



J R C T E C H N I C A L R E P O R T S

Task 2: Market Analysis (draft) Working Document

Revision of the EU GPP Criteria for the Product
Group Food and Catering Services

Pernilla Sjögren (Oakdene Hollins)
Peter Lee (Oakdene Hollins)
Dan Eatherley (Oakdene Hollins)
Belmira Neto (JRC-IPTS)
Rocío Rodríguez Quintero (JRC-IPTS)
Oliver Wolf (JRC-IPTS)

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Abbreviations and Acronyms

B&I:	business and industry
EIRO	European Foundation for the Improvement of Living and Working Conditions
EVA	European Vending Association)
FAO:	Food and Agriculture Organization of the United Nations
FERCO	European Federation of Contract Catering Organisations
GAIN	Global Agricultural Information Network
HACCP:	Hazard Analysis and Critical Control Points
IPTS:	Institute of Prospective Technological Studies
LCA:	life-cycle assessment
LCC:	life-cycle costing
NHS:	National Health Service (the UK)
SMEs:	small and medium sized enterprises

<i>Codes for the representation of names of countries and their subdivisions (according to ISO 3166)</i>	
AT: Austria	IE: Ireland
BE: Belgium	IT: Italy
BG: Bulgaria	LT: Lithuania
CY: Cyprus	LU: Luxembourg
CZ: Czech Republic	LV: Latvia
DE: Germany	MT: Malta
DK: Denmark	NL: Netherlands
EE: Estonia	PL: Poland
ES: Spain	PT: Portugal
FI: Finland	RO: Romania
FR: France	SE: Sweden
GR: Greece	SI: Slovenia
HR: Croatia	SK: Slovakia
HU: Hungary	UK: United Kingdom

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2 MARKET ANALYSIS

The aim of this chapter is to update the key figures on the size and structure of the EU market in terms of the public expenditure on food and catering services, and to identify important drivers, trends, innovations and initiatives. This involves the identification of significant changes in the market to inform the revision of the current EU GPP document for food and catering services. The analysis covers the period starting from the current EU GPP document (dated 2008).

A large emphasis in this chapter will be on the catering service part of food provision. In addition, public sectors, food systems and food categories will be presented in more detail in this chapter to evaluate which are most relevant for the public sector as a whole and thereby of most relevance to the revision of the EU GPP criteria. A number of stakeholders from different organisations across Europe (within the food and catering sector) have provided feedback on how public catering services looks like in the EU. Some of their responses will be part of this section.

2.1 EU market overview

Most statistical data available on foodservice in Europe includes both public and commercial data. Eurostat Structural Business Statistics provides data on the NACE Rev 2 category 'Food and Beverages Service Activities'.

Table 1 shows this category and its three sub-categories. Sub-category '56.1 Restaurants and mobile food service activities' is likely to consist mainly of companies working in the private market, as is the sub-category '56.3 Beverage service activities' - although this also includes vending machines. Sub-category '56.2 Event and other food service activities' may also cover both public and private markets, although public market activities are more prevalent. '56.29 Other food service activities' includes industrial catering. In the EIRO (2010) report it is assumed that contract catering is part of this sub-category.

Table 1: NACE Rev. 2 classification of 'Food and Beverage Service Activities' (Eurostat, 2008)

56 Food and Beverage Service activities
56.1 Restaurants and mobile food service activities
56.2 Event catering and other food service activities
56.21 Event catering activities - includes the provision of food services based on contractual arrangements with the customer, at the location specified by the customer, for a specific event.
56.29 Other food service activities - includes industrial catering, i.e. the provision of food services based on contractual arrangements with the customer, for a specific period of time. Also included is the operation of food concessions at sports and similar facilities. The food is usually prepared in a central unit.
56.3 Beverage service activities - includes preparation and serving of beverages for immediate consumption on the premises.

Statistics from 2011 and 2012 from Eurostat Structural Business Statistics has been used in this report, since those years provide the most recent complete sets of data from all Member States. Statistics from 2013 and onwards are not complete or are under development. Figure 1 present the total purchase of 'Food and Beverage Service Activities' in the EU-28, by Member State in 2011. This includes all meals and drinks that are prepared for immediate consumption, also alcoholic beverages (Eurostat, 2008). The estimated expenditure for the 28 Member States is €206.3 billion.

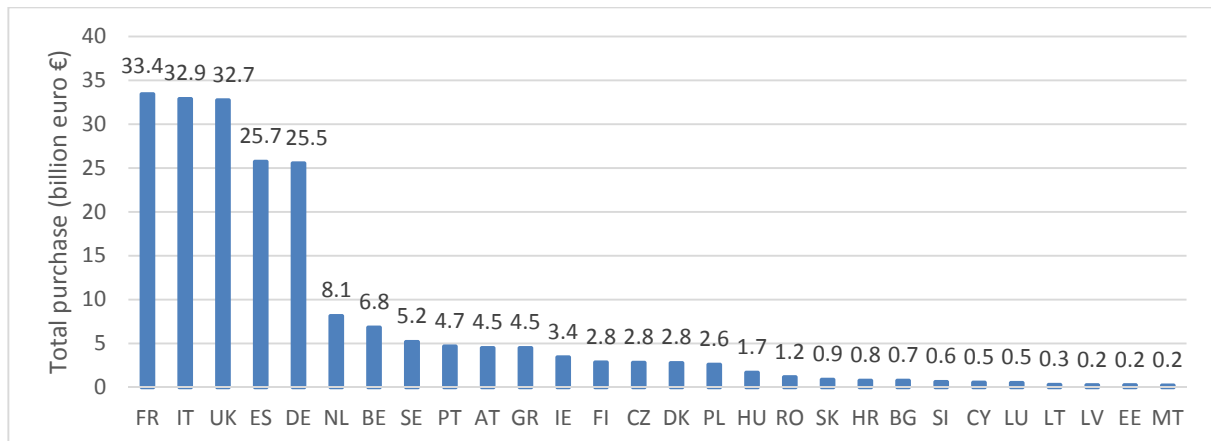


Figure 1: Total purchase cost per EU Member State for 'Food and Beverage Service Activities' in 2011 (Source: Adapted from Eurostat Structural Business Statistics)

The data in Figure 1 is further broken down into its three sub-categories as illustrated in Figure 2. It is clear that 'Restaurants and mobile food service activities' has the largest purchase value in all countries. 'Event catering and other food service activities' is small in comparison.

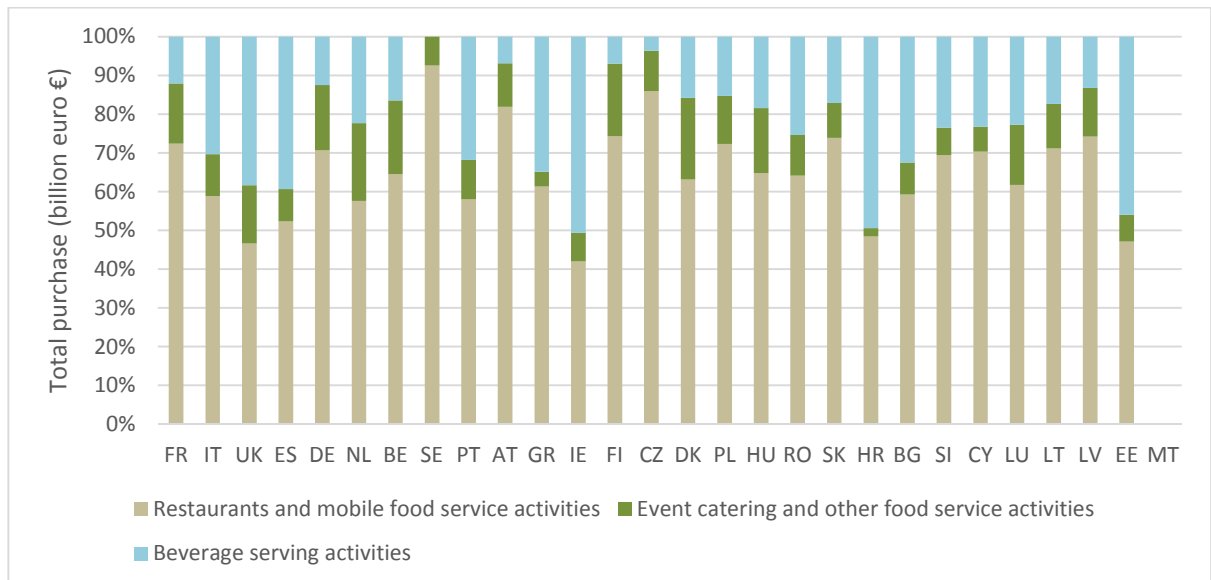


Figure 2: Total purchase cost per Member State (2011), split between the three sub-categories of 'Food and Beverage Service Activities' (Source: Adapted from Eurostat Structural Business Statistics)

In 2012 'Food and Catering Service Activities' involved more than 1.5 million enterprises, the sector had a total turnover of approximately €354 billion, and employed 8 million people¹, (Table 3). Table 2 shows the same information, but for 2008. The values are accumulated from all Member States of EU-28.

Between 2008 and 2012 'Restaurant and Mobile Service Activities' sector has had an increase of enterprises (+10.9 %), employees (+12.2 %) and turnover (+16 %). A similar development can be seen for 'Event Catering and Other Food Service Activities' where it has been an increase in number of enterprises (+23.3 %), employees (+9.2 %) and turnover (+17.1 %). 'Beverage Serving Activities, on

¹ "Defined as the total number of persons working in the various industries: employees, non-employees (e.g. family workers, delivery personnel) with the exception of agency workers" (Structural Business Statistics)

the other hand, has seen enterprises decrease (-8.1 %) and turnover decreased (-8.9 %), while the number of employees has increased (+24.1 %).

Table 2: Structure of food and beverages services, by activity, EU-28, 2008 (Source: Eurostat Structural Business Statistics)

	No. enterprises ('000)	No. of persons employed ('000) ^a	Turnover (EUR million)
Food and beverage service activities	1 496.0	6 990.6	324 573
Restaurants & mobile food service activities	791.1	4 400.0	187 625
Event catering and other food service activities	60.1	961.7	44 396
Beverage serving activities	644.8	1 628.9	92 552

^a Values for France are estimated based on data for previous years.

Table 3: Structure of food and beverages services, by activity, EU-28, 2012 (Source: Eurostat Structural Business Statistics)

	No. enterprises ('000)	No. of persons employed ('000) ^a	Turnover (EUR million) ^b
Food and beverage service activities	1 543.9	8 008.3	353 823
Restaurants & mobile food service activities	877.3	4 936.6	217 560
Event catering and other food service activities	74.1	1 050.0	51 970
Beverage serving activities	592.4	2 021.7	84 293

^a Values for Malta are estimated based on data for previous years.

^b Values for Malta are estimated based on data for previous years.

GIRA Foodservice (2014) reports that the total social foodservice market of all Member States in EU-28 was valued €82 billion in 2013. This estimation is based on the data of EU-15 Member States, which represent 88 % of the EU-28 total social foodservice market. This figure comprises the expenditures of both public and private organizations in B&I, Educational, Health and welfare, and other services. GIRA Foodservice (2014) report shows the percentage of meals provided to public institutions, estimated 55 % from the total meals of the social foodservice market (data from EU-15).

2.2 Market structure

2.2.1 Contract catering market

2.2.1.1 Public bodies vs catering companies

The foodservice sector in Europe is split into markets self-operated by public bodies and markets contracted to catering companies. In 2012, contract caterers in the EU had a 35.2 % share of the total public foodservice market value (FERCO, 2012). This was an increase of 1.7 % since 2008 (when the share was 33.5 %) and had already increased 8.7 % since 2000 (based on EIRO, 2010). Figure 3 illustrates the split of public sector expenditure on food and catering between self-operating public bodies and contract caterers. A wide variation is visible between the 17 Member States. In Germany, Sweden, Finland, Denmark, and Poland public expenditure on self-operating services accounted for over 70 % of the total, whereas Spain, Portugal and Ireland accounted for less than 40 %. Contract caterers represent more than 50 % of the public expenditure in those countries, together with Luxembourg, Austria and Italy.

