

Der Open-Access-Publikationsserver der ZBW – Leibniz-Informationzentrum Wirtschaft
The Open Access Publication Server of the ZBW – Leibniz Information Centre for Economics

Flatau, Janine; Hart, Volker; Kavallari, Aikaterini; Schmitz, Peter Michael

Working Paper

Supply Chain Analysis of Olive Oil in Germany

Discussion Papers / Zentrum für internationale Entwicklungs- und Umweltforschung, No. 35

Provided in cooperation with:

Justus-Liebig-Universität Gießen (JLU)

Suggested citation: Flatau, Janine; Hart, Volker; Kavallari, Aikaterini; Schmitz, Peter Michael (2007) : Supply Chain Analysis of Olive Oil in Germany, Discussion Papers / Zentrum für internationale Entwicklungs- und Umweltforschung, No. 35, <http://hdl.handle.net/10419/21931>

Nutzungsbedingungen:

Die ZBW räumt Ihnen als Nutzerin/Nutzer das unentgeltliche, räumlich unbeschränkte und zeitlich auf die Dauer des Schutzrechts beschränkte einfache Recht ein, das ausgewählte Werk im Rahmen der unter

→ <http://www.econstor.eu/dspace/Nutzungsbedingungen> nachzulesenden vollständigen Nutzungsbedingungen zu vervielfältigen, mit denen die Nutzerin/der Nutzer sich durch die erste Nutzung einverstanden erklärt.

Terms of use:

The ZBW grants you, the user, the non-exclusive right to use the selected work free of charge, territorially unrestricted and within the time limit of the term of the property rights according to the terms specified at

→ <http://www.econstor.eu/dspace/Nutzungsbedingungen>
By the first use of the selected work the user agrees and declares to comply with these terms of use.

Zentrum für internationale Entwicklungs- und Umweltforschung der
Justus-Liebig-Universität Gießen

**Supply Chain Analysis of Olive Oil
in Germany**

by

Janine Flatau, Volker Hart, Aikaterini Kavallari

and P. Michael Schmitz

Nr. 35, Giessen, June 2007

The study has been prepared in June 2005 for the MEDFROL Project “Market and Trade Policies for the Mediterranean Agriculture: The case of fruit / vegetables and olive oil” under the European Sixth Framework Program, Priority 8.1, Policy-Oriented Research, Integrating and Strengthening the European Research Area. Views in this paper are those of the authors and do not necessarily reflect those of the institutions of affiliation, the MEDFROL project and the EU. Any errors in the paper are in the responsibility of the authors.

Table of Contents

List of figures.....	III
List of tables	III
1 Introduction	1
2 The demand side	2
3 The supply side	6
3.1 Imports – Exports.....	6
3.2 Wholesale trade.....	9
3.3 Food industry	9
3.4 Food Retailing	9
3.5 Specialised shops	10
3.6 Big consumers	10
3.7 Business relationships between the different players in the supply chain	11
4 Quality and labelling issues	13
5 Institutional structure	15
6 Conclusions.....	16
Literature.....	17
Annex	18

List of figures

Figure 1: Imports of virgin olive oil in Germany (2003)	3
Figure 2: Development of the consumption of edible oils in 1997 vs. 2003 in %	4
Figure 3: Development of the consumption of edible oils in 1997 vs. 2003 in %	5
Figure 4: Suppliers of olive oil to the importers in terms of volume , in %.....	7
Figure 5: Recipients of olive oil in terms of value, in %.....	8
Figure 6: Acquisition and selling mechanisms of the importers, in %	11
Figure 7: Trade flows in the supply chain of olive oil in Germany, 2003	12

List of tables

Table 1: Market developments of all oils and fats (AF) and vegetable oils and fats (VO) in 1,000 tonnes in Germany	2
Table 2: Consumption of olive oil in Germany	4
Table 3: Imports of virgin olive oil (HS150910) in Germany from country of origin	18
Table 4: Imports of olive oil and its fractions refined but not chemically modified (HS150990) in Germany from county of origin	19
Table 5: Imports of oils & their fractions obtained from olives, refined (HS151000) in Germany from country of origin.....	20
Table 6: Export destinations of virgin olive oil (HS150910) from Germany.....	21
Table 7: Export destinations of olive oil and its fractions refined but not chemically modified (HS150990) from Germany.....	22
Table 8: Export destinations of oils & their fractions obtained from olives, refined (HS151000) from Germany	22
Table 9: Olive oil importers in Germany, 2005.....	23

1 Introduction

Olive oil is a typical product of the Mediterranean basin, where almost all of the world production takes place. Due to campaigns for a healthier way of living, consumption of olive oil has also increased in non Mediterranean countries in recent years. As a result of the expanded demand the different participants in the supply chain of olive oil strengthen their efforts to obtain a higher market share in these non-traditional markets.

Germany with 82.5 million inhabitants is of special interest for olive oil producing countries as it serves as an attractive export destination. Although during the period 1997/98 Germany imported only about 2.6 % of the world's imports of olive oil and consumed about 0.9 % of the world consumption, it is considered to be a very dynamic market (Ward et al., 2002). Olive oil becomes more and more popular in Germany not only through the "for a healthier life" campaigns but also through immigrants coming from the Mediterranean basin. Another reason for the growing popularity of olive oil is the increasing convergence of the consumption habits of the European people as a consequence of the expanded tourism to southern countries. The Germans are integrating the Mediterranean diet into their own habits and thus changing gradually their way of cooking in using more and more olive oil in their dishes.

Against this background this report aims to analyse the supply chain of olive oil in Germany. For this purpose the report is organised in five chapters. Following the introduction, the second chapter deals with the demand and the third one with the supply of olive oil in Germany. Quality and labelling issues related with the consumption of olive oil are discussed in the fourth chapter. In the fifth chapter the institutions and organisations in Germany occupied with olive oil are briefly presented. After the conclusions follows the annex including detailed tables.

2 The demand side

Olive oil as a vegetable oil belongs to the food category “fats for food uses”. In order to assess accurately the increasing importance of olive oil within this category, firstly, it is necessary to give a brief overview about the developments of fats for food uses as a whole.

The domestic use for all oils and fats has steadily increased from 1997 to 2003 (Table 1). Whereas the consumption for food uses has declined over the considered period, the use for feed and manufacture purposes has noticeably risen. The developments for the domestic use of vegetable oils and fats are similar to those of all oils and fats, i.e. the share of food consumption on domestic use has decreased, while feed and manufacture uses have become more important over time. The food consumption of vegetable oils and fats account for about 50 % of the total food consumption of all oils and fats.

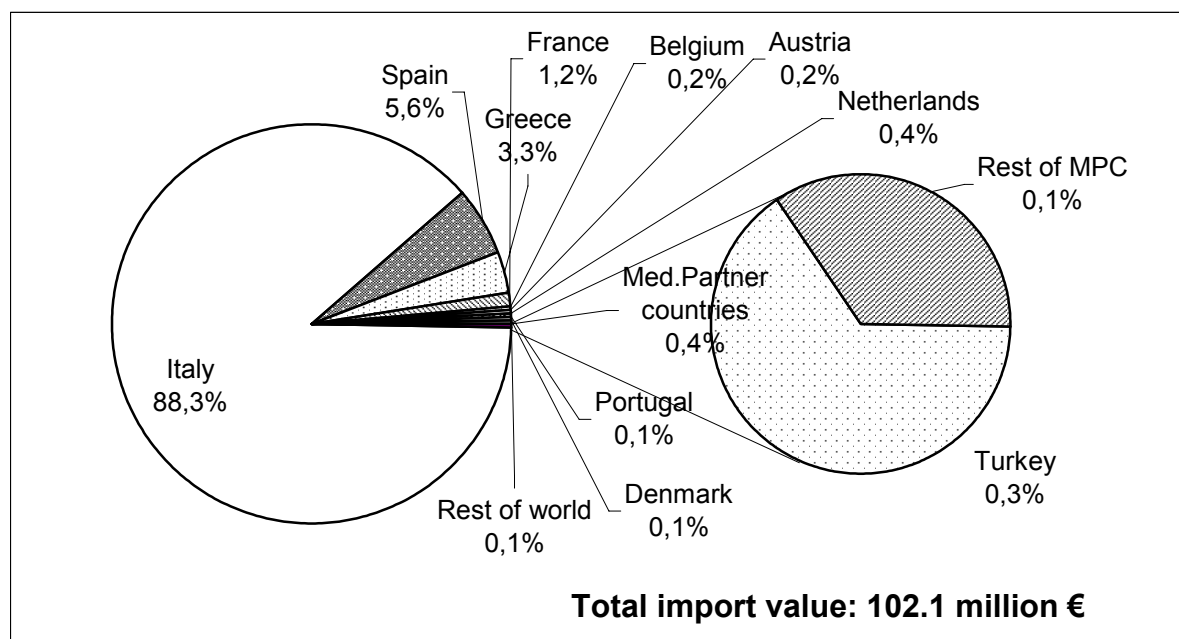
Table 1: Market developments of all oils and fats (AF) and vegetable oils and fats (VO) in 1,000 tonnes in Germany

