a peak of 3,41 €/kg in 2009 to 3,17 €/kg in 2012.

Table 15 : Evolution of the average German export price of the breaded filets (€/kg)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average price	3,10	2,97	2,86	2,96	3,03	3,05	3,41	3,37	3,30	3,17

Source : COMEXT

Code : 16 04 19 95

4 PRICE TRANSMISSION IN THE SUPPLY CHAIN

The EU fish fingers processing industry is highly concentrated.

FROZEN FISH INTERNATIONAL, PICKENPACK and FROSTA are key players in Germany.

FROZEN FISH INTERNATIONAL is the world leader on the fish finger scene. It owns in Bremerhaven the world's largest frozen fish factory (production volume > 80 000 t) and centre for sourcing, development and production of frozen fish articles and ready meals within the Iglo group. It produced 89 000 t in 2012 for a turnover of EUR 260 million.

PICKENPACK processes about 70 000 t of fish, i.e. 400 million retail packs of fish fingers, out of which 65% are for the German market where it has a market share of 25%.

Available financial accounts of German companies allow estimating roughly some costs : raw material, labour costs and other operating costs. They also inform on profitability ratios (EBIT, EBITDA). Several elements limit their use :

- they encompass the whole activities and products of the companies (for this reason we cannot include FROSTA in the analysis because a significant part of this company's activity concerns vegetable processing),

- changes in the capital structure (mergers, acquisitions, ...) can affect the readability of ratios,

- differences in the consolidation of companies' accounts can affect make some evolutions unclear (for instance in an international group – which is the case of both FROZEN FISH INTERNATIONAL and PICKENPACK – a part of the material costs can be made up of purchases of finished goods from another company of the group) and make the ratio "labour costs/turnover" difficult to appraise,

- access to data was made difficult for confidentiality reasons. This undermined ability to analyse specific costs of fish finger production and better understanding evolutions.

Therefore table 16 and figures 9 and 10 must be read with care. The main finding is the convergence of the two ratios for the two leading companies.

Table 16 – Costs and margins of the main fish finger processors in Germany

	FROZEN FISH INTERNATIONAL							PICKENPACK						
	Turnover (1000 €)	Material costs (1000 €)	Costs of employees (1000 €)	EBIT (1000 €)	Material costs (%)	Costs of employees (%)	EBIT (%)	Turnover (1000 €)	Material costs (1000 €)	Costs of employees (1000 €)	EBIT (1000 €)	Material costs (%)	Costs of employees (%)	EBIT (%)
2002	247 595	185 334	37 675	3 546	74,9%	15,2%	1,4%	140 250	96 818	14 926	6 734	69,0%	10,6%	4,8%
2003	221 321	149 748	42 108	6 060	67,7%	19,0%	2,7%	172 856	112 546	20 583	11 918	65,1%	11,9%	6,9%
2004	202 025	134 141	38 234	6 378	66,4%	18,9%	3,2%	186 533	116 142	23 841	13 825	62,3%	12,8%	7,4%
2005	213 341	138 979	36 177	13 768	65,1%	17,0%	6,5%	185 558	120 241	23 787	9 201	64,8%	12,8%	5,0%
2006	224 600	156 788	35 177	6 114	69,8%	15,7%	2,7%	228 611	166 988	23 211	1 810	73,0%	10,2%	0,8%
2007	272 249	201 809	36 915	5 033	74,1%	13,6%	1,8%	222 890	156 032	24 315	2 824	70,0%	10,9%	1,3%
2008	318 800	230 228	37 844	4 962	72,2%	11,9%	1,6%	224 032	153 000	24 570	5 857	68,3%	11,0%	2,6%
2009	324 893	239 914	36 161	13 223	73,8%	11,1%	4,1%	230 064	158 392	23 876	7 877	68,8%	10,4%	3,4%
2010	298 444	216 658	35 059	14 824	72,6%	11,7%	5,0%	217 058	143 225	24 429	10 445	66,0%	11,3%	4,8%
2011	280 737	201 117	33 533	11 692	71,6%	11,9%	4,2%							

Figure 9 – Evolution of ratio Labour cost/Turnover for the two main German fish finger processors