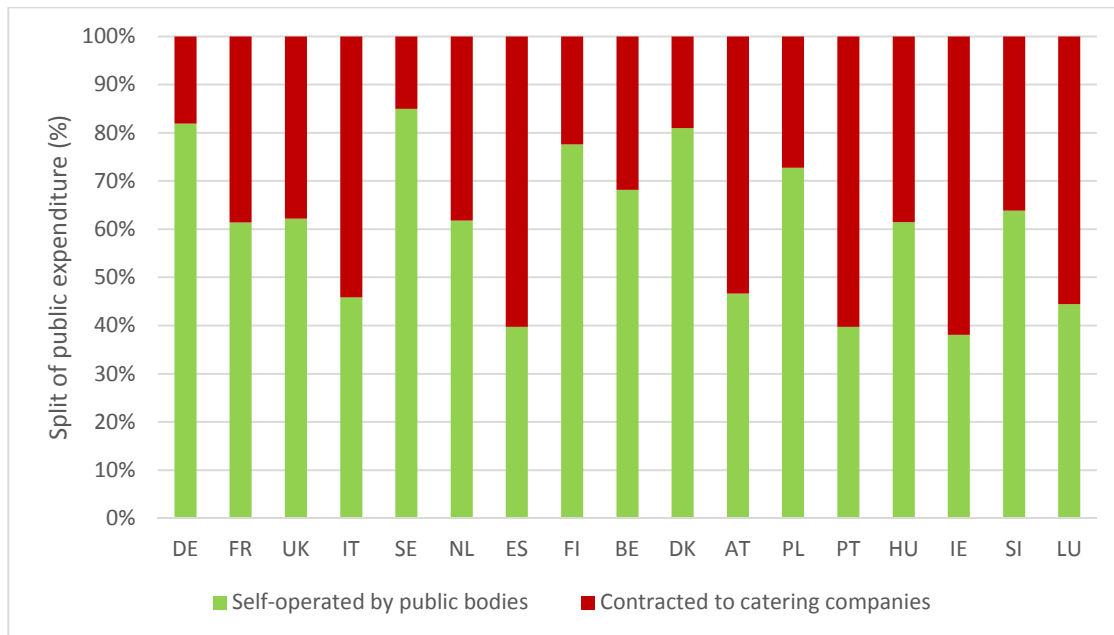


Figure 3: Split of public expenditure on food and catering services per provider (Adapted from: FERCO, 2012)

In 2008 the turnover of the total contract catering industry in the EU was €24.6 billion and around 600 000 people were employed (EIRO, 2010). Table 4 shows the breakdown of employees between Member States and between private and public sector.

Table 4: Number of employees in the European contract catering sector (Source: FERCO, 2012)

Country	Total employees	Private sector employees	Public sector employees
Austria	17 500	8 400	9 100
Belgium	8 500	5 000	3 500
France	78 026 (2010)	-	-
Hungary	60 000	20 000	40 000
Italy	100 000	50 000	50 000
Netherlands	20 000	-	-
Portugal	14 000	8 000	6 000
Slovenia	39 000	22 000	17 000
UK	114 500	59 500	55 000

2.2.1.2 Structure of the contract catering market

Specific arrangements between public sector procurers and contract caterers vary enormously from provision of ‘fine dining’ to the operation of vending machines and everything in between.² In some cases, the contractor will agree to provide a full catering service for a fixed annual fee. In other situations, the contractor may sign a ‘zero cost agreement’ or even pay, essentially to secure the right to sell food to customers on the public sector organisation’s premises.³ In certain situations (e.g. some of Spain’s public hospitals) the contract caterer will simply help the hospital procure raw ingredients but leave the catering to in-house staff (as governed by trade union agreements).⁴ This kind of ‘middle-man’ arrangement is not common in Hungary, where contract caterers generally

² Representative of a Catering Association, UK (a). Personal communication, 17 February 2015.

³ Representative of a Catering Association, UK (a). Personal communication, 17 February 2015.

⁴ Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

both procure the food and provide the catering service (although in some cases, e.g. in schools, in-house staff will physically serve the food).⁵ It is not always obvious to the end consumer that a third-party business is delivering the service. Often the contract caterer will simply take over existing in-house staff and equipment, with the commitment to provide the same or higher level of service at lower cost.⁶

There is currently strong competition within the catering industry as well as a high rate of market concentration in some Member States, both of which are increasing (EIRO, 2010). This has led to a development where major companies acquire smaller competitors as a way of increasing market share (EIRO, 2010). In 2008, there were three contract catering companies dominating the market in many Member States. However, there are still some more fragmented national markets, with local operators and family businesses providing a share of the catering services - such as Spain, Italy and countries in Central and Eastern Europe (EIRO, 2010). Figure 4 illustrates the extreme differences in the market share held by the top 4 contract caterers in each country in 2013. In Austria and Portugal, the top 4 accounts for 86 % of the total contract catering market, whereas, in Poland the top 4 only accounts for 14 %.

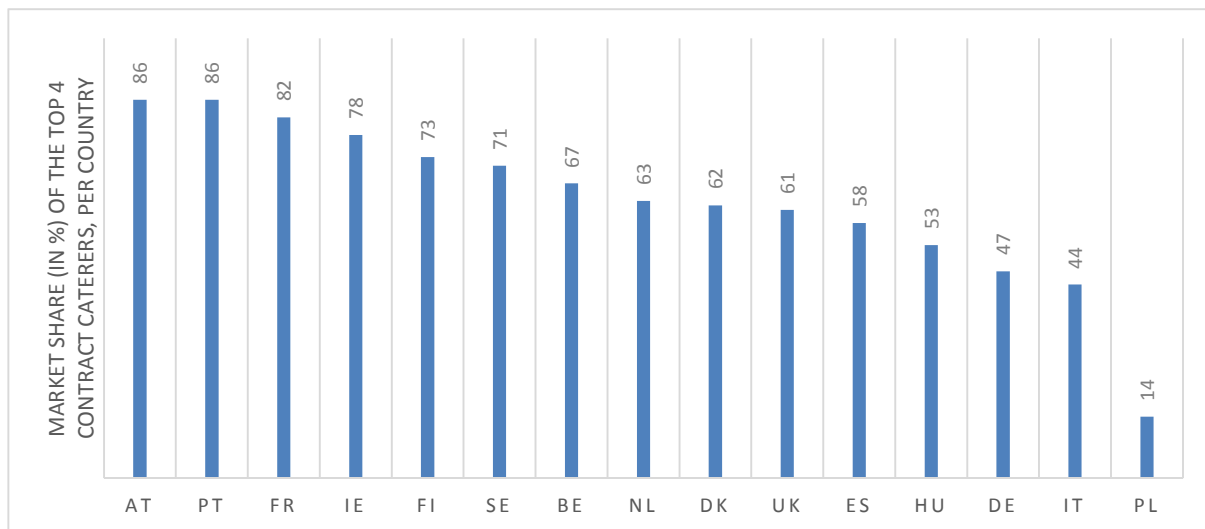


Figure 4: The market share (by financial value) of the top 4 contract caterers in each country (Adapted from: GIRA Foodservice, 2014)

Table 5 shows how the activity in the foodservice sector varies by segment and by country in terms of number of meals provided. The social foodservice market that provided to public institutions accounts for 15 % of the B&I segment (ranging from 5 % in Finland to 34 %), for health/welfare the value is 53 % (varying from 12% in the Netherlands to 97 % in Hungary) and 78 % of the education segment consists of public institutions (ranging from 44 % in Belgium to 97 % in Finland).

⁵ Representative of a Catering Service Provider, Hungary. Personal communication 10 March 2015.

⁶ Representative of a Catering Association, UK (a). Personal communication 17 February 2015.

Table 5: Average breakdown of meals provided to public and private foodservice in 2013 (by volume of meals provided) (Source: GIRA Foodservice, 2014)

Country	Business and Industry (B&I)		Education		Health/Welfare		Other Segments		Total	
	Public %	Private %	Public %	Private %	Public %	Private %	Public %	Private %	Public %	Private %
Belgium	34	66	44	56	34	66	57	43	37	63
Denmark	17	83	85	15	92	8	100	0	77	23
Finland	5	95	97	3	90	10	100	0	85	15
France	20	80	77	23	52	48	43	57	56	44
Germany	11	89	63	37	35	65	100	0	36	64
Hungary	7	93	90	10	97	3	100	0	81	19
Ireland	6	94	92	8	85	15	100	0	52	48
Italy	13	87	78	22	58	42	61	39	57	43
Netherlands	19	81	77	23	12	88	100	0	27	73
Poland	6	94	95	5	90	10	100	0	82	18
Spain	10	90	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sweden	13	87	82	18	80	20	100	0	76	24
UK	18	82	75	25	60	40	90	10	60	40
Total	15	85	78	22	53	47	74	26	55	45

2.2.1.3 Food and catering service per public sector – stakeholder feedback

Business and Industry (B&I)

Contract caterers are particularly evident in staff canteens. In the UK for instance, 80-90 % penetration is reported by two stakeholders^{7,8}. FrozenFoodEurope (2014) reports that in the German B&I sector, 62 % of the sales volume falls to the classical warm midday meals and this is regarded as an employee’s benefit and the company typically provides a subsidy. The remaining 38 % is classified as ‘in-between’ meals, e.g., snacks and snack drinks and companies can make a profit on these items. In Finland, contract catering – which has developed since 2000 - is still not widespread, due in part to political resistance. Currently it is almost entirely restricted to provision of meals in staff canteens⁹.

Education (schools and higher education)

As a whole, contract caterers are less evident in schools. For instance, in the UK, around one third of schools outsource catering.¹⁰ However, arrangements for provision of food in schools vary with the type of institution. In the state-run primary school sector, a Local Authority will procure catering via a single contract covering perhaps 200 to 300 sites.¹¹ These contracts may be won either by a public-owned entity or by one of eight or nine private contractors.¹¹ A similar model exists in France, Italy and Spain¹². By contrast, individual academy¹³ schools (or a small cluster) in the UK are able to select

⁷ Representative of a specialised magazine, UK. Personal communication, 24 February 2015.

⁸ Representative of a Catering Service Provider, UK (b). Personal communication, 6 March 2015.

⁹ Representative of a local government, Finland. Personal communication, 27 February 2015.

¹⁰ Representative of a specialised magazine, UK. Personal communication, 24 February 2015.

¹¹ Representative of a Catering Service Provider, UK (b). Personal communication, 6 March 2015.

¹² Representative of a Catering Service Provider, UK (b). Personal communication, 6 March 2015.

their own caterer, independent of Local Authority control, as can secondary state schools which have 'delegated budgets'.¹² Contract catering is also rare in Ireland's schools, with private caterers active in boarding schools only.¹⁴ There is some evidence of contract catering in the Netherlands, with about 50 % of secondary school canteens operated by small private sector organisations, but the meals offered are simple.¹⁵

In Germany, contract catering in schools is reportedly a new phenomenon with a low rate of penetration by the private sector and a preponderance of independent not-for-profit actors.^{16,17} As in the Netherlands, a substantial proportion of students may go home for lunch.¹² A similar tradition is seen in Poland.¹⁸ In Spain, the picture is rather unusual with all non-teaching functions carried out by third-party contractors including supervision of students at playtime, during travel to and from school and during meal times. Thus, one large contract caterer reports that, of its 18 000 employees, approximately half act as supervisors (*monitores*).¹⁹ In Hungary, the involvement of the private sector in schools is relatively high at 55 %, with the main market being the provision of food to the younger age group (3-15 years).¹⁸

The penetration of the higher education market by contract caterers is highly variable across Europe. In some Member States (e.g. France, Finland, Germany²⁰) food service in universities is provided by nationwide public or not-for-profit organisations. However, in the Netherlands private caterers supply 100 % of the university and colleges (18+ year-old) market.¹⁵ Universities in Ireland employ around 90 % external contractors.¹⁴

On-site preparation is making a return in UK schools - with the exception of some remote rural schools which might have their meals prepared elsewhere, perhaps at a nearby secondary school, and brought in at lunchtime.²¹ Elsewhere in Europe (e.g. Germany¹⁶), off-site preparation is relatively common in the schools sector for cost-reduction reasons. FoodServiceEurope (2013) reports that low prices remain the most important criterion for eating at a university restaurant and that, over recent years, expectations have risen in terms of the demand for a professional service. The report also stresses that, more than any other segments of society, university students tend to prefer organic, healthy cuisine.