	1997		2000		2003	
	AF	VF	AF	VO	AF	VO
Production	3,350	2,520	3,763	2,830	3,688	2,750
thereof domestic production	1,730	913	2,193	1,283	2,215	1,309
Imports	1,721	1,490	1,959	1,769	2,195	2,085
Exports	2,273	1,845	2,376	2,012	2,126	1,777
Domestic use	2,833	2,198	3,311	2,549	3,760	3,059
thereof manufacture use	513	387	819	714	1,461	1,156
feed use	223	38	362	134	424	411
food use	2097	1,085	2,130	1,179	1,875	1,054
Degree of self-sufficiency in %	61	42	66	50	59	43

Source: BMVEL, 2004.

Due to unsuitable climatic conditions no cultivation of olive trees takes place in Germany. Thus, the demand of olive oil is covered through imports only. Among the different import categories of olive oil, the most important one is the virgin olive oil. Its imports are about 87 % of the total imported quantity of olive oil in Germany (34,329 tonnes out of 39,467 tonnes). As shown in figure 1, most of the German imports of virgin olive oil come from Italy, which in terms of value account for about 88 % of the imports followed by Spain and Greece with 5.6 and 3.3 %, respectively.

Figure 1: Imports of virgin olive oil in Germany (2003)



Source: PC-TAS; Own illustration.

The non-EU Mediterranean countries altogether account only for about 0.4 % of the German imports with Turkey as the distinguishing country. However, the trend¹ of their imports in terms of quantity and value is positive with 20 and 12 % respectively, indicating positive developments of Mediterranean exports to Germany (see Annex: Table 3).

As already mentioned above, much less important are other olive oil categories, such as olive oil refined but not chemically modified and refined olive oil. However, again most of the German imports originate from Italy. Interesting though is the fact that the trend of the imports of olive oil refined but not chemically modified from all countries of origin as a whole is negative. Apparently, this category of olive oil is of lower and of decreasing significance for the German market. As far as refined olive oil is concerned, Italy and Spain have increased their shares in the last five years, whereas the trend in percentage for all other major suppliers is negative (see Annex: Table 4-5).

Using the data from Tables 1 and 3 the import share for olive oil of the total imports of vegetable oils and fats could be calculated. Although olive oil accounts in terms of volume only for approximately 1.7 % in the year 2003, its consumption has continuously increased in the considered period. According to the International Olive Oil Council (IOOC), the consumption of olive oil has increased from 22,300 tonnes in the farm year 1997/98 to 37,400 tonnes in 2002/03.

¹ The trend according to PC-TAS is calculated as the annual average growth rate (in percent) of selected values, based on least squares exponential formula, over five years

Table 2: Consumption of olive oil in Germany

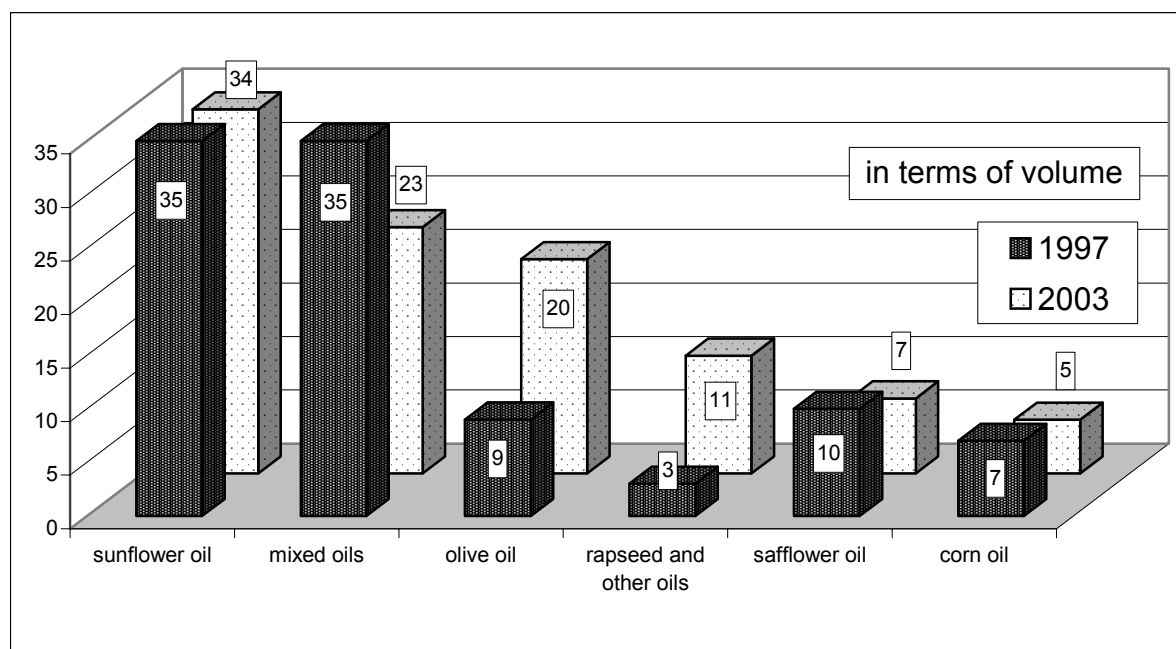
	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
Consumption in 1,000 t	22,3	23,4	26,6	35,0	36,5	37,4
Consumption in kg/capita	0,27	0,29	0,32	0,43	0,44	0,45

Source: IOOC, 2005; Own calculations.

In the same period the per capita consumption has also increased from 0.27 kg to 0.45 kg² (Table 2). The significant rise in per capita consumption of olive oil has been confirmed by a consumer panel study carried out by the Gesellschaft für Konsumforschung (GfK). Its results show an increase from 0.19 kg in 1997 to 0.48 kg per capita in 1999 (ASOLIVA, 2003).

The developments in the per capita consumption of olive oil together with the stagnation for consumption of other edible oils has led to significant changes in the consumption pattern of edible oils. Figure 2 illustrates the consumption trend of different edible oils with regard to their quantity share in 1997 and 2003. In 1997 the two most important edible oils were sunflower oil and mixed oils with each a share of 35 %. Regarding to its quantity share, olive oil was only of minor importance in the year 1997. This has changed considerably since then. Whereas the share of mixed oils has declined down to 23 % in 2003, the quantity share of olive oil has increased to 20 %.

Figure 2: Development of the consumption of edible oils in 1997 vs. 2003 in %

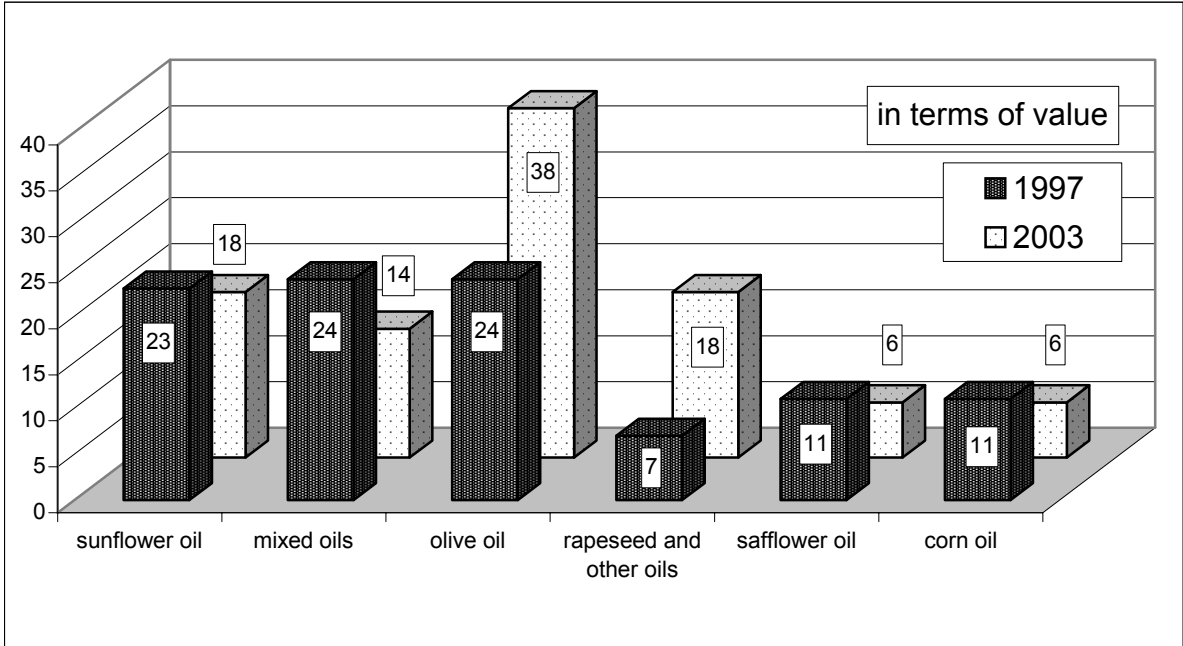


Source: ASOLIVA, 2003.