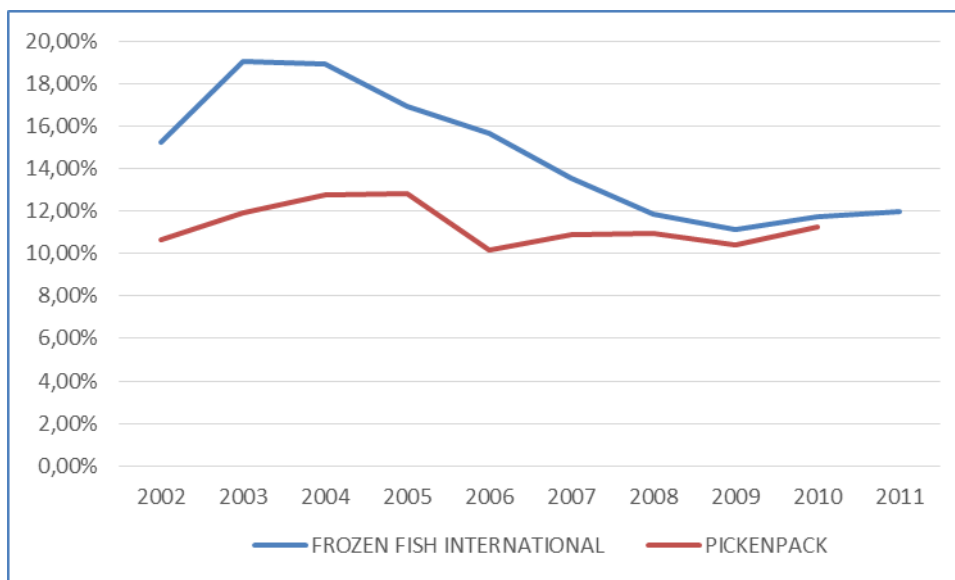
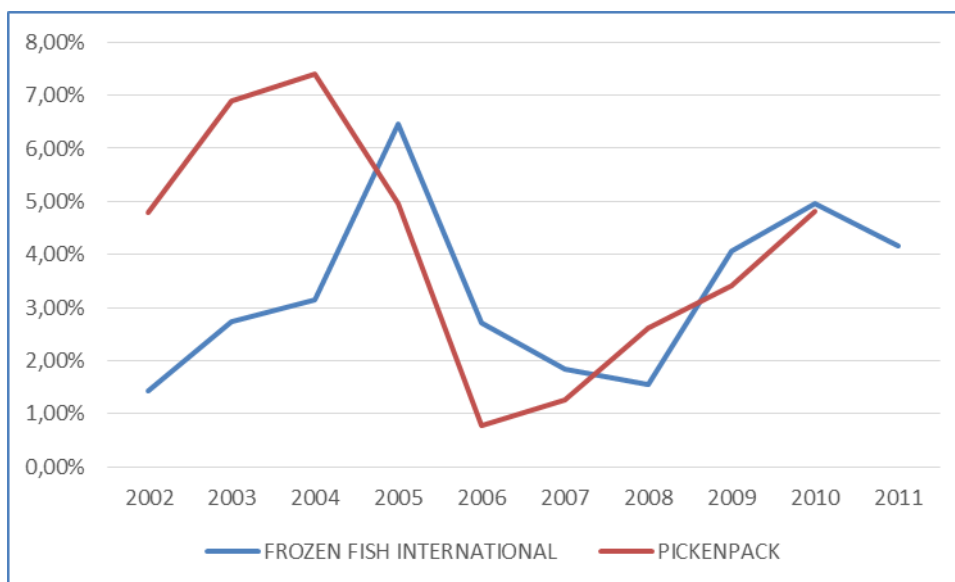


Figure 10 – Evolution of EBIT margin for the two main German fish finger processors



Source :