Sweden contrasts with other Member States in that only around 20 % of food and catering contracts are undertaken by private enterprises. The bulk of preparation is instead done by the municipalities themselves, using their own employees, within on-site kitchens.²² Sweden's universities are unusual in that the bulk of student catering is provided by a country-wide cooperative, although franchises provide additional meals on certain campuses.²² In Finland most schools, day-care centres, social services and larger hospitals are wholly responsible for their own food service.²³ A local stakeholder

¹³ Academy schools are primary and secondary schools in England, UK, directly funded by central government and independent of direct control by the local authority.

¹⁴ Representative of a Catering Association, Ireland. Personal communication, 9 March 2015.

¹⁵ Representative of a Catering Association, Netherlands. Personal communication, 6 March 2015.

¹⁶ Representative of an Institute, Germany. Personal communication, 6 March 2015.

¹⁷ Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015.

¹⁸ Representative of a Catering Service Provider, Hungary. Personal communication, 10 March 2015.

¹⁹ Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

²⁰ *In Germany, it is illegal for universities to outsource food service* (Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015).

²¹ Representative of a specialised magazine, UK. Personal communication, 24 February 2015.

²² Representative of a Governmental Authority, Sweden. Personal communication, 25 February 2015.

²³ Representative of a local government, Finland. Personal communication, 27 February 2015.

reports that, in 2011, only 14 % of Finnish catering services to schools, day-care centres, hospitals, and social services came from private sector with the rest supplied by the public sector - usually a municipality-owned public utility.²⁴ As in other parts of Europe, including Sweden and France, food provision within the universities in Finland is the responsibility of a single catering organisation, among which a relevant organisation specialised in very low priced meals for students.²⁵

Health sector

Within the UK, one stakeholder²⁶ reports that 15-20 % of patient meals are provided by contract caterers, but another²⁷ estimates that 40 % are outsourced. These contractors generally procure meals which have been prepared by themselves or by specialist manufacturers in off-site central production units. Relevant contract caterers are active in Germany's hospitals, with meals produced off-site by a specialist ready-meal manufacturer²⁸ In Hungary, dominant contract caterers are responsible for around 40 % of patient meals in the larger hospitals, but smaller sites (e.g. 60-100 patients) tend to prepare their own food.²⁹ In the Spanish hospital system, contract caterers have failed to get much of a foot-hold due to trade union resistance, and their function is restricted to supplying raw ingredients into hospitals. However, an industry expert predicts that, over time, third-party involvement is likely to grow in the Spanish health sector. In the Netherlands, contract caterers have so far been excluded from the preparation of patient meals in the health system, hospital managers arguing successfully that they are better placed to meet patients' dietary needs, although this is unsurprisingly disputed by private providers.³⁰ Contract catering is also rare in Ireland's health service, with one stakeholder estimating that 90 % of food provision is undertaken in-house.³¹

Within the health sector across Europe, the predominant preparation method for patient meals is now the off-site, cook-chill, plated meal system – although specific arrangements vary widely.²⁷ For instance, in one English city, a single central production unit (CPU) caters for eight different hospitals. In the Netherlands, twelve separate hospitals have joint-funded a single CPU²⁷ and, in a city in Germany, one CPU serves eleven sites.²⁸

Visitors to hospitals in Ireland, and employees, are price sensitive and prefer lower priced food. However, if the food provided is of higher quality or greater convenient (grab-to-go), they are willing to pay extra. For patients, the operators focus on providing menus that are healthy and with balanced nutrition (Bord Bia, 2014). However, as budgets are tightened, it is important to keep the cost of food down. In Ireland this is done by having long-term contracts and using central kitchens to provide the foodservice (Bord Bia, 2014).

Social care

With people generally living longer across Europe, the elderly care market represents an attractive target market for contract caterers, manufacturers and suppliers. However, in social care settings, contract catering still tends not to be the norm. In Spain, for instance, the main obstacle is the philosophy of care providers that feeding the residents (or enabling the residents to cook for

²⁴ Representative of a local government, Finland. Personal communication, 27 February 2015.

²⁶ Representative of a specialised magazine, UK. Personal communication, 24 February 2015.

²⁷ Representative of a Catering Association, UK, (b). Personal communication, 18 February 2015.

²⁸ Representative of an Institute, Germany. Personal communication, 6 March 2015.

²⁹ Representative of a Catering Service Provider, Hungary. Personal communication, 10 March 2015.

³⁰ Representative of a Catering Association, Netherlands. Personal communication, 6 March 2015.

³¹ Representative of a Catering Association, Ireland. Personal communication, 9 March 2015.

themselves) is a core principle, and this function is less likely to be outsourced in the future.³² The situation is the same in the Netherlands³⁰ and Ireland³¹. Contract catering is also almost unheard of in the UK social care sector, since most residential homes employ in-house teams to prepare meals. Private sector involvement is therefore largely restricted to the community meals service, where businesses manufacture ready-meals for delivery to consumers' homes.³³ It is predicted that any future role for the contract caterers might be solely in top-level management of catering staff rather than direct involvement in day-to-day food preparation.³³ Despite this, at least one multinational contract caterer is in talks with some of the larger providers of social care in Spain, France and the UK.³⁴

Within the social care sector in the UK³³, Spain³² and in much of Europe, on-site preparation from raw, fresh ingredients is the primary provision model. The exception is when meals are delivered 'in the community' (i.e. 'meals on wheels' services). Fresh, traditional preparation may be viewed as an integral aspect of 'care' by those operating residential homes.³⁵ Residents generally expect food to be 'home cooked'.³⁶ It may be that the widely dispersed nature of residential homes makes the model of a central kitchen serving multiple sites (as in certain health systems) less viable³⁶, although this is debatable given that manufacturing companies are able to make meals for sites across wide regions of the UK. Furthermore, in the UK at least, ready-to-eat delivered meals seem popular with the private care home sector.³⁷ An interviewee from a large contract caterer suggested that the 'meals on wheels' market is likely to develop with retired people who are not ready to move into residential care but would like 'help at home'. In France, for instance, the average age at which people enter a residential home is now 87, with those in their late-70s to mid-80s preferring to stay at home.³⁸

According to a Finnish stakeholder, the private sector is seeking to gain a foothold in other social food settings, but it is not clear whether it will succeed. A recent example was cited of a contract caterer which had been brought in to provide food in a care home, but then was dismissed and public provision resumed.³⁹ Another Finnish stakeholder observed that the size of public procurement across all subsectors was growing with centralized procurement activity also increasing.⁴⁰ The picture across the rest of Scandinavia is variable, with contract catering achieving a greater foothold in Denmark.⁴¹

Other sub-sectors (Defence and Prisons)

The UK is unusual in that contract caterers are responsible for almost 100 % of the food provided in Ministry of Defence sites in the UK. 'In-house' chefs only occur in the field.⁴² The large share of outsourcing may be a legacy of the Second World War during which the first contract catering companies were formed to make and serve food in large quantities.⁴³ Elsewhere the private sector

³² Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

³³ Representative of a local government, UK. Personal communication, 26 February 2015.

³⁴ Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015.

³⁵ Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

³⁶ Representative of a local government, UK. Personal communication, 26 February 2015.

³⁷ Representative of a Catering Service Provider, UK (a). Personal communication, 27 February 2015.

³⁸ Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015

³⁹ Representative of a local government, Finland. Personal communication, 27 February 2015.

⁴⁰ Representative of a Business Organisation, Finland. Personal communication, 5 March 2015.

⁴¹ Representative of a Governmental Authority, Sweden. Personal communication, 25 February 2015.

⁴² Representative of a specialised magazine, UK, Personal communication, 24 February 2015.

⁴³ Representative of a Catering Service Provider, UK (b), Personal communication, 6 March 2015.

has made less of an impact. In the Netherlands, for instance, a state-owned company caters for military personnel. However, private contractors are hopeful of gaining a foothold in the Dutch market.⁴⁴ In France⁴⁵ and Hungary (and other countries in central Europe)⁴⁶, no contract caterers operate in the defence sector. In the Finnish defence forces, the main catering organisation has been since 2012, wholly state-owned (although it was previously part of the defence forces, so no real change has occurred). It provides over 70 000 meals per day, although some services are provided in conjunction with a private company.⁴⁷

The presence of contract catering is variable in the prison sector. Private companies are providers in some UK prisons⁴⁸, with some not only providing food but also building and running the prison³⁸. In-house provision is more usual in the older jails.⁴⁹ In the Netherlands too, contract caterers are responsible for prison catering (even though all prisons are public).⁴⁴ Outsourcing is also reportedly common in French prisons⁴⁶ but is rare in Ireland⁵⁰ and Hungary⁴⁶. Traditional on-site preparation continues to be the norm in prisons across Europe since inmates provide a ready source of cheap labour.⁵¹

In Irish prisons, costs cannot increase and operators are putting effort into increasing quality where possible. One method of controlling costs is to have a programme of central/collective buying (similar to that in education and healthcare (Bord Bia, 2014).

Alternative catering services providers

A variety of external not-for-profit enterprises sometimes supplant the role of the private contract caterers. In some parts of southern Europe (e.g. Italy, Spain, Portugal), religious organisations (i.e. the Catholic Church) play a prominent role in providing catering services for the education establishments (e.g. schools, universities) which they run⁵²; although such examples are arguably beyond the scope of public sector procurement.

In Italy ‘cooperatives’ are key food providers within the public sector, consisting in an arrangement which is rather unusual in Europe.⁵³ Italy, as well as Germany, evidences not-for-profit organisations. In Germany, these not-for-profits take the form of independent GmbHs⁵⁴ and cater for business and industry canteens⁵⁵ along with schools and universities. In Hungary and other parts of Central and Eastern Europe, not-for-profits appear rare⁵⁶.

It should also be noted that, in Germany (and certain other large European countries) the application of VAT to outsourced services acts as a significant barrier to the involvement of contract caterers. As

⁴⁴ Representative of a Catering Association, Netherlands. Personal communication, 6 March 2015.

⁴⁵ Representative of a Catering Service Provider, UK (b), Personal communication, 6 March 2015.

⁴⁶ Representative of a Catering Service Provider, Hungary. Personal communication, 10 March 2015.

⁴⁷ Representative of a local government, Finland. Personal communication, 2 March 2015.

⁴⁸ Representative of a specialised magazine, UK, Personal communication, 24 February 2015.

⁴⁹ Representative of a Catering Service Provider, UK (b), Personal communication, 6 March 2015.

⁵⁰ Representative of a Catering Association, Ireland. Personal communication, 9 March 2015.

⁵¹ Representative of a Catering Association, UK (a). Personal communication, 17 February 2015.

⁵² Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015.

⁵³ Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

⁵⁴ Gesellschaft mit beschränkter Haftung, i.e. company with limited liability

⁵⁵ Representative of an Institute, Germany. Personal communication, 6 March 2015.

⁵⁶ Representative of a Catering Service Provider, Hungary. Personal communication, 10 March 2015.

evidence for this link, one stakeholder points to Norway, where there is a 24 % VAT rate and no outsourcing at all: 'it is a 24 % barrier to entry'⁵⁷. In Hungary, the VAT rate is higher still at 27 %.⁵⁶

2.2.2 Market segmentation by type of public food and catering service

GIRA Foodservice (2014) provides a breakdown of the social foodservice sector by segment (Table 6). The analysis shows that over 18 billion meals were served in these 15 countries in 2013 and again there is significant variability by country and by segment. Across the 15 countries, health/welfare represents the most significant segment accounting for an average 42.7 % of the total meals served (ranging from 27.3 % in Ireland to 57.4 % in Belgium). A report on France stated that the sector remained strong through the recession because of a steady demand from an ageing population (GAIN, 2012). This observation would be relevant across many of the EU countries. Education is the second most significant segment accounting for an average 31.4 % (ranging from 14 % in the Netherlands to 57.4 % in Sweden).