² Experts assume foreign households' consumption of olive oil to be about 60 % of the whole per capita consumption in Germany.

Looking at Figure 3, which shows the development of the consumption of edible oils with respect to their value shares, the picture alters significantly. In the year 1997 there were three important edible oils: sunflower oil, mixed oils and olive oil with each a share of approximately 24 %. In 2003 the importance of olive oil has increased substantially up to a value share of 38 %, making it the most important edible oil with regard to its value share on consumption.

Figure 3: Development of the consumption of edible oils in 1997 vs. 2003 in %



Source: ASOLIVA, 2003.

3 The supply side

The supply chain of olive oil in Germany is characterised by a limited number of participants and thus rather straightforward linkages between the different distribution channels.

It should be noted though that there are several difficulties in obtaining reliable data for the German supply chain of olive oil. The official statistics provide data only for the imports and exports of olive oil, but no further information is given about its distribution in the German market. Through an intensive literature research only two studies have been detected with useable content about the German market of olive oil, namely a Spanish study by the Spanish Consulate General based in Düsseldorf and a study prepared by "Food for Thought". Especially the information given by the latter study should be treated with caution as the study appears quite unserious, an anticipation which has been confirmed by later expert interviews. The difficulties regarding reliable data availability, made it necessary to resort to expert interviews³ and to conduct a survey among the importers of olive oil in Germany⁴. A total of 101 importers have been contacted, of which 19 importers have sent back their questionnaire so far. Although the response rate of 19 % does not allow representative conclusions, along with the expert interviews and in combination with the official statistical data, they are valuable and the sole information source for the analysis of the supply chain of olive oil in Germany.

In the following a detailed view of the different agents of the supply chain is given, which is structured according to the position of each agent within the chain, as shown in Figure 7. The description starts with the importers, continues with the wholesale trade, the food industry, the retail trade, the specialised shops and ends with the big consumers.

3.1 Imports – Exports

According to the trade database PC-TAS in the year 2003 39,467 tonnes were imported by Germany which were equal to a value of 116.4 million €. As mentioned above, the majority of olive oil in the German market is imported from Italy, followed by Spain and Greece. This corresponds favourably with our survey results, where on a non-weighted average 56.21 % of the imported olive oil is of Italian origin, 28.26 % of Spanish, 8.89 % of Greek and 6.63 % of other origin⁵. More specifically, out of 19 importers 14 stated they import from Italy while 5 told to import their entire olive oil from Italy. In the case of Spain and Greece as the country of origin, 8 and 7 out of 19 interviewed importers mentioned to import from these countries, respectively. Half of the Spanish olive oil importers purchase their whole oil from Spain only, whereas 1 importer imports only from Portugal. Although the discovered figures from the survey are not representative due to the relative low response rate, they indeed confirm each countries' importance, i.e. Italy is the most important source of supply.

³ The authors are indebted to Mr Fissenewert of the Italian Institute of Foreign Trade (I.C.E.), who provided his expert view of the German market of olive oil in several telephone talks. Furthermore, the authors are grateful to Mr Oberg, who also supported this study with valuable information.

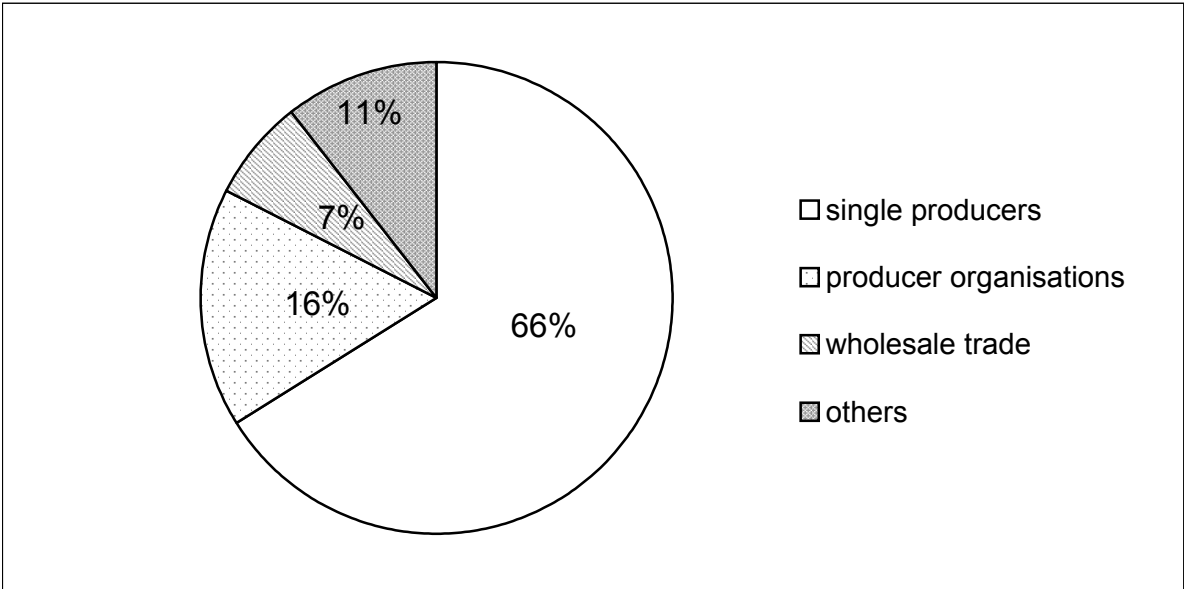
⁴ The authors are obliged to Mr Uzcanga of the Spanish Consulate General in Düsseldorf and again to Mr Fissenewert of the I.C.E. for providing lists of importers of olive oil in Germany. The full consolidated list can be found in the Annex, Table 9.

⁵ These figures have been calculated as an average of the respondents' statements given in percentage shares.

The main part of the imported olive oil is intended to cover the domestic demand. With 1,372 tonnes or 3.5 % of the imported volume, exports are of minor importance and concern only re-exports of some firms to neighbouring European countries (such as the Netherlands and Austria) (see Annex: Table 6-8).

According to the survey results, most of the imported olive oil in terms of volume is acquired directly from producers (66 %), followed by producer organisations (16 %), other sources (i.e. bottler) (11 %) and wholesale trade (7 %) (Figure 4). In absolute terms, 9 importers receive the entire quantity of their olive oil directly from producers, 2 solely from producer organisations, 1 from the gastronomy and the rest from a combination of the above mentioned suppliers. However, according to the survey results the most important source of supply are the single producers and producer organisation, as 15 and 6 out of 19 importers have chosen these categories, respectively.

Figure 4: Suppliers of olive oil to the importers in terms of volume , in %.



Source: Own survey.

The majority of the imported olive oil is already labelled and packaged when it enters the German market, a fact also supported by the survey results, with one single exception of an oil mill. The indicated package sizes range from very small ones like 0.08 lt., 0.1 lt. and 0.25 lt., over 0.5 lt., 0.75 lt. and 1lt. up to 5lt., 10lt. and 174 lt. Whereas the 10lt. package is distributed only to big consumers (hotels, restaurants etc.) and the 174 lt. are imported by an oil mill for the food industry, all other package sizes are distributed through the different possible channels in the supply chain, except for the food industry.