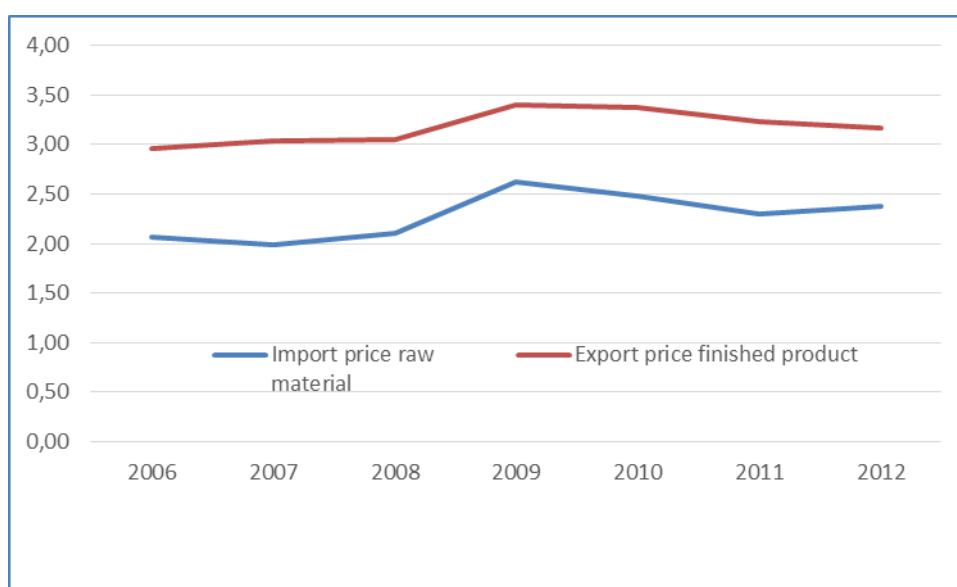
The elements of costs and margins of this table come from the balance sheets and profit and loss accounts issued by the database AMADEUS.

EBIT (Earnings Before Interest and Taxes) is an indicator of a company's profitability. It is also referred to as operating margin.

Figure 11 shows that the export price of the final product and the import price of raw material follow parallel evolutions.

This is linked to important weight of fish in final products : according to the German Food Code (Deutsches Lebensmittelbuch) fish fingers must include at least 65% of fish fillet.

Figure 11 – Evolution of import price (raw material) and export price (manufactured product)



However price transmission is not a mechanical phenomenon : margins of German processors decreased in periods where the price of raw material increased, probably due to low elasticity of demand for fish fingers.

Table 17 shows that the part of raw material (in %) in the total price of the finished product increases when the cost of raw material rises (e.g. 2008-2009). That means that the price of the finished product rises less than the cost of raw material :

- in 2008 the raw material rises by +5,50%, the finished product only by +0,69%,
- in 2009 the raw material rises by +24,94%, the finished product only by +11,60%.

On the other hand the price of the finished product drops less when raw material costs go down :

- in 2010 the raw material cost falls by -5,17%, the finished product by -1,09%,
- in 2011 the raw material cost falls by -7,37%, the finished product by -3,98%.

In the long run evolutions of raw material costs and prices of finished products are very close : respectively +11,48% and + 9,22% for the period 2006-2011.

But the situation changed in 2012 due to the market conditions : the export price continued to fall (-1,98%) whereas raw material prices rose by +3,17%.

Table 17 – Evolution of import price (raw material) and export price (manufactured product)

Year	Export price finished product (€/kg)	Import price raw material (€/kg)	Cost raw material (€/kg)	% raw material
2006	2,962	2,065	1,342	45,31%
2007	3,031	1,988	1,292	42,63%
2008	3,052	2,097	1,363	44,68%
2009	3,406	2,619	1,703	49,99%
2010	3,369	2,485	1,615	47,94%
2011	3,235	2,301	1,496	46,23%
2012	3,171	2,374	1,543	48,66%

Sources:

- Import prices raw material (average yearly import prices of frozen Alaska pollack fillets)

COMEXT - CN code 03 04 29 85 (2006-2011) then 03 04 75 00

- Export prices finished product : average yearly export prices of prepared Alaska Pollack (mostly frozen fish fingers): COMEXT - CN code 16 04 19 95

CN code 16 04 19 91 includes “frozen raw fish fillets, coated with batter or breadcrumbs, whether or not pre-fried in oil” but is not limited to Alaska Pollack (it groups all fish but salmon and pelagics).

CN code 16 04 19 95 includes “Alaska pollack *Theragra chalcogramma*” and pollack “*Pollachius pollachius*”, prepared or preserved, whole or in pieces; it refers only to these two species but excludes “finely minced and fillets, raw, merely coated with batter or breadcrumbs, whether or not pre-fried in oil, frozen). Anyhow, as average prices are very similar for the two items, we used 16 04 19 95 in the table (because of wider presence of Alaska Pollack).

- Cost raw material = 65% of import price raw material (incorporation rate)

5 ANNEX: SOURCES

- EUMOFA
- COMEXT
- BUNDESVERBAND DER DEUTSCHEN FISCHINDUSTRIE UND DES FISCHGROSSHANDELS E.V.
Große Elbstraße 133
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- Deutsches Tiefkühlinstitut
- AMADEUS