Table 6 shows the breakdown of the average cost of meals by sector, which is a rough estimation that might vary within a wide range of values.

Table 6: Average breakdown of Social Foodservice market by segments in 2013 by number of meals. (Source: GIRA Foodservice 2014).

Country	B&I		Education		Health/welfare		Other segments		Total
	Million meals	% of total	Million meals	% of total	Million meals	% of total	Million meals	% of total	Million meals
Austria	72	26.2	54	19.6	119	43.3	30	10.9	275
Belgium	88	18.1	87	17.9	279	57.4	32	6.6	486
Denmark	66	17.1	120	31.0	182	47.0	19	4.9	387
Finland	55	10.8	271	53.3	159	31.3	23	4.5	508
France	436	12.0	1 223	33.5	1 644	45.1	345	9.5	3 648
Germany	974	28.2	683	19.8	1 679	48.6	116	3.4	3 452
Hungary	100	14.2	357	50.9	204	29.1	41	5.8	702
Ireland	85	45.5	39	20.9	51	27.3	12	6.4	187
Italy	228	14.6	438	28.0	627	40.1	269	17.2	1 562
Netherlands	250	29.4	119	14.0	445	52.3	37	4.3	851
Portugal	28	9.3	104	34.7	139	46.3	29	9.7	300
Poland	118	13.1	202	22.4	404	44.8	178	19.7	902
Spain	71	7.3	256	26.2	509	52.0	142	14.5	978
Sweden	72	8.5	484	57.4	268	31.8	19	2.3	843
UK	625	18.9	1 320	40.0	1 124	34.1	231	7.0	3 300
Total	3 267	17.8	5 756	31.4	7 832	42.7	1 504	8.2	18 359

⁵⁷ Representative of a Catering Service Provider, UK (and internationally), Personal communication, 9 March 2015.

Table 7: Breakdown of Social Foodservice market by segments in 2013 by expenditure (Source: GIRA Foodservice 2014).

	B&I	Education	Health/welfare	Other segments
Average meal cost (EUR/meal)	5.14	3.16	4.18	3.19

Table 8 shows consumer spending and the purchasing cost of food for the foodservice operator in Ireland, for 2014, with a forecast for 2017. Consumer spending is expected to increase slightly in all sectors, but 'Education' will grow fastest, at almost 6%. For operator purchasing, 'Education' is expected to increase most (circa 5.1 %).

Table 8: Consumer spending and operator purchasing of foodservice, current levels at 2014 and forecasts to 2017 (Bord Bia, 2014)

Irish Institutional Foodservice Market	Consumer spending (€M) Year 2014	Operator Purchasing (€M) Year 2014	Consumer Spending (€M) Year 2017	Operator Purchasing (€M) Year 2017
B&I	283	136	289	139
Health	224	114	229	116
Education	138	59	146	62
Other institutional	38	19	39	20
Total	€638	€328	€703	€337

In the public sector in the UK 'Education' provides most meals per year. However, it is 'Services' and 'Staff Catering' that provide the most meals per outlet. (Outlet being the place of consumption of meals). This is illustrated in Table 9.

Table 9: The UK foodservice market in 2013 (Source: Adapted from Horizons data in GAIN, 2014a)

	Number of outlets	Number of meals (million)	Average number of meals per outlet per year
Staff catering	17 960	787	43 820
Health care	32 116	986	30 700
Education	34 308	1 094	31 887
Services	3 071	257	83 690
Total	87 455	3 124	35 720

2.2.3 Food and catering service supply chain

2.2.3.1 Overview of a general supply chain

The supply chains of food products and catering services are rather complex, but Figure 5 attempts to summarise the main features in a simplified manner. For most products the main stages do not vary whether the food is used for self-operation by public bodies (in-house food service) or by contract caterers. Differences first become apparent where the catering service starts (i.e. when food is prepared and served to end-consumers). For instance, in some cases contract caterers undertake the whole service; in others only parts of the service. In some cases they operate in the customer's facility, in others in their own (e.g. in a central facility). Note that Figure 5 indicates that all actors buy their food products from wholesale: this is a simplification of the supply chain and may not be true for food products with a short shelf life for instance (e.g. milk or meat) - that may be bought direct from the producer/processor. In Ireland, as an example, it is reported that around 85 % of food is supplied through the traditional wholesale route and 15 % through emerging 'buy direct' routes.

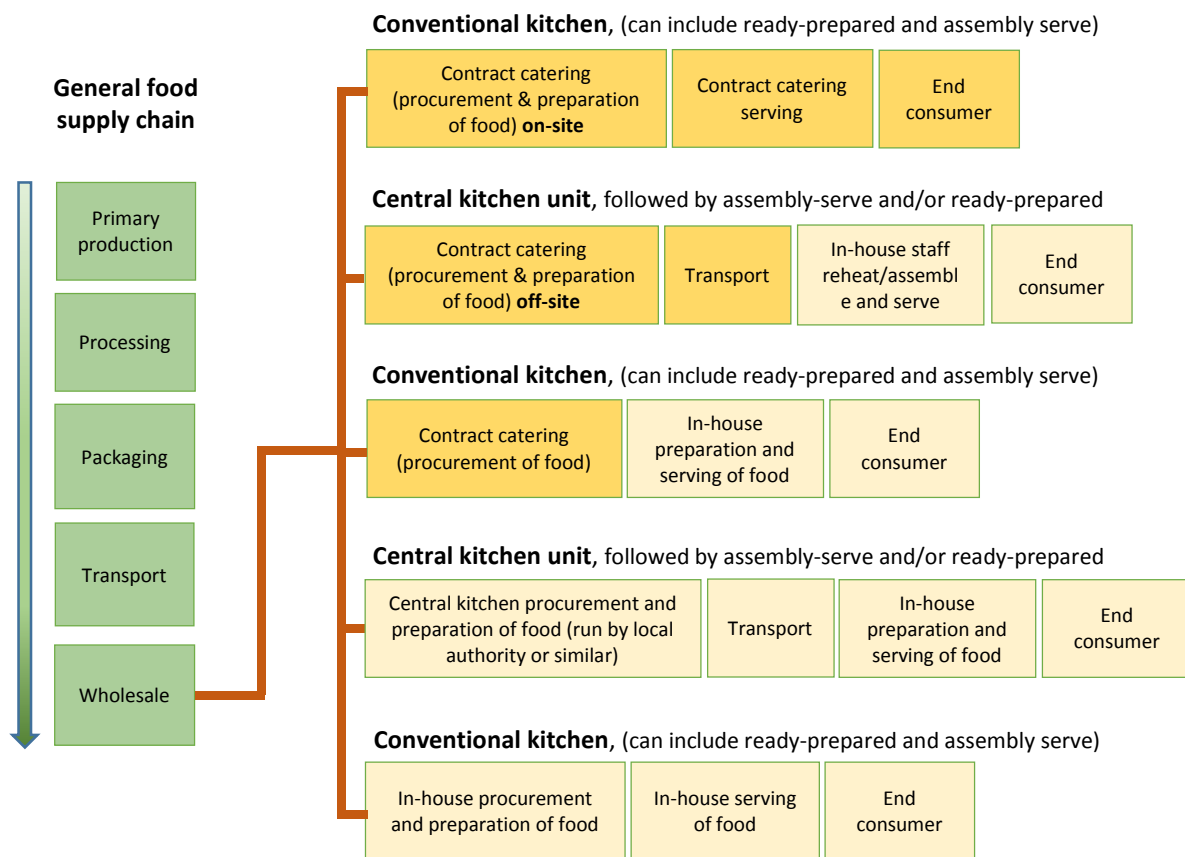
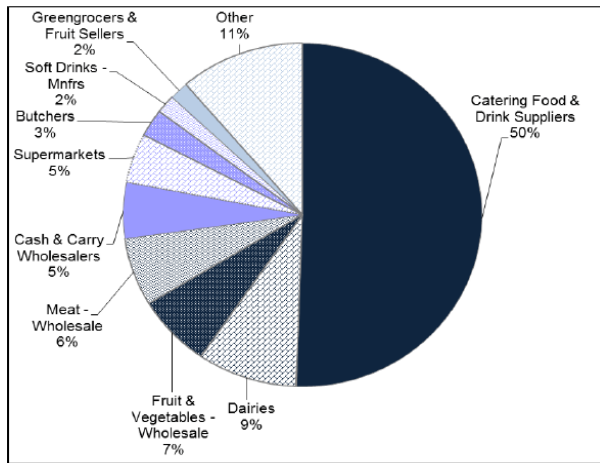


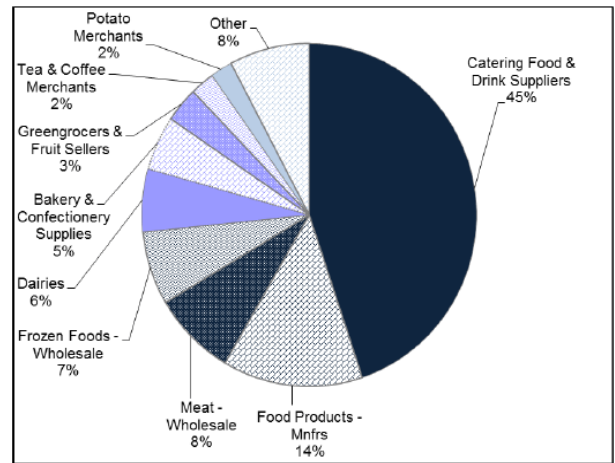
Figure 5: A general food supply chain and different forms of catering service supply chains (using different food systems, the dark yellow colour shows those stages carried out by the catering service companies and the light yellow colour the ones carried out by the public authorities)

In the UK there are three main ways for foodservice operators to obtain food: delivered from wholesale, through contract distributors, and through cash & carry wholesalers (Food Ethics Council, 2009). Other suppliers (such as local bakers or butchers) may be used for fresh produce and specialist distributors are sometimes used for products like coffee, snacks and cheese (Food Ethics Council, 2009).

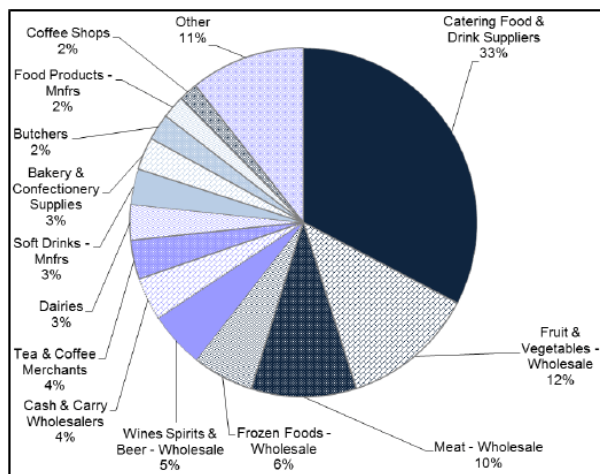
Figure 6 shows a breakdown of food procurement for food and food services in five public sectors in Scotland (namely, local authorities; NHS health boards; colleges and universities; central governments and governmental agencies; and prison services), and highlights the significant differences in what kind of food and foodservice the different sectors procure. It is evident that Local Authorities and the NHS (health sector) procure a large proportion of their food and drink from catering suppliers. Colleges and universities also procure a large share from caterers, but not as large. Prisons do not procure any food and drink from caterers, according to this study. In summary this shows that, although the traditional supply of products through the wholesalers is still prevalent, there is significant activity in buying products direct from the producers.