However, olive oil in particular from countries with limited marketing channels in Germany like Spain and Greece, is either directly exported in bulks to big consumers in Germany (i.e. Spanish and Greek restaurants) or redirected over Italy, blended there with other olive oils and finally entering the German market under an Italian brand name. In recent years though, those producing countries are increasing their efforts to market their olive oil as standardised and already bottled in packages less than 5 litres, so as to promote it with their own brand names.

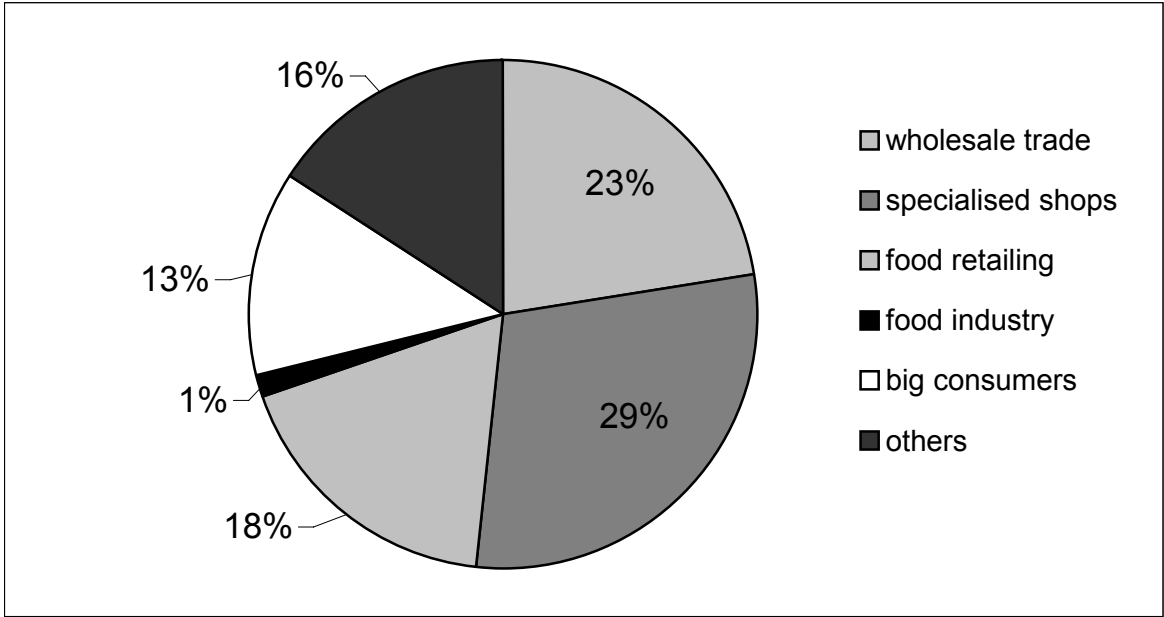
This is for example the case of the Spanish association of producers and exporters of olive oil ASOLIVA (ASOLIVA, 2003). In the year 2001 ASOLIVA exported approximately 1.62 million tonnes in loose bulks, that is non standardised and in containers bigger than five litres and 0.65 million tonnes standardised and in packages less than five litres to Germany. The share of standardised olive oil has significantly increased over the years, indicating the growing efforts of Spanish olive oil producers to create own brands for their olive oil and thus to market it directly to the food retailing or specialised shops in Germany (ASOLIVA, 2005). Another similar example is the case of the oil of the Greek producer company “Gaia”, imported and distributed by the “Importhaus Wilms” (Gaea, 2005) and the oil of the agricultural cooperative of Sitia “Kloster Toplou”, imported and distributed by the “Lukullus GmbH” (Kloster Toplou, 2005).

According to the survey and the PC-TAC database, the quality of the imported olive oil is mainly the highest one i.e. extra virgin. Only one importer reported imports of native olive oil for the wholesale trade, the retail and big consumers and another one imports pomace olive oil for the gastronomy.

One of the biggest importers of olive oil from Italy is the “BLM Produktions- und Vertriebsgesellschaft mbH & Co.KG”, one of the key importers for the discount market Aldi. BLM based in Buchholz belongs to the Betz Holding and calls itself the specialist for Italian products. This enterprise has an own logistic business called “PMB”, which is responsible for the whole logistic assignment and thus is in charge of importing food products from Italy, the storage and the final distribution (BLM, 2005). There are no intermediate storages in Germany, as BLM directly supplies the appropriate platforms of the Aldi supermarkets. Two other importers for Aldi are the Alfred Graf GmbH & Co.KG and the Clama GmbH belonging to the KM Mahnke Group (Fissenewert, 2005).

In the case of the discount market Lidl, it imports directly through Lidl International and does not use intermediate importers. The bottler RM Oleificio in Lucca delivers the olive oil to the loading platform in Verona and consigns it there to Lidl (Fissenewert, 2005).

Figure 5: Recipients of olive oil in terms of value, in %.



Source: Own survey.

As shows, on a non-weighted average 23 % of the imported olive oil in terms of value is delivered to the wholesale trade, 29 % to specialised shops, 18 % to the food retailing, 13 % to big consumers, 16 % directly to the consumers (others) and 1 % to the food industry⁶. Apart from the food industry and direct selling to consumers, the other distribution channels are of similar importance to the interviewed importers⁷. For each of the rest categories 9-12 out of 19 importers stated to distribute their olive oil to the respective recipient. Furthermore, it should be noted that only 1 importer delivers its entire olive oil exclusively to specialised shops, 1 importer solely to the food retailing and 1 to big consumers.

3.2 Wholesale trade

The sole sources about the wholesale trade are the results of the conducted survey among the importers of olive oil. Both the sample size of the survey as well as the response rate of 19 % do not allow for representative conclusions regarding the activities and the real importance of the wholesale trade within the supply chain of olive oil. Thus, only qualitative conclusions can be drawn, indicating that indeed wholesalers can act as middlemen between the importers and the food retailing, big consumers and the specialised shops (see Figure 5).

3.3 Food industry

The food industry is supplied with olive oil by the importers, most probably to a higher share by wholesalers, whereas it is equally possible that it imports olive oil directly. Here again the information is derived from the results of the survey. One oil mill, which imports mainly from Italy in bulks extra native olive oil, distributes it to the food industry in bulks (174 lt. package).

3.4 Food Retailing

The food retailing (supermarkets, warehouses, and discount markets) is the major recipient of olive oil in Germany. According to Fissenewert (2005) about 77 %⁸ of the imported volume of olive oil goes into the food retailing, which equals 30,476 tonnes.

Although no information about the value share is available, in order to classify the significance of the retail trade within the supply chain, an auxiliary calculation was done. Therefore an average price of 3 €⁹ per 750ml was assumed and resulted a total value of 133.1 million €¹⁰ by multiplying the price with the respective quantity.

About 60 % of the flowing quantity in the food retailing is marketed by discounters like Aldi,

⁶ Again, these figures have been calculated as an average of the respondents' statements given as a percentage share.

⁷ As it will be described later, the importance of the food retailing seems to be underestimated by the survey.

⁸ This is expressed as share of the remaining olive oil in the German market after deducting the exports from the whole imports.

⁹ The assumed price is based on personal observations of the authors in the German market and it serves therefore only as an approximate price.

¹⁰ This figure is similar to the finding of a study conducted by the market research institute A.C. Nielson. According to their study results in 2003 olive oil was predominant in the edible oil sector with a turnover of 107.49 million € (whole food retailing excluding Aldi) (UFOP, 2005).

Lidl and Penny and the remaining 40 % by other supermarket chains and warehouses. Among the discounters, Aldi is the predominant one with a market share of about 50 % on the total discounter share and thus a respective total market share of about 30 % (Fissenewert, 2005).

Oberg (2005) and Fissenewert (2005) agree that about 75 – 80 % of the olive oil is marketed under retailer brands, like “Villa da Badia” (Rewe), “Bancetto” (Edeka), “Cantinelle” (Aldi Süd) and about 25 – 20 % under manufacture brands. Under the brand “Bertolli”, Unilever Bestfood GmbH markets its olive oil and claims to have a market share of 12 % in terms of value and 6 % in terms of volume (Unilever Deutschland Holding GmbH, 2005). Other well known manufacture brand names of olive oil are “Mazola” and “La Espanola”, “Minerva Sasso”, “Kloster Toplou”.