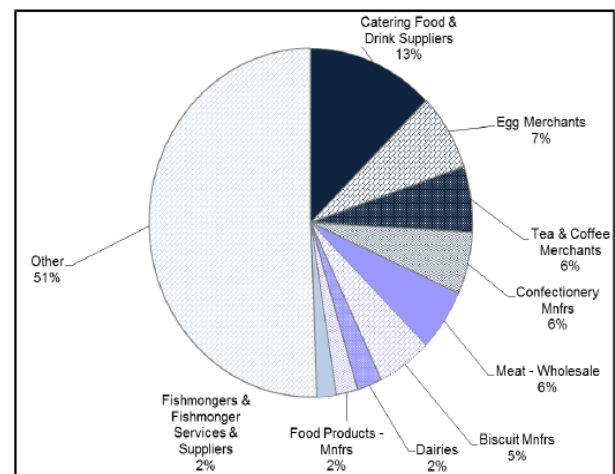
Local Authorities



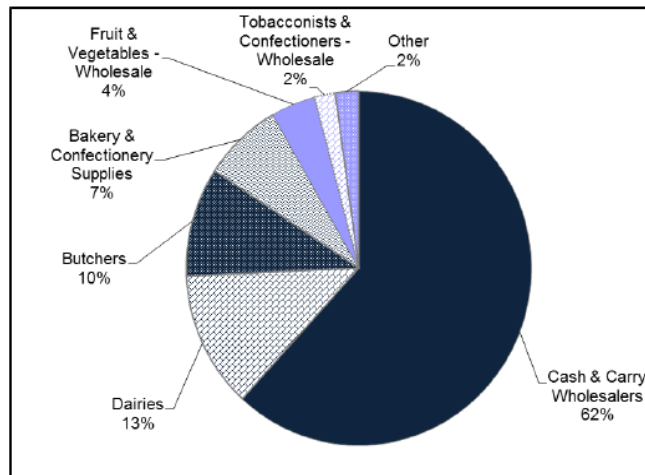
NHS Health Boards



Colleges & Universities



Central Governments and Governmental Agencies



Prison Service

Figure 6: Proportion of total expenditure divided by sector (2012-13) (The Scottish Government, 2014)

To have food delivered through wholesale is the most common channel. However, for large operators, contract distribution (in which the distributor only transports the produce and do not take ownership of it) is also common. Small independent foodservice operators are the ones that use cash & carry (Food Ethics Council, 2009).

2.2.3.2 Food production per food product

A review of current food consumption in the world, including trends towards 2050, was conducted by Kearney (2010). It was found that, in Europe, around 30 % of the energy intake comes from cereals. Furthermore, meat is still a main part of the diet. However, the consumption of red meat is not increasing as much as pig meat and chicken. Processed products, such as burgers and sausages account for almost 50 % of total meat consumption. Consumption of eggs, cheese and butter is expected to increase while consumption of fresh milk will continue to decrease. (A similar trend was seen in the USA and the reason for the decrease is that milk has been substituted by juices and carbonated beverages.) In Europe the consumption of fish is high in for instance Portugal and Spain, but quite low in the UK, however the consumption is expected to rise (Kearney, 2010). In the northern EU Member States processed fish products are popular, while the southern Member States fresh seafood products are preferred (European Commission, 2014b). The consumption of potatoes is falling (Kearney, 2010). Production of fruit and vegetables is increasing, but that does not necessarily mean that consumption is. The report also found that worldwide intake of fruit and vegetables is not enough to cover the nutritional recommended intake (500 g or more per day and person), but that there has been a 50 % increase in the consumption of vegetable oils in industrial countries and thereby a decline in animal fats (Kearney, 2010).

Data in this section is mainly gathered from the Eurostat PRODCOM database and focuses on the main product groups (produced and consumed). Figures C.1 to C.11 in Appendix C show the production in EU. All values are shown for EU-28, even though values are from 2012 when Croatia was still not a member of the EU.

Fish and seafood: The total production of aquaculture products in the EU-28 in 2012 was 1 million tonnes and was dominated by Spain, United Kingdom, France and Italy (Figure C.1). The UK was the main producer of farmed salmon and captured the largest weight of wild salmon (Figure C.5 and Figure C.6). Outside the EU, Norway is a major producer of farmed fish and its production weight in 2012 was even larger than the EU-28 total of cultivated fish (Figure C.1). As for the total wild capture of fish and seafood, the EU-28 produced 4 million tonnes in 2012; Spain, the UK and Denmark produced the most (Figure C.2). Spain and France caught the most tuna (including bonitos and billfishes) (Figure C.3). Finally, cod (incl. hakes and haddock) were caught mostly by Spain, the UK and France (Figure d). Between 2008 and 2011, the EU was 45 % self-sufficient in seafood. The EU produces enough flatfish and small pelagics for its own consumption, but is dependent on imports for salmon, cod and tuna (European Commission, 2014b). Norway is the major supplier of salmon and cod and the main suppliers of tuna are Ecuador, Mauritius and Thailand (European Commission, 2014b).

Meat: In 2012 the EU-28 produced 22 million tonnes of pig meat, 9.5 million tonnes of chicken meat and 7.6 million tonnes of bovine meat. Germany dominated the production of pig meat and Spain was the second largest producer (Figure C.9). France was a major producer of bovine meat followed by Germany and Italy (Figure C.7). The United Kingdom was a major producer of chicken meat, followed by Poland and Spain (Figure C.8).

Milk and dairy products: In 2012 the EU-28 produced almost 154 million tonnes of milk. Germany and France produced most (Figure C.10), but Denmark, Finland and Sweden exhibited the greatest output of milk per cow (i.e. had the highest productivity). The range between the lowest productivity (Croatia) and the highest (Denmark) was 3 250 to 8 780 tonnes per cow (Figure C.11). Only a small proportion of all milk produced is used as drinking milk; a large part is used for cheese and butter (see Figure 7).

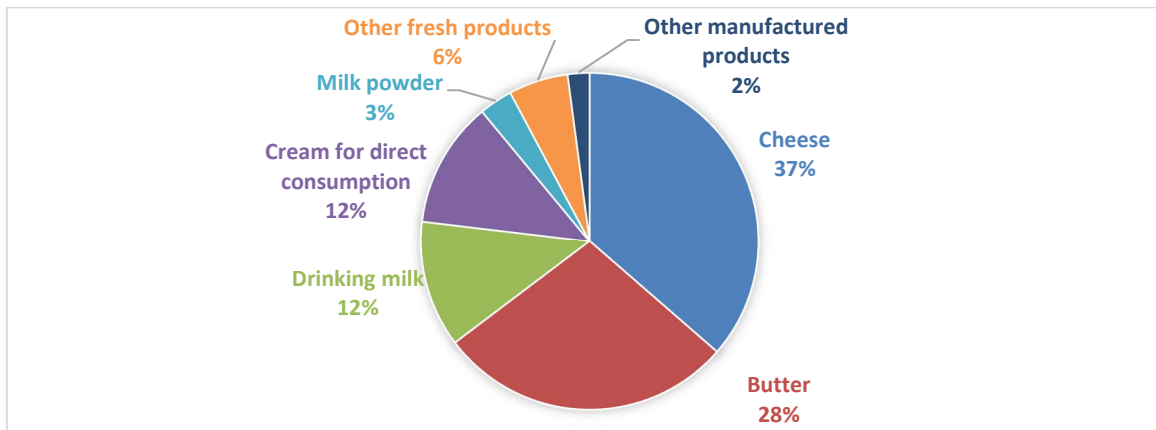


Figure 7: Utilization of whole milk in the EU-28 (2013) (Eurostat Statistics Explained, 2015)

Fruit: Figure 8 shows the fruits with the highest total harvest tonnage in the EU in 2012, dominated by apples and oranges. In 2012, the EU-28 produced a total of 30.5 million tonnes of fruits (aggregated of the fruit types in Figure 8).

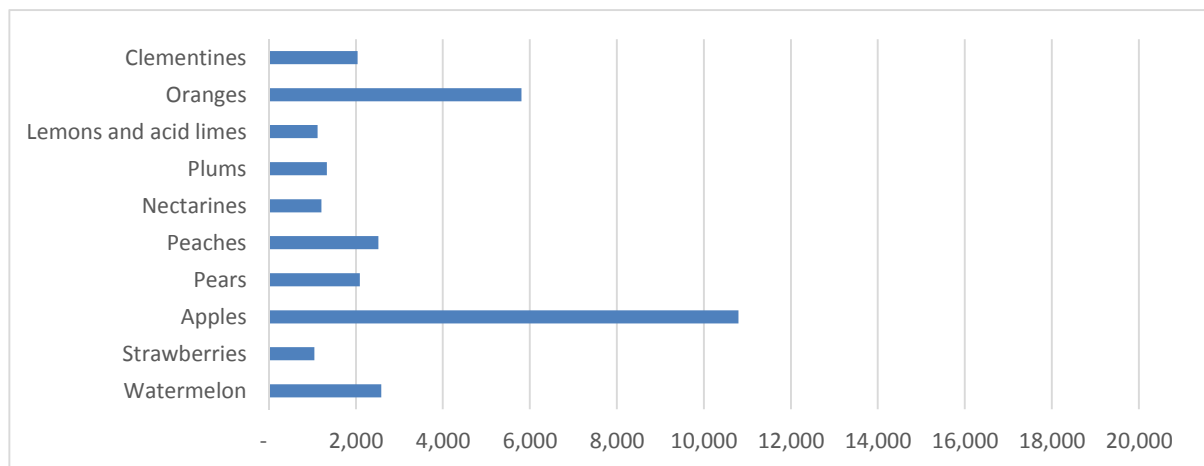


Figure 8: Harvested production of fruit in the EU (2012) ('000 tonnes)

Vegetables: Figure 9 shows the vegetables with the highest total harvest tonnage in the EU in 2012. Tomatoes, onions and carrots dominate. The total EU-28 production of vegetables was 41 million tonnes (aggregated of the vegetable types in Figure 9).

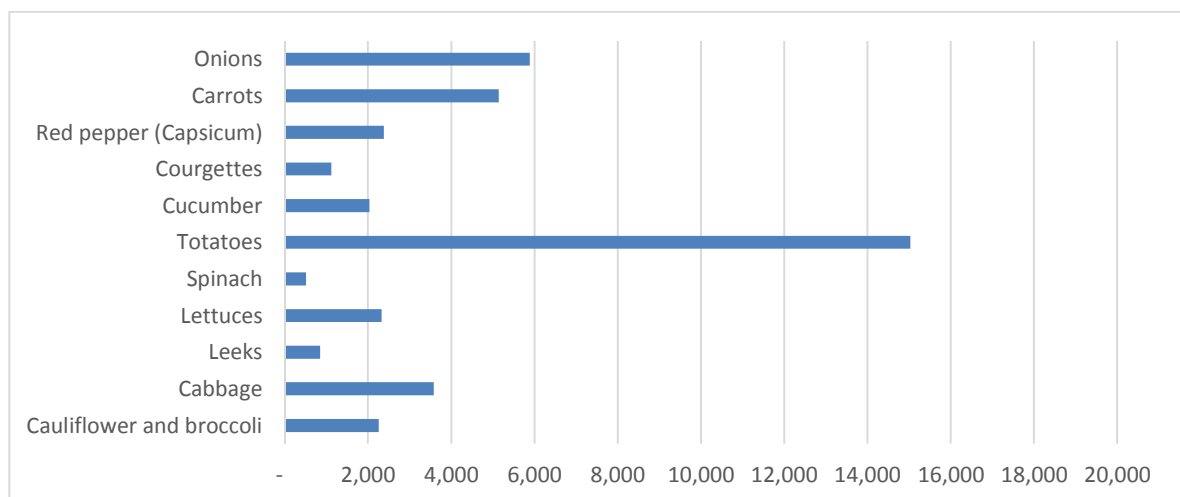


Figure 9: Harvested production of vegetables in the EU (2012) ('000 tonnes)

Cereals, potatoes and rice: Other food products important to consider are shown in Figure 10. Wheat, potatoes and barley are the largest food products in terms of tonnage. It is clear how important these three foods are in comparison to fruit and vegetables. 15 million tonnes of tomatoes and almost 11 million tonnes of apples were harvested in 2012, compared to 134 million tonnes of wheat, almost 54 million tonnes of potatoes and 55 million tonnes of barley. As for cereals in total, there were 287 million tonnes produced in the EU in 2012 (FAOSTAT, 2015), visible in Figure 11.