3.5 Specialised shops

Specialised shops such as delicatessen shops are another important recipient of olive oil. Although through these shops only 3,048 tonnes or about 8 % of the volume of olive oil in Germany is marketed, its significance in terms of value is considerably higher (Fissenewert, 2005). Again, in order to give estimation about the value, an auxiliary calculation as previously follows. In this case an average price of 11 € per 750 ml bottle was assumed, which results in a total value for this distribution channel of 48.8 million €. The prices of these olive oils are significantly higher compared to oils in other distribution channels. This is mostly due to the higher quality and often higher production costs. Specialised shops usually market olive oil with brand names of producers, which are often of protected geographical origin or protected designation of origin. One major trend for specialised shops are the increasing demand for very small packages of olive oil with different aroma. Among specialised shops there are a growing number of those which offer the consumer the possibility to bottle the different oils himself in small aesthetic bottles as a gift. Furthermore there are great deal of online-shops selling high quality olive oil.

3.6 Big consumers

Big consumers like hotels, restaurants and other institutions are being attributed a share of 11.6 % of the total market volume of olive oil equal to 4,571 tonnes (Fissenewert, 2005). Assuming an average price of 3 € per 750 ml bottle, a value of 19.9 million € was calculated.

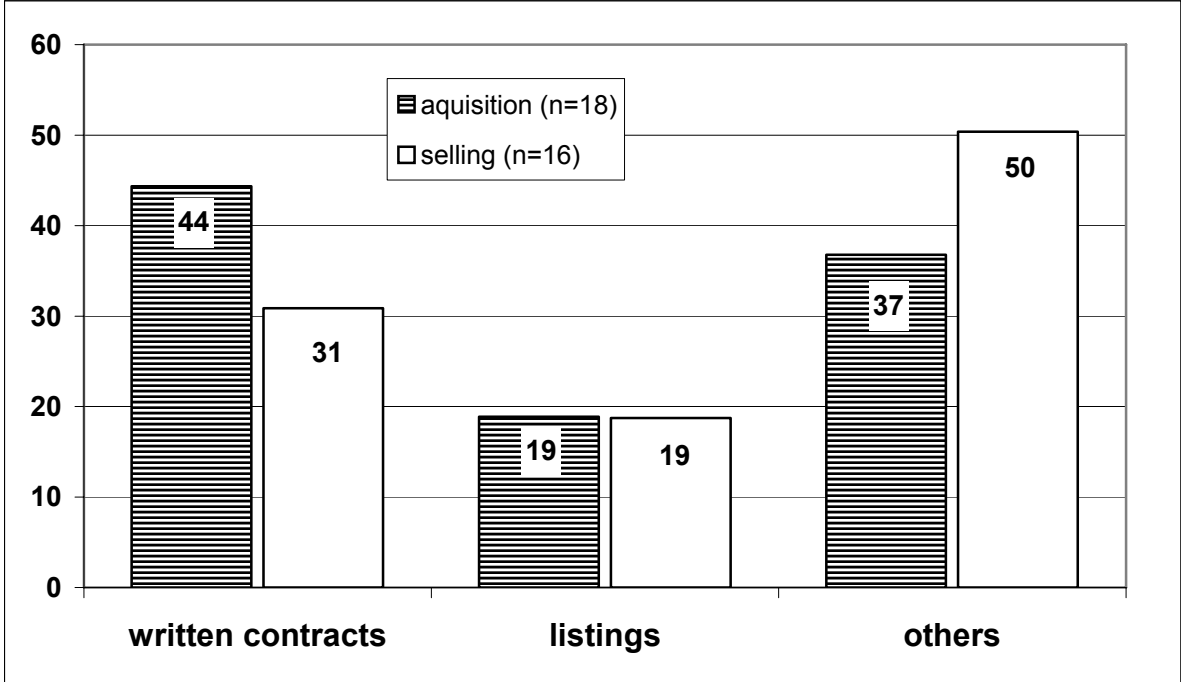
Regarding the quality of olive oil supplied to big consumers, the survey and the expert interviews indicate that it is not the highest one. As mentioned above one importer delivers native olive oil in 10lt. package to the gastronomy.

3.7 Business relationships between the different players in the supply chain

Until now the report concentrated on the trade flow of olive oil between the different actors in the supply chain. In this part it is tried to be explained how the supply flows are arranged and what kind of business relationships exist among the different actors of the chain. Sole source of information is the special by conducted survey for the needs of this report.

The results of the survey are depicted in Figure 6. Almost half of the imported olive oil is acquired through written contracts between the importers and their suppliers (44.33 % or 9 importers of the 18). Equally important are other order mechanisms as per fax or telephone with a percentage of 36.78 % (or 8 importers out of 18), whereas 18.89 % is handled via listings (4 importers out of 18). It should be noted that 3 importers use a combination of these instruments for buying olive oil, whereas one importer did not answer the question.

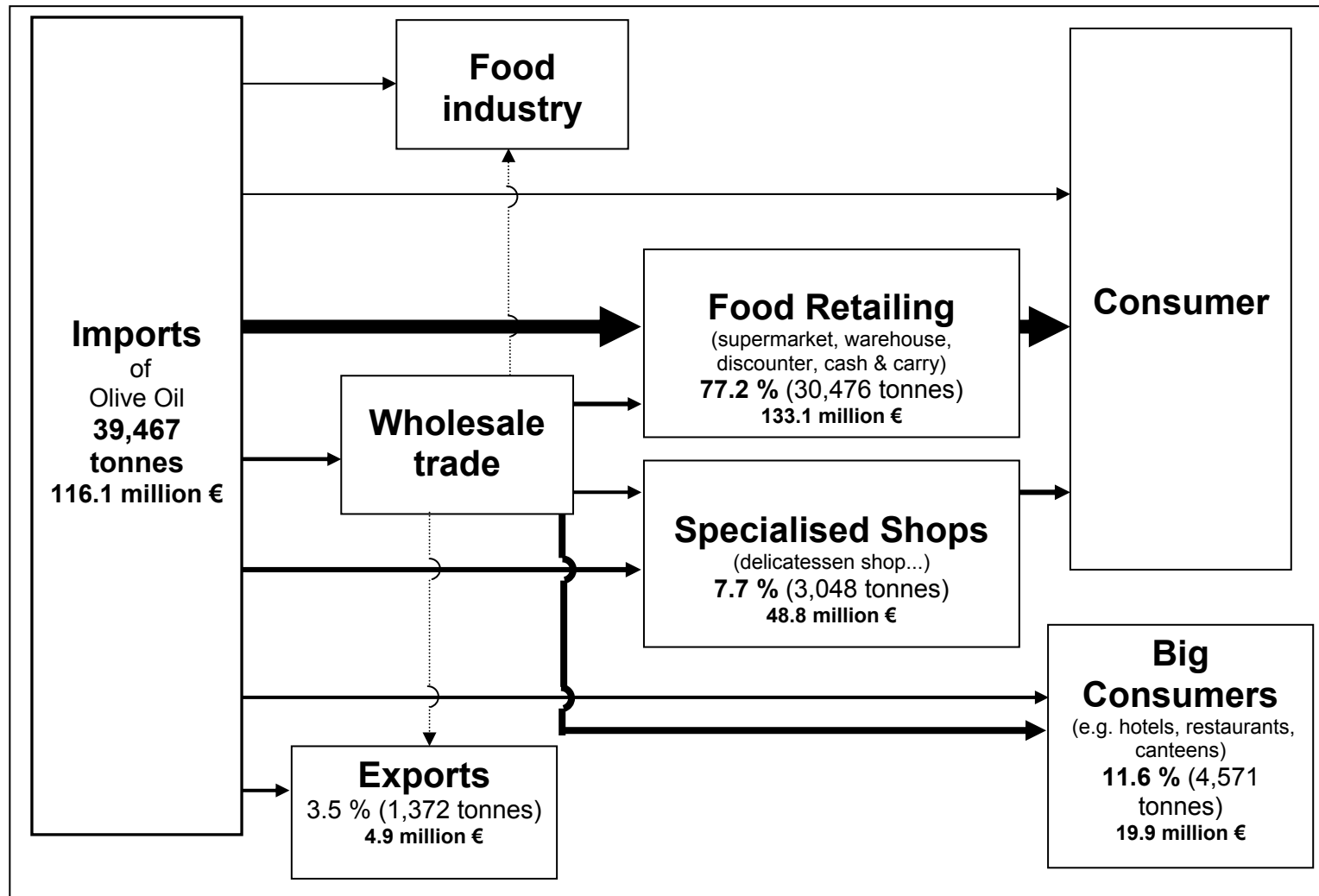
Figure 6: Acquisition and selling mechanisms of the importers, in %



Source: Own survey

The main selling mechanisms from the 16 observations are instruments under the category “others” such as commissioned transactions or orders made per telephone or fax depending on the demand (50.38 %), operations typical for brokers. Other selling mechanisms are through written contracts (30.88 %) and listings (18.75 %). In particular 7 importers sell 100 % of the quantity of olive oil through instruments of the category “other”, 4 through written contracts, 2 through listings, whereas the remaining 3 use a combination of the mechanisms.

Figure 7: Trade flows in the supply chain of olive oil in Germany, 2003



Source: PC-TAS; Fissnewert, 2005; Oberg, 2005a; own calculations

4 Quality and labelling issues

The EU has recognised quality as a key factor to increase consumer confidence and consumption of olive oil in both member countries and third countries. Efforts initiated by the EU to improve the product quality, in accordance with the standards of the IOOC are reflected in the new framework for the marketing of olive oil in the Community (EU Regulation 796/2002 and 1019/2002). The various quality categories have been redefined and more technologically advanced organoleptic methods have been introduced for a more proper categorisation of olive oil.

The label of each package comprises of several mandatory information, i.e. the category of the oil (e.g. extra virgin), the filling quantity, the expiry date, the address of either the producer, bottler or trader, the regional origin in case of oil from protected designation of origin or protected geographical origin and a declaration of the nutrient content in case of advertising with positive attributes such as cholesterol free, rich in Vitamin E or rich in linoleic acid (Oberg, 2005b). Additionally, there are numerous facultative declarations possible, such as the variety of the olives from which the oil was extracted, the harvest period and the harvest method, the date of bottling and indications for storage. Since most of the German olive oil is labelled as extra virgin, those voluntary information are often the only measure for producers of more expensive olive oil to distinguish their high quality oils from the cheaper ones of discount markets.

However, the labelling “extra virgin” even on bottles of discounter olive oils suggests the German consumer the best quality. Since consumers generally are not able to distinguish between the different qualities within the category of “extra virgin olive oil” most of them are not willing to pay more for the same perceived quality and thus buy their olive oil in discount markets instead of in specialised shops.

Nevertheless, as it has been lately reported to the wider German public and as experts in every occasion indicated, the labelling of olive oil with the category of extra virgin is not always justified, especially in the case of discounters’ olive oil. The magazine “Der Feinschmecker” recently tested eight different extra virgin olive oils. Four of them belonged to the group of cheaper retailer brands and the other four belonged to the group of rather expensive producer brands. Using a lately developed analytical method¹¹ it was proven that in the case of the four retailer brands the labelling “extra virgin” was misused. Two different assigned labs found out a heat treatment of the four cheaper olive oils, which should therefore not be marketed as extra virgin, but as refined olive oils. It should be noted that using the traditional analytical methods all eight olive oils have been legitimately classified as extra virgin olive oil (Der Feinschmecker, 2005).

¹¹It is called after Serani, who developed this method together with two other Italian researchers in 2001. This method is already applied in Italy and Greece.

This recent study confirms the argument that there is some ambiguity concerning the proper labelling of the different classification of olive oil within the EU and the IOOC standards. The traditional methods used for the categorisation of olive oil are not adequate to identify for example heat treatments and thus, leave space to the food retailing to market lower quality olive oil as higher ones. Such activities not only harm the uninformed and unaware German consumers, but mostly the producers of a better quality and thus more expensive olive oil, since it is a typical example of unfair competition.

5 Institutional structure

The main official body in Germany dealing with questions regarding olive oil is the information agency of olive oil (Informationsgemeinschaft Olivenöl). It is the first and until now the only official agency for olive oil, which is active in the branch for 15 years and is supported by the EU. Its main objective is the promotion of olive oil consumption in Germany. It mostly addresses issues related with quality and nutrition. It undertakes seminars, presentations and consulting services with the aim to make the special characteristics of olive oil, the different qualities and the factors that influence it, well known to the consumers. Together with the German olive oil panel (Deutsches Olivenöl Panel) it organises sensory test groups for the examination of the quality of olive oil (www.olivenoel-info.net).

Supported by the IOOC the panel was voluntarily founded in 1998. It is responsible for carrying out the so-called panel tests for the categorisation of native olive oil and currently comprises of 12 members and a panel supervisor. The parameters taken into consideration for the sensory tests are the ones set by the IOOC and the EU Regulations for the distinction of olive oil in the different categories. The background of the panel's initiation was the fact that olive oils labelled as "extra virgin" have consistently been flawed products, which could not necessarily be correctly detected in non producing countries, such as Germany. On the basis of voluntary self-controls the panel decided to focus on the examination of native olive oil. Therefore at least 10 times per year 8 – 12 samples of native olive oil are sent to the members and are analysed. If required they contact the producers or traders in order to protect the German consumers. The Panel is certified according to the guidelines of the IOOC (www.olivenoel-info.net).

Through a specialised fair for olive oil ("OLIO") olive oil producers and importers have the possibility to make their products and activities known to the German public. The "OLIO" has been organised by the magazine "Der Feinschmecker" in the last three years once per year and aims at the promotion of olive oil in the German market. Apart from the exhibition of the products it includes seminars related with gastronomy and the Mediterranean kitchen and with tasting and testing olive oil. The highlight of the fair is the award of the best olive oil for the year.

It should be also noted that there is no association of olive oil importers or suppliers in Germany. Contacting points though especially for small producers and exporters interested in the German market are the embassies and consulates of their countries. The departments of foreign trade of the embassies conduct market studies and have an important role in the information flows between the producers and the German consumers. They are trying to be up-dated regarding the demand in Germany to develop the proper marketing strategies for their countries.

6 Conclusions

With 82.5 million inhabitants, Germany is of special interest for olive oil producing countries. Due to natural production limitations, the supply of the German market is covered only through imports mostly originating from the Mediterranean basin. Until now Italy is the main source for olive oil in Germany followed by Spain and Greece. It is worth noting though that the positive annual growth of imports originating from non-EU Mediterranean countries along with the gradual liberalisation between the EU and these states under the framework of the Barcelona Agreement leaves open space for further growth of their exports of olive oil to Germany. This combined with their lower production costs in comparison to the EU-Mediterranean member states, provides them with comparative advantages and gives additional possibilities for positive developments of their exports.

Nevertheless, lately interesting for the supply side seem to be efforts of smaller producers and exporters, to export high quality olive oil to Germany under their own brands. This trend combined with the labelling problems could possibly change the scenery of the supply chain in the future, splitting it up to more agents with less market dominance and should be definitely taken into account from exporters into the German market. This combined with the general trend observed in the markets of primary commodities that consumers want to know the origin of their products and demand more guarantees for the product quality, is another chance the Mediterranean countries should seize upon. They could raise their profits by exporting directly their own olive oil and thus by-passing big suppliers, which import olive oil in bulks and are then selling it under their own brand names.

Currently the majority of the importers bring in the country already packaged and labelled olive oil and distribute it mainly to the food retail. Major players in the food retailing are the discounters with a share of about 60 % and thus could be characterised as one of the biggest power of the German market of olive oil.

A driving force for the consumption of olive oil is its healthier profile compared to other edible oils. The increasing health conscience along with the adoption of the Mediterranean diet by German consumers is already reflected in the increased consumption of olive oil and the decreased consumption of other edible oils. Another lately observed trend is the increasing demand of olive oil with different aroma.

The majority of olive oil is marketed under retailer brands of either the discounters or the importers, but often of dubious quality. As a study recently indicated there are misuses of the labelling “extra virgin olive oil” opening the discussion for the quality of lower cost olive oils. Obviously the standards of the IOOC and the EU leave space to such mislabelling incidents and need to be reconsidered so as to avoid similar cases in the future and to reassure the food safety for consumers.