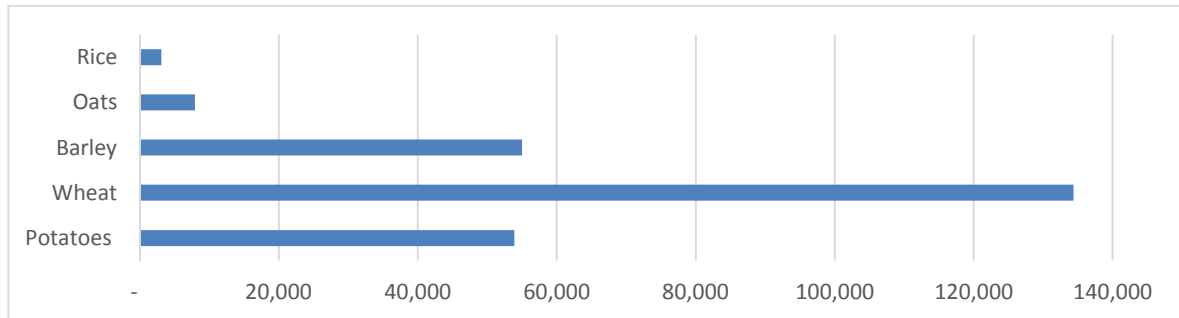


Figure 10: Harvested potatoes, rice and grains in the EU (2012) ('000 tonnes)

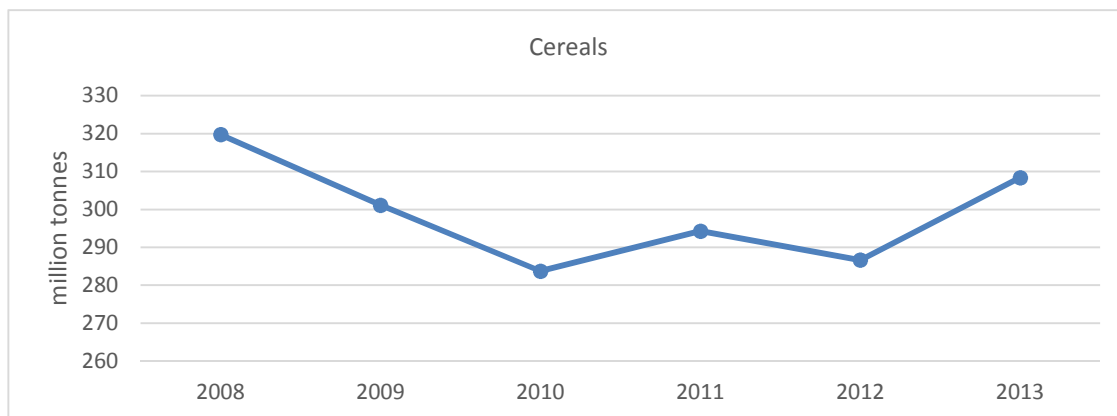


Figure 11: Volume of produced cereals between the years 2008-2013 (FAOSTAT, 2015)

Eggs: In 2012 there were 6.7 million tonnes of eggs produced in the EU, visible in Figure 12.

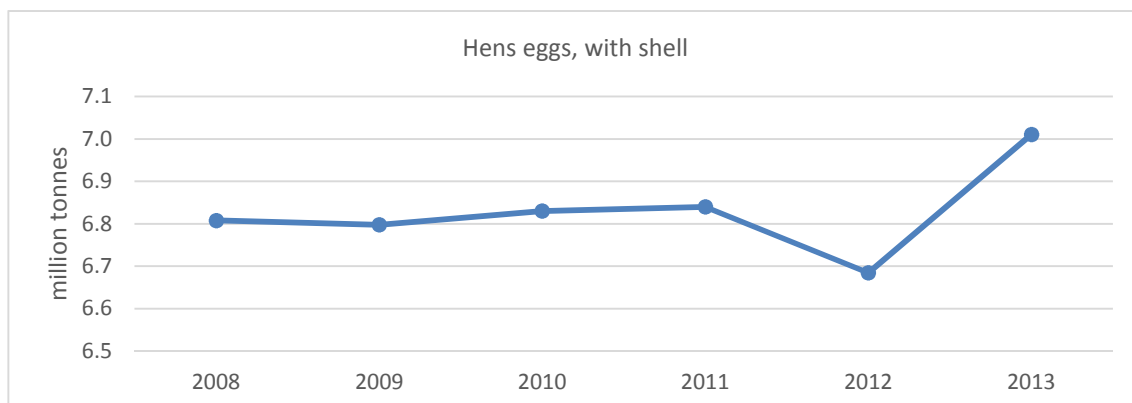


Figure 12: Production of eggs in the EU, from hens, between the years 2008-2013 (FAOSTAT, 2015)

Hot beverages: Coffee is one of the main hot beverages in the EU. Table 10 shows the production of coffee (solid matter) in the EU and it is clear that the processing stage of coffee beans is mainly taking place within the EU, as roasted coffee is far greater in size than the other types of production. The total production, however, of all types of coffee products are 6.3 million tonnes.

Table 10: Production of coffee products (solid matter), EU-28, in 2012 (Source: European Coffee Federation, based on Eurostat data)

Production	Volume (tonne)	Value (million EUR)
Decaffeinated coffee not roasted	251 680	287
Roasted coffee not decaffeinated	5 617 828	10 557
Roasted decaffeinated coffee	83 950	585
Extracts and essences of coffee	331 419	2 981
Total	6.3 million tonnes	€14.4 billion

Table 11 presents a sum up for the total production levels in million tonnes, per food category. It is visible that milk and cereals (mainly wheat) are the major food products to be produced. Fruit and vegetables together stand for 71.5 tonnes, and is thereby the third largest category.

Table 11: Summary of production volumes of some of the most common food categories in 2012

Food product/category	Million tonnes (2012)
Fruit	30.5
Vegetables	41
Fish and seafood	5 (1 farmed, 4 wild)
Meat	39.1
Milk (dairy)	154
Eggs	6.7
Cereals	287
Wheat	134
Potatoes	54
Coffee (solid matter)	6.3

2.2.3.3 Food consumption per food product

FAOSTAT (FAO, 2011) collects a comprehensive set of global food consumption statistic data. Figure 13 shows the food supply quantity in the EU-28 for the different food categories in 2011. The data are expressed in kg/capita/year and the EU-20 population was 507.4 million.

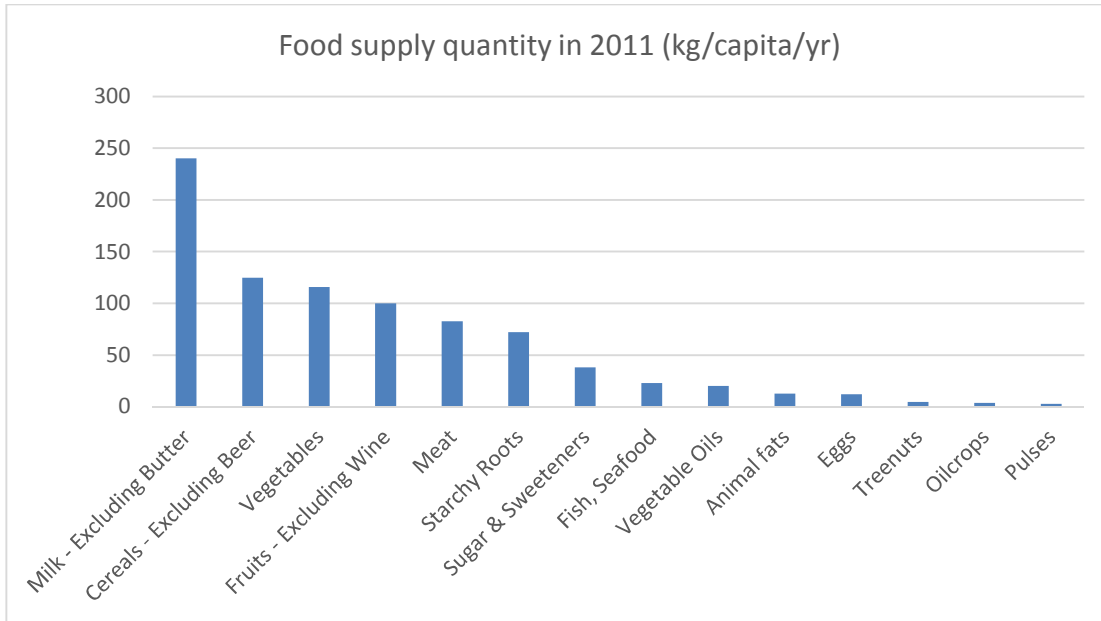


Figure 13: Food supply quantities per food product/category (Source: FAOSTAT)

As it can be observed in Figure 14 the food categories milk, cereals, vegetables, fruits, meat and starchy roots (mainly potatoes) represent almost 90 % of the yearly food intake.

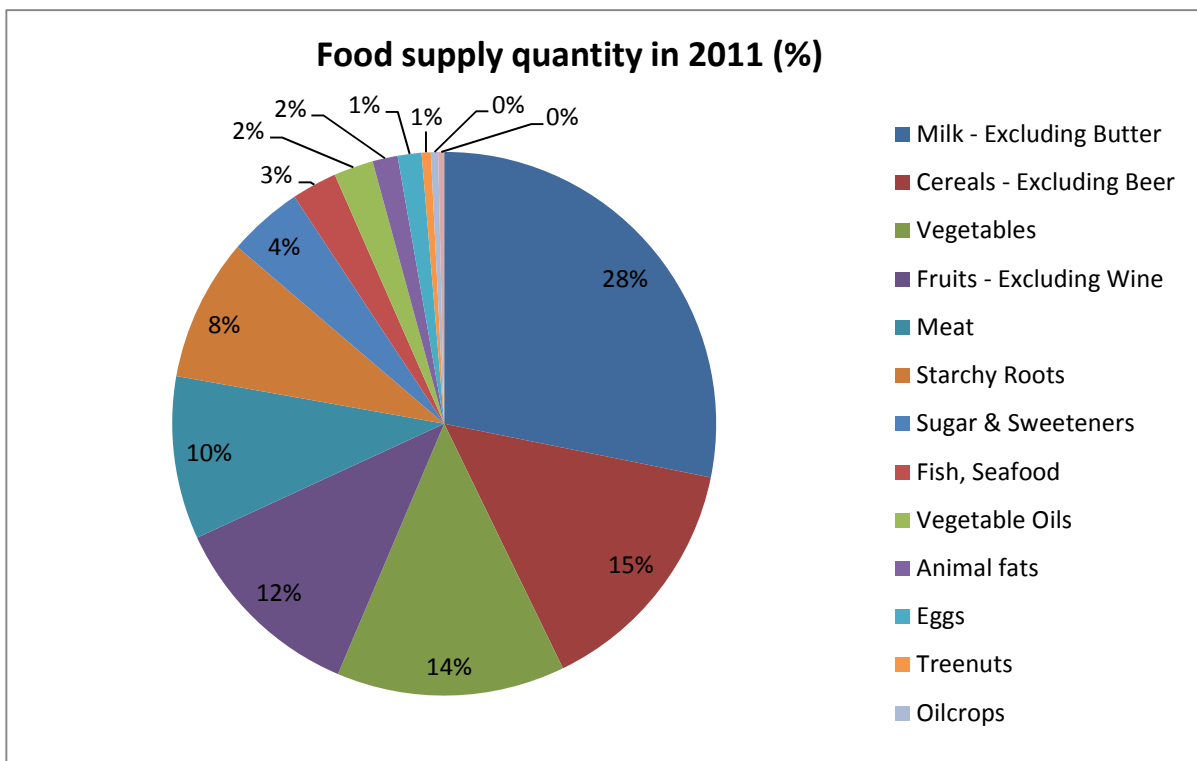


Figure 14: Food supply quantities per food product/category (Source: FAOSTAT)

It is relevant to highlight that the data from FAOSTAT do not distinguish among raw and processed food, meaning for example that the yearly intake of milk includes both milk and dairy products, except butter which is covered by the category animal fat. The category 'cereals' includes bread.

Bread: In 2012 there were 20 million tonnes bread sold. Despite the fact that sold is not consumed it is considered to be the same amount for the purpose of this section. Included in this summary are the two Eurostat categories 10711100: “Fresh bread containing by weight in the dry matter state <= 5 % of sugars and <= 5 % of fat” and 10721150: “Rusks, toasted bread and similar toasted products”. These are both shown in Figure 15.