Literature

- ASOLIVA (2005). http://www.asoliva.de/downloads/pdf/facts_figures.pdf, cited: 25.05.05.
- ASOLIVA (ed.) (2003). Facts & figures – Fachinformationen zu spanischem Olivenöl 2002/03. http://www.asoliva.de/downloads/pdf/facts_figures.pdf; cited: 28.04.2005.
- BLM (2005). <http://www.blm-pantos.de>, cited: 23.05.05.
- BMVEL (ed.) (2004). Statistisches Jahrbuch über Ernährung, Landwirtschaft und Forsten.
- Der Feinschmecker (2005). Olivenöl: Etiketteschwindel im Discount. Jahreszeiten Verlag, Hamburg. <http://www.presseportal.de/story.htx?nr=667200>, cited: 28.04.2005.
- European Commission. Directorate-General for Agriculture (2002). The olive oil sector in the European Union. http://europa.eu.int/comm/agriculture/publi/fact/oliveoil/2003_en.pdf, cited: 28.04.2005.
- Fissenewert, F. (2005). Oral information. Italian Institute of Foreign Trade (I.C.E.), Düsseldorf.
- Food For Thought (2005). Food & Drink Markets. 2005 Edition. Genf.
- Gaea Products S.A. (2005). <http://www.gaea.gr>, cited: 6.06.05
- Informationsgemeinschaft Olivenöl. <http://www.olivenoel-info.net>, cited: 31.05.05.
- International Olive Oil Council (2005). World Olive Oil Figures. <http://www.internationaloliveoil.org/economics2.asp>, cited: 4.03.2005.
- Kloster Toplou (2005). Informationen über Olivenöl aus Kloster Toplou <http://www.toplou.com/Toplou1/toplou1.html>, cited: 3.06.05.
- Löbber, R., D. Hanrieder, U. Berges und J. Beck (2004). Lebensmittel – Waren, Qualitäten, Trends. Verlag Europa-Lehrmittel, Nourney, Vollmer GmbH & Co.KG, Haan-Gruiten.
- Oberg, D. (2005a). Oral information. Leiter Deutsches Olivenöl Panel und Informationsgemeinschaft Olivenöl, München.
- Oberg, D. (2005b). Was muss und was darf auf das Etikett von nativen Olivenölen? Vortrag auf dem Olive Oil Congress aus Anlass der Preisverteilung der International Olive Oil Awards in Zürich, 7. April 2005, Fachhochschule Wädenswil, Zürich.
- Personal Computer Trade Analysis System (PC-TAS). 1999-2003. International Trade Center UNCTAD/WTO.
- UFOP (2005). http://www.ufop.de/download/GB_2004_Speiseoel.pdf, cited: 6.06.05.
- Unilever Deutschland Holding GmbH (2005) <http://www.unilever.de/bestfoods.html>, cited: 27.05.05.
- Ward, R. W., J. Briz and I. de Felipe (2003). Competing Supplies of Olive Oil in the German Market: An Application of Multinomial Logit Models. *Agribusiness* 19 (3): 393-406.

Annex

Table 3: Imports of virgin olive oil (HS150910) in Germany from country of origin

Partner country	Value (in 1000 US \$)				Quantity (in tonnes)					V/Q in % (2003)		Share in % (2003)		Trend in %	
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003	Value	Quantity	Value	Quantity	
world	69,978	49,390	102,540	102,982	115,544	24,168	18,564	41,160	39,383	34,329	3.4	100.0	19.0	15.7	
<i>top 10 partners</i>															
-Italy	58,516	43,809	93,235	93,304	102,030	18,146	16,431	37,376	35,680	30,271	3.4	88.3	20.5	19.7	
-Spain	6,205	2,862	4,684	4,350	6,433	3,108	1,276	2,203	2,019	2,145	3.0	5.6	5.0	-2.8	
-Greece	1,768	1,544	2,774	2,780	3,868	454	530	1,007	973	1,089	3.6	3.3	24.0	26.6	
-France	1,247	511	1,162	1,630	1,401	337	149	337	432	323	4.3	1.2	14.9	10.3	
-Belgium	1,554	0	4	41	248	1,911	0	2	38	86	2.9	0.2	0.3*	*	
-Austria	111	247	93	366	262	18	37	22	94	58	4.5	0.2	23.5	38.7	
-Netherlands	38	138	126	211	418	12	57	48	63	121	3.5	0.4	68.5	60.3	
-Turkey	206	33	70	74	290	113	10	28	25	83	3.5	0.3	16.1	3.0	
-Portugal	160	192	129	45	113	42	62	44	19	41	2.8	0.1	-19.3	-11.6	
-Denmark	0	0	5	80	156	0	0	2	10	18	8.7	0.1	0.1*	*	
<i>Med. Countries</i>	285	34	253	85	445	124	10	101	31	124		0.4	19.8	12.0	
-Turkey	206	33	70	74	290	113	10	28	25	83	3.5	0.3	16.1	3.0	
-Tunisia	8	0	140	0	58	2	0	67	0	21	2.8	0.1	0.1*	*	
-Israel	71	1	43	0	36	9	0	6	0	5	7.2	0.0	0.0*	*	
-Lebanon	0	0	0	11	61	0	0	0	6	15	4.1	0.1	0.0*	*	

Source: PC-TAS

Table 4: Imports of olive oil and its fractions refined but not chemically modified (HS150990) in Germany from country of origin

Partner country	Value (in 1000 US \$)					Quantity (in tonnes)					V/Q in % (2003)	Share in % (2003)		Trend in %		
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003		Value	Quantity	Value	Quantity	
	34,192	31,534	5,934	6,358	12,602	10,797	1,3254	2,732	2,488	3,909		100.0	100.0	-30.2	-31.0	
<i>top 10 partners</i>																
-Italy	29,485	29,114	2,571	4,756	7,004	9,178	12,211	1,108	1,802	1,928			55.6	49.3	-37.4	-39.6
-Spain	3,383	1,385	2,123	695	2,870	1,192	632	1,158	378	1,059			22.8	27.1	-9.7	-7.2
-Greece	444	582	628	375	883	138	255	255	128	273			7.0	7.0	9.8	7.0
-France	213	289	437	420	347	65	90	140	134	97			2.8	2.5	14.5	12.7
-United Kingdom	16	81	50	18	1,022	3	24	17	8	419			8.1	10.7	97.6	140.6
-Netherlands	244	32	73	5	68	71	15	36	1	37			0.5	0.9	-35.7	-33.0
-Denmark	32	12	0	0	293	19	6	0	0	50			2.3	1.3*	*	*
-India	263	0	0	0	0	82	0	0	0	0*			0.0	0.0*	*	*
-Turkey	17	0	11	66	5	7	0	4	32	2			0.0	0.1*	*	*
-Belgium	9	17	10	0	51	4	11	5	0	18			0.4	0.5*	*	*
<i>Med. Countries</i>	17	0	11	66	5	7	0	4	32	2			0.0	0.1*	*	*
-Turkey	17	0	11	66	5	7	0	4	32	2			0.0	0.1*	*	*

Source: PC-TAS

Table 5: Imports of oils & their fractions obtained from olives, refined (HS151000) in Germany from country of origin

Partner country	Value (in 1000 US \$)					Quantity (in tonnes)					V/Q in % (2003)	Share in % (2003)		Trend in %		
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003		Value	Quantity	Value	Quantity	
	world	1,426	1,319	3,052	3,736	3,692	457	643	1,430	1,469		1,229	3.0	100.0	100.0	34.2
top 10 partners																
-Italy	759	1,049	2,776	3,472	3,372	290	539	1,328	1,366	1,138	3.0	91.3	92.6	51.9	44.3	
-France	226	44	106	56	46	52	14	37	16	10	4.6	1.2	0.8	-25.5	-27.1	
-Greece	185	110	18	54	42	41	49	6	18	10	4.2	1.1	0.8	-30.8	-31.8	
-Austria	75	30	51	39	36	16	8	13	18	4	9.0	1.0	0.3	-11.4	-17.8	
-United Kingdom	27	40	48	56	24	10	19	21	19	9	2.7	0.7	0.7	1.0	-2.1	
-Spain	23	8	13	39	70	12	4	3	18	24	2.9	1.9	2.0	46.4	33.5	
-Portugal	113	0	0	0	24	29	0	0	0	1	24.0	0.7	0.1*	*	*	
Med. Countries	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0*	*	*	