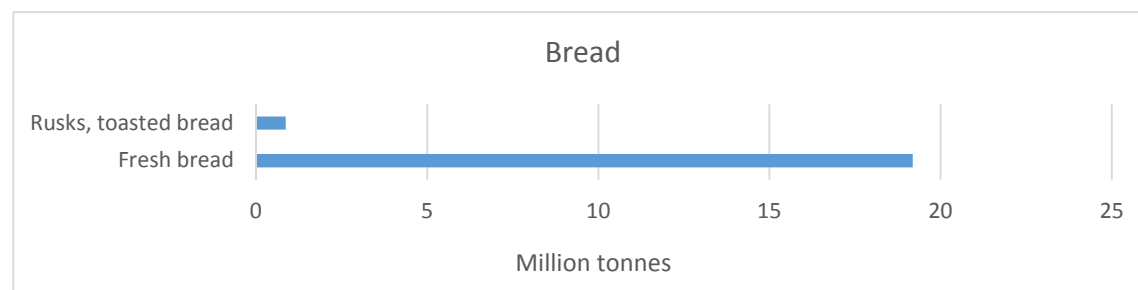


Figure 15: Volume of sold production of bread in 2012 (Source: Eurostat Structural Business Statistics)

Cold beverages: This section also focuses on sold volume and not consumption, but it follows the same rule as for bread. Table 12 shows that soft drinks and mineral waters are sold in much greater quantities than fruit juices. Figure 16 resumes how the Member States of EU-28 differ on the consumption of cold beverages (in 2012).

Table 12: Sold volume of cold drinks, EU-28 (Source: Eurostat – PRODCOM NACE Rev. 2)

	2011	2012
Un-concentrated orange juice	2 416	2 584
Apple juice	1 851	1 922
Mixture of fruit and vegetable juice	2 171	2 166
Mineral water	38 825	41 881
Soft drinks	33 737	36 370
Total volumes of cold beverages	79 000 million litres	84 922 million litres

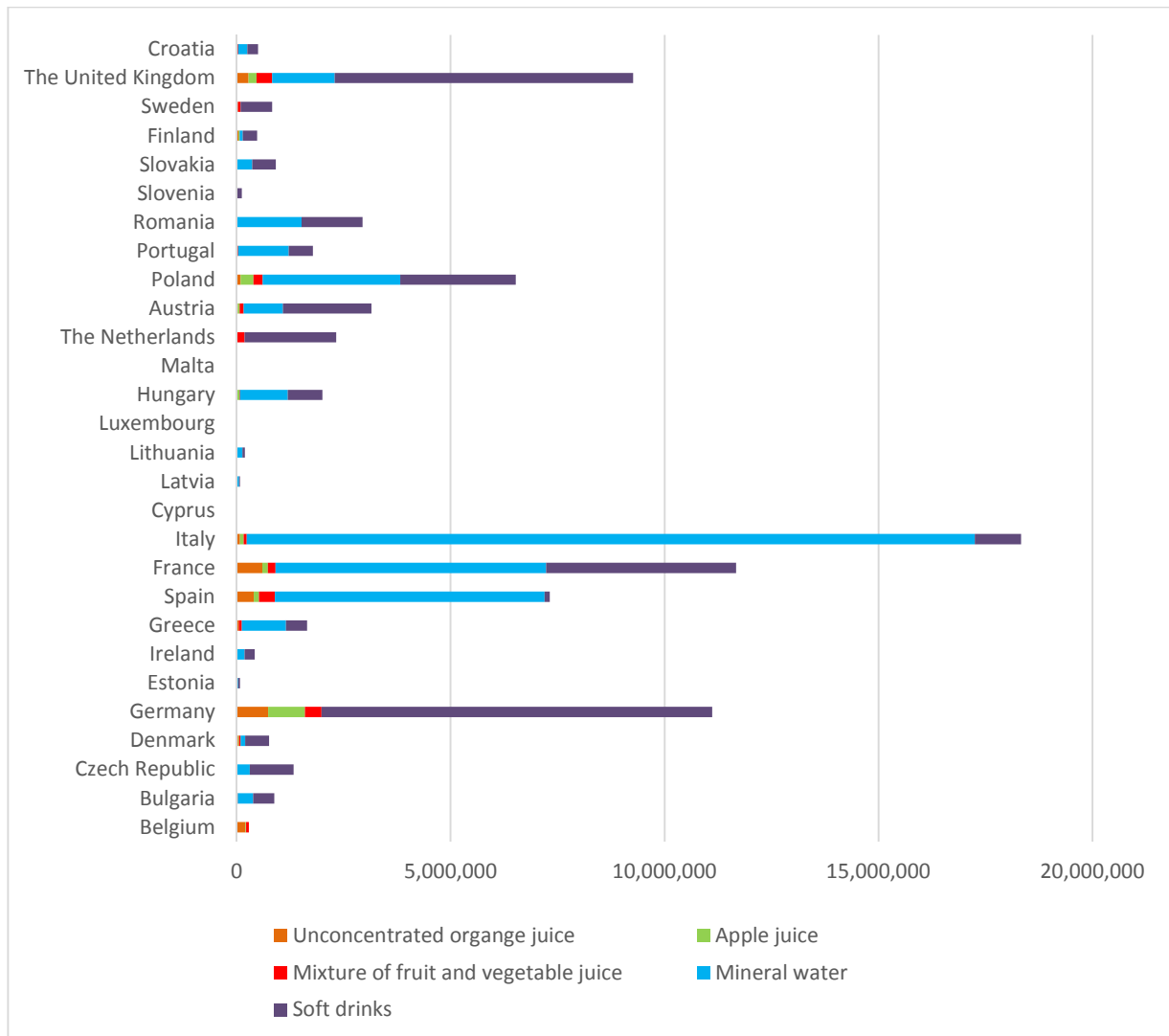


Figure 16: Volume of cold beverages sold in the EU in 2012 ('000 litres) (Source: Eurostat – PRODCOM NACE Rev. 2). Note: the analysis above is based on Eurostat data, which does not always show a complete set of data from every country. In some cases, countries decline to state production levels, if it is sensitive information. Hence, although the analysis is based on best available data, it presents some limitations for instance on the reasoning behind the magnitude of sales among different countries.

Stakeholder remark on beverage consumption in the EU

Since 2 000 local authorities in France have not provided any carbonated drinks except water.⁵⁸ Branded carbonated drinks have long been outlawed in both UK schools and French schools.⁵⁹ In the UK, the policy on sugar-containing drinks has somewhat reversed. Until very recently school children were encouraged to drink fruit juice every day, but concerns over the rise in obesity has now led the Government to recommend restricted consumption of juices due to the high sugar content⁵⁸ The Netherlands Government introduced a rule that only 25 % of the choices offered to children (i.e. controlled by the number of buttons on the machine) could be regular (full sugar) options. However, in practice, the proportion of drinks actually chosen and consumed by children is closer to 75 %.⁶⁰

⁵⁸ Representative of a local government, France. Personal communication, 24 February 2015.

⁵⁹ Representative of a specialised magazine, UK. Personal communication, 24 February 2015.

⁶⁰ Representative of a Catering Association, Netherlands. Personal communication, 6 March 2015.

Within the UK health service, the attitude towards fizzy drinks is ambivalent; some NHS Trusts will ensure that vending machines offer only ‘bottled water and nuts’ while others believe that visitors, who are the target market for these machines, should be rewarded with ‘treats’ including fizzy drinks and snacks high in salt or sugar⁵⁸. The situation in Dutch schools is unusual in that vending machines (widespread throughout the country) will stock both ‘healthy’ and ‘regular’ drinks.

Hot beverages: Coffee is a major hot beverage in the EU. The consumption of coffee (solid matter) per capita, on average (in 2012) was 4.84 kg. Figure 17 shows the food supply quantity of stimulants (coffee and products, cocoa beans and products, and tea) in the EU-28 (FAOSTAT, 2011).

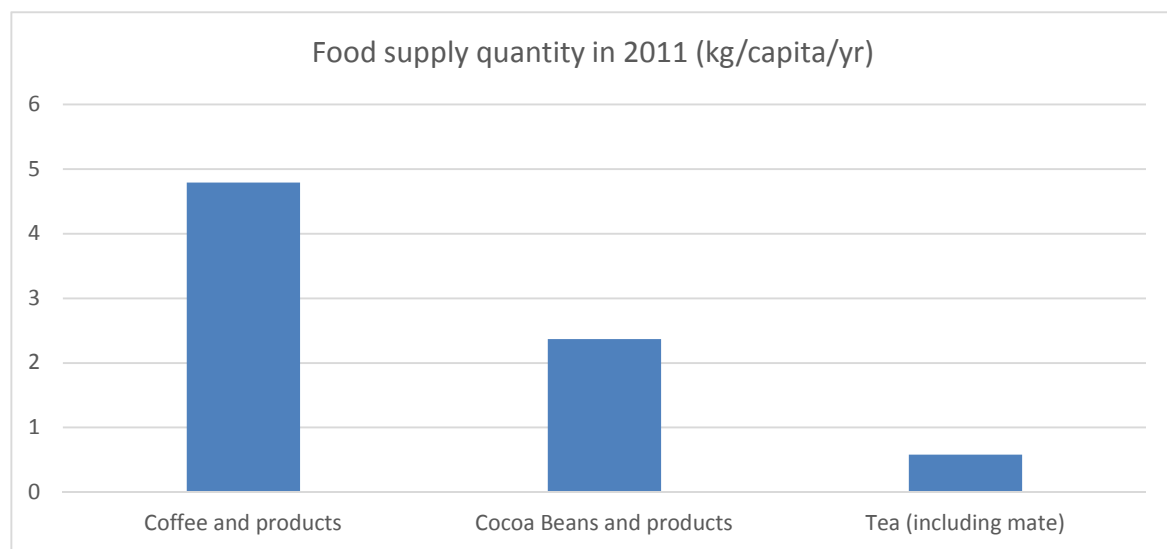


Figure 17: Food supply quantity of stimulants in 2011 (Source: FAOSTAT)

Fish: In 2011 the apparent consumption of seafood products in the EU was around 12 million tonnes (European Commission, 2014b). The consumption per capita was 24.5 kg in 2011. 75 % of all fish consumed in the EU came from capture fisheries. Cod, salmon and tuna are the main species consumed in terms of tonnes (European Commission, 2014b).

2.2.3.4 Food imports, exports and trade balance

A study from the European Commission (2013) summarised (in general terms) the main food products or categories that are currently being imported to the EU. These are: tropical fruit and spices, oilcakes, coffee, tea and mate, other fats and oils (not butter or olive oil, but palm oil), soya beans and fruits (fresh or dried) (European Commission, 2013). Fish is not included in this summary. The tropical fruit category includes products like banana, spices and nuts. 70 % of all bananas sold in the EU originate from Colombia, Ecuador and Costa Rica. As for nuts, the USA (generally) provides the EU’s almonds, walnuts and pistachios while Turkey provides hazelnuts. Spices have various origins, although pepper usually comes from Vietnam, vanilla is often from Madagascar and cinnamon is supplied by Sri Lanka and India (European Commission, 2013). For coffee, in terms of tonnage most comes from Brazil, and in terms of value Switzerland has a high market share of processed coffee. Soya beans usually originate from Brazil, Argentina and the USA. Indonesia provides a large share of the EU’s palm oil (European Commission, 2013).

As for seafood products the EU (in 2011) imported 8.38 million tonnes, produced 5.55 million tonnes and exported only 1.61 million tonnes (European Commission, 2014b).

Table 13 shows the imports and exports of the EU and it is clear that the EU produces more live animals, meat, dairy products, eggs, cereals, miscellaneous edible products and beverages than needed. Furthermore, the EU is importing (and obviously strongly dependent on) fish products, fruits and vegetables. But it is also dependent on coffee, tea and cocoa and animal feed.