Source: PC-TAS

Table 6: Export destinations of virgin olive oil (HS150910) from Germany

Partner country	Value (in 1000 US \$)				Quantity (in tonnes)				V/Q in % (2003)	Share in % (2003)		Trend in %			
	1999	2000	2001	2002	2003	1999	2000	2001		2002	2003	Value	Quantity	Value	Quantity
	1,716	1,191	5,042	2,453	4,103	548	340	2,141		701	914	100.0	100.0	28.0	19.1
<i>top 10 partners</i>															
-Italy	346	42	3,152	130	165	245	16	1,575	40	67	4.0	7.3	-3.5	-15.4	
-Austria	271	160	437	699	1,957	70	39	110	139	374	47.7	40.9	72.1	58.8	
-Netherlands	164	164	418	417	561	37	50	153	181	196	13.7	21.4	40.4	58.7	
-Switzerland	248	228	252	267	447	43	46	52	47	61	10.9	6.7	14.3	7.5	
-France	293	42	167	145	194	66	11	64	49	55	4.7	6.0	4.2	12.0	
-Ireland	71	71	85	84	122	17	20	25	25	30	3.0	3.3	13.3	14.6	
-Luxembourg	1	69	104	86	141	0	20	32	32	42	3.4	4.6	175.0*		
-United Kingdom	63	48	38	83	119	14	13	10	21	18	2.9	2.0	20.0	10.3	
-Czech Rep.	35	75	33	84	36	10	34	17	35	11	0.9	1.2	1.7	2.2	
-Norway	28	43	63	40	85	5	7	19	7	11	2.1	1.2	24.0	17.1	
<i>Med. Countries</i>															

Source: PC-TAS

Table 7: Export destinations of olive oil and its fractions refined but not chemically modified (HS150990) from Germany

Partner country	Value (in 1000 US \$)				Quantity (in tonnes)					V/Q in % (2003)	Share in % (2003)		Trend in %		
	1999	2000	2001	2002	2003	1999	2000	2001	2002		2003	Value	Quantity	Value	Quantity
	world	2,054	906	743	482	1,355	1,083	307	321		196	418	100.0	100.0	-13.6
<i>top 10 partners</i>															
-Netherlands	124	118	137	136	728	36	44	55	57	257	53.7	61.5	44.5	52.0	
-Italy	1,179	21	4	0	0	792	5	1	0	0*	0.0	0.0*		*	
-Austria	71	399	229	29	61	20	114	85	6	18	4.5	4.3	-25.4	-27.1	
-France	199	105	73	8	41	69	41	42	5	15	3.0	3.6	-43.6	-40.3	
-Switzerland	47	43	43	55	70	14	13	11	17	7	10.0	5.2	11.0	-10.6	
-Israel	88	4	16	24	13	25	1	5	8	3	4.3	1.0	-18.4	-19.4	
-Belgium	62	10	18	11	36	21	3	7	3	9	2.7	2.2	-9.4	-15.6	
-Czech Rep.	41	0	12	15	68	15	0	6	6	17	4.0	5.0		*	
-Brazil	2	0	0	15	72	0	0	0	5	19	3.8	4.5*		*	
-Spain	51	0	30	0	0	20	0	18	0	0*	0.0	0.0*		*	
<i>Med. Countries</i>															
-Israel	88	4	16	24	13	25	1	5	8	3	4.3	1.0	-18.4	-19.4	

Source: PC-TAS

Table 8: Export destinations of oils & their fractions obtained from olives, refined (HS151000) from Germany

Partner country	Value (in 1000 US \$)				Quantity (in tonnes)					V/Q in % (2003)	Share in % (2003)		Trend in %		
	1999	2000	2001	2002	2003	1999	2000	2001	2002		2003	Value	Quantity	Value	Quantity
	world	46	82	75	70	110	23	38	63		35	40	2.8	100.0	17.2
<i>Med. Countries</i>															

Source: PC-TAS

Table 9: Olive oil importers in Germany, 2005

Company name	Comments
A. Sander & Co. GmbH	
Aktuell Vertriebs-GmbH	Supplier of food retailing
Alisa GmbH	
Almasol Deutschland	
Andrzej Pilecki Import-Export	
Andu-Pez Lebensmittel GmbH	
Anduronda Import GmbH	
Ars Gustandi Detlef Rick GmbH	
Barrique Weinimport GmbH	
Barth Feinkost GmbH	
Bernhard Möllers GmbH & Co. KG	
Bestfoods GmbH & Co. KG	
BLM Prod.- u. Vertriebsges. mbH	Supplier of food retailing
Bohl, Ruth GmbH	Supplier of specialised shops
Bonvino Weinvertrieb u. Weinhandel	Supplier of specialised shops
Bouquet Garni – Feinkostverband Paula Lederer	
Brändle GmbH	
Bremer, Harald L.	Supplier of specialised shops
Carl Geiger GmbH & Co. KG	
Clama GmbH & Co. KG	Supplier of food retailing
Culinaria Delikatessen Service GmbH	Supplier of food retailing
Damak Lebensmittelvertriebsges.	
D'Amico Spezialitäten GmbH	Supplier of food retailing
Das Weinkabinett	
Der Mallorquiner	
Di Gennaro Feinkost- & Weinimport GmbH	Supplier of specialised shops
Die Olive - und mehr e.K.	Supplier of specialised shops
Dunekacke & Wilms Nachf. GmbH & Co. KG	Supplier of food retailing
El Paladar –Esteban Ruiz- Import	
EMA GmbH	Supplier of food retailing
Epicerie Fine	Supplier of specialised shops
eterna Nahrungsmittel GmbH	Supplier of food retailing
Euro Atlantic Import-Export Food Handels GmbH	
Fantone Feines Olivenöl	Supplier of specialised shops
Fäustle Import	
Fripa Vertribs GmbH	
Garibaldi - Eberhard Spangenberg	Supplier of specialised shops
Graf, Alfred	Supplier of food retailing
Grudis GmbH	
Grünsfelder Ölmühle GmbH	
Günther Hellriegel GmbH	
GZ Online – Gerhard Ziegler	
Henry Lamotte GmbH	
Holtmann Feinkost GmbH	
Horace M. Ostwald	
Horst Küper GmbH Import	
Il Nuraghe GmbH	Supplier of specialised shops
Imex Handelsges. mbH	Supplier of food retailing
Importhaus für Delikatessen Wolfram Berge GmbH & CO KG	
Interfood GmbH	

Table 9: - continued -

Irene C. L. Bleickert	
Kattus, Theodor GmbH	Supplier of food retailing
Klemann GmbH	Supplier of specialised shops
Krini - A. Kristallidis GmbH feine Spezialitäten	Supplier of food retailing
Macha Weine & Feines	Supplier of specialised shops
Maren Encinas KG	
Marmara Import-Export GmbH	
Minerva Deutschland Olivenöl GmbH	Supplier of food retailing
Moreno GmbH & Co. KG	
Ölbaum	Supplier of specialised shops
Olive E Più Marzak KG	Supplier of specialised shops
Olivia's-Florian Schüssler	
Ölmühle Solling GmbH	
Olmühle Walz GmbH	
Otto Franck Import KG	
Ralf Bos Food	
Raoul Rousso GmbH	
Reichold Feinkost, Feinkost Dittmann GmbH	
Reina Vertrieb-José Reine Diaz	
Rekru Brennerei-Kellereibedarf am Bodensee	
Rila Feinkost-Importe GmbH & Co. KG	Supplier of food retailing
Romina Foods Import GmbH	
Ronald Schubbert	
Rungis Express GmbH	
Ruth Bohl GmbH – Delikatessen –u. Spezialitäten Import	
Samsel Vertriebs GmbH & Co. KG	
Santos Lebensmittel Import GmbH	
Sektkellerei Jürgen Weisenborn	
Silca Import AG	
Siller & Boeckheler	
Simon, Evers & Co. GmbH	
Smart Food & Drink GmbH	Supplier of specialised shops
Sol Im.-u. Export GmbH	
Spanischer Garten Import GmbH	
St. Josef Imp.-u. Export Handelsges.mBH	
Stirn, Wilhelm F. GmbH & Co KG	Supplier of food retailing
Südlandhaus-Horst Beiderwieden GmbH & Co. KG	
Sul Portugal GmbH-Spezialitäten aus Spanien u. Portugal	
Sunda Vital oHG	
Tivona Alimentaria GmbH	
Trienon Handels GmbH	
Unilever Bestfoods Deutschland GmbH	
Viani Importe GmbH	Supplier of specialised shops
Vin o Ropa Weinhandels GmbH	
Vinespa Vinos Españoles GmbH	
Vinos Barron – Feines aus Spanien	
Vivolo Vin OHG	
Weinhandel Peral	
Weise von Schmeling, INKA	
Wilk GmbH & Co.	Supplier of specialised shops
Wilms Importhaus GmbH & Co. KG	Supplier of food retailing

Source: Spanish Consulate in Düsseldorf and Italian Institute of Foreign Trade (I.C.E.)