Table 13: Value of extra EU-27 trade, 2010, (EUR million) (Source: Eurostat Statistics in focus, 2011)

	Imports	Exports	Net trade
Food & beverages	78 254	73 159	-5 095
Live animals	271	1 378	1 106
Meat & meat products	5 007	6 245	1 238
Dairy products & eggs	665	7 686	7 021
Fish crust. molluscs	17 105	2 996	-14 110
Cereals & cereal prep.	3 364	9 526	6 161
Vegetables & fruit	20 764	8 759	-12 006
Sugars sugar prep. & honey	2 168	2 103	-65
Coffee tea cocoa	13 581	5 475	-8 106
Animal feeding stuff	8 529	3 112	-5 417
Miscellaneous edible products	2 332	7 639	5 307
Beverages	4 466	18 241	13 775

Table 14 show how different types of coffee is imported and exported. Figure 18 shows where most of the imported green coffee comes from; Brazil and Vietnam are the main suppliers.

Table 14: Import and export of coffee products, in tonnes, EU-28, in 2012, excl. intra-trade (Source: European Coffee Federation, based on Eurostat data)

	Import	Export	Net trade
Green coffee	2 790 370	21 717	- 2 768 653
Green coffee decaffeinated	3 075	97 325	94 250
Roasted coffee	38 540	89 022	50 482
Roasted coffee decaffeinated	3 531	2 811	- 720
Coffee extracts	51 106	43 664	- 7 442

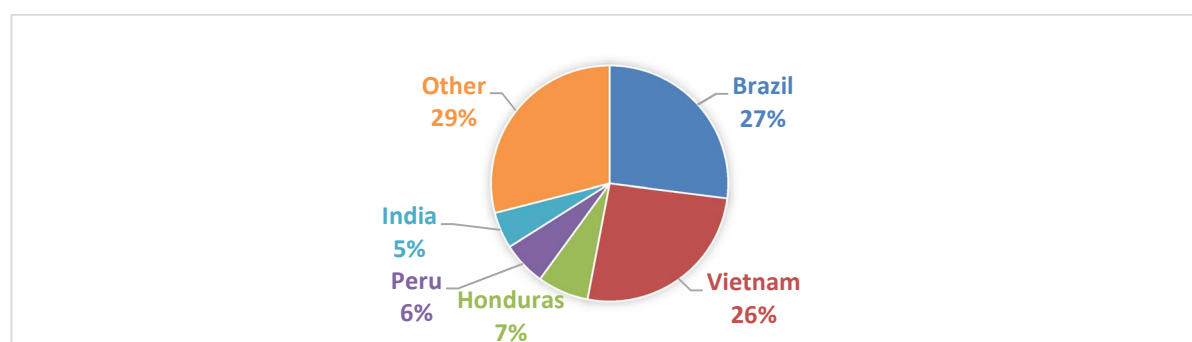


Figure 18: Top 5 green coffee suppliers to the EU, in 2012 (Source: European Coffee Federation, 2014)

2.2.3.5 The market for organic food in the EU

2.2.3.5.1 Economic value

The total value of the EU-27 organic market has been estimated in 19.7 billion EUR in 2011. The largest organic markets in the EU are in Germany (6.6 billion EUR), France (3.6 billion EUR), UK (1.9 billion EUR) and Italy (1.7 billion EUR). Nevertheless, in relative sales, Denmark is highlighted (162 EUR/person), followed by Luxembourg (134 EUR/person) and Austria (127 EUR/person) (Thünen Institute of Farm Economics, 2013).

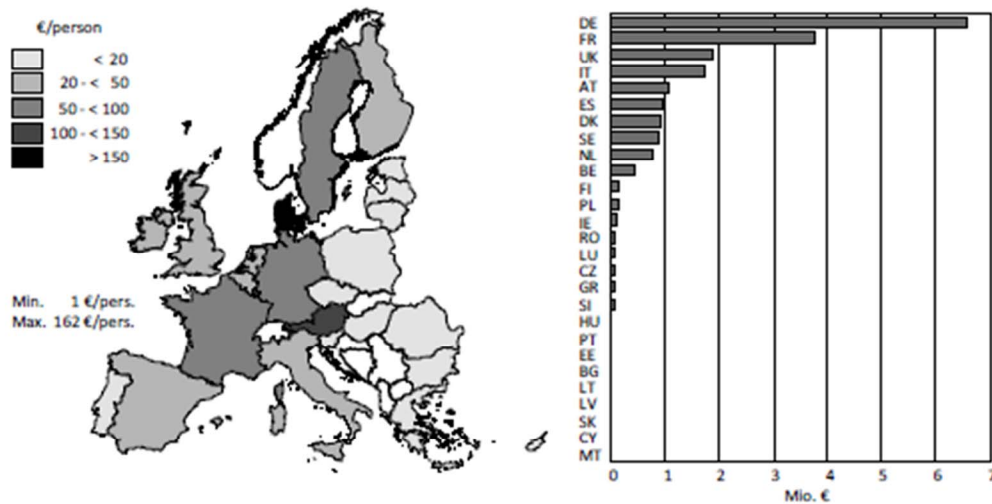


Figure 19: Organic sales per capita (left) and total organic sales (right) in EU MS in 2011 (Thünen Institute of Farm Economics, 2013).

The data collected in Figure 20 (Thünen Institute of Farm Economics, 2013) shows that the organic market grew by 56 % between 2006 and 2011. The highest growths took place in the two largest organic markets: France (+2 055 million EUR) and Germany (+1 990 million EUR) (Thünen Institute of Farm Economics, 2013).

	Organic sales per capita (€/person)				Total organic sales (Mio €)			
	2006	2011	Difference		2006	2011	Difference	
			€	%			Mio €	%
Austria	64	127	63	98	496	1 065	569	115
Belgium	23	40	17	72	258	435	178	69
Bulgaria	0	1	1	900	1	7	6	775
Cyprus	2	2	1	33	2	2	1	33
Czech Republic	3	7	4	104	27	59	32	109
Denmark	80	162	82	103	434	901	467	108
Estonia	-	-	-	-	-	-	-	-
Finland	11	22	11	105	57	120	63	112
France	26	58	32	120	1 700	3 756	2 056	121
Germany	56	81	25	45	4 600	6 590	1 990	43
Greece	5	5	0	0	55	58	3	5
Hungary	2	3	1	67	20	25	5	25
Ireland	16	22	6	40	57	99	42	72
Italy	19	28	9	46	1 130	1 720	590	52
Latvia	-	2	-	-	-	4	-	-
Lithuania	-	2	-	-	-	6	-	-
Luxembourg	85	134	50	59	41	68	27	66
Netherlands	28	46	18	64	458	761	303	66
Poland	1	3	2	131	50	120	70	140
Portugal	-	2	-	-	-	21	-	-
Romania	1	4	4	700	10	80	70	700
Slovakia	1	1	0	0	4	4	0	- 7
Slovenia	5	19	14	280	4	38	34	850
Spain	2	21	19	1 213	270	965	695	257
Sweden	42	94	52	124	379	885	506	134
United Kingdom	42	30	- 12	- 16	2 557	1 882	- 675	- 16

Figure 20: Changes in organic sales per capita (left) and total sales in EU Member States between 2006 and 2011 (Thünen Institute of Farm Economics, 2013).

The total market of organic products had an estimated value of €20.9 billion in the EU in 2012 (FiBL and IFOAM, 2014) and €22.2 billion in 2013 (FiBL and IFOAM, 2015). In total the organic market is growing, although due to the economic crisis, in some countries the market is stagnating or declining.

2.2.3.5.2 Importers and processors

As shown in Figure 21 (Thünen Institute of Farm Economics, 2013), there were more than 35 000 organic processing companies and 1 600 importers of organic products in the EU in 2011. The processors are concentrated in countries with a large organic market and/or a large organic area or both (Germany, France, Italy, Spain and the United Kingdom). In the case of Greece, the number of processors might stem from an atomized production of olive oil in small plants. Most companies were located in EU-15 countries while, only about 1 500 processors and less than 100 importers were located in EU-12 countries in 2011 (Thünen Institute of Farm Economics, 2013).

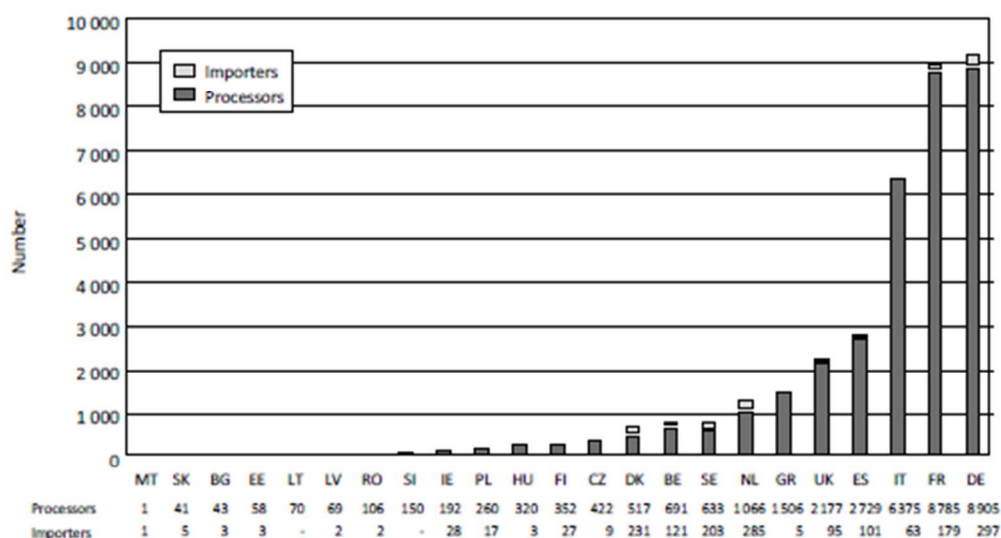


Figure 21: Number of organic importer and processor in 2011*(Thünen Institute of Farm Economics, 2013).

*No data on processors and importers for AT, CY, LU, PT and on importers for LT and SI. Data for IE, LT and UK are from 2010, since no data from 2011 were available.

2.2.3.5.3 Production of main categories

In 2012, organic land use was 10 million hectares in the EU (5.6 % of total agricultural land) (FiBL and IFOAM, 2014). In 2013 this grew to 10.2 million hectares (5.7 % of the total) (FiBL and IFOAM, 2015) Spain, Italy and Germany have most area of organic production (FiBL and IFOAM, 2014)

A report on organic agriculture in EU-27 provides a breakdown of organic crop types per Member State in 2011 (European Commission, 2013b). Table 15 shows the total land use and the share of each category.

Table 15: Main categories of the organic arable land use in the EU (2011) (European Commission, 2013b).

Categories for land use	% area of total organic
Total crops	100 %
Permanent grasslands	44.9 %
Permanent crops	13.1 %
Cereals	14.6 %
Dried pulses	2.2 %
Industrial crops	1.9 %

The information about the main categories production are further described below.

Vegetables

The vegetables constitute a marginal share of the organic area: 110 955 ha in 2011 out of 9.6 million ha (1.2 %). Italy holds the largest area of organic vegetables (23 405 ha), Germany 18 000 ha, France 14 529 ha, the United Kingdom 13 618 ha and Spain 11 483 ha. The share of organic vegetables referred to the organic crop area reaches the maximum in Malta (47.8 %) and followed by Netherlands (10.5 %). The vegetable sector is under development in the EU-12, with just 13 837 ha; being Poland and Hungary the largest ones (8 231 ha in Poland and 1 770 ha in Hungary) (European Commission 2013b).

Permanent crops

The organic area of permanent crops equals to 1.2 million ha at the EU level meaning, 13.1 % of all organic areas. This represents 10.9 % of the EU-27 total area under permanent crops in 2011 (European Commission 2013b).

The Member States with the largest organic areas in 2011 are Spain (636 019 ha), Italy (302 000 ha), France (90 668 ha), Poland (85 594 ha), Greece (62 705 ha), and Portugal (25 045 ha). France, Italy and Spain are the largest producers of permanent crops in the EU, but this is not reflected in the share of organic, which is variable across EU: in Italy 13 % of all permanent crop areas are under the organic sector and in Spain this share amounts to 14 %, while in other Member States, the share of organic permanent crops in total permanent crop area varies between 1 % in Malta and the Netherlands to 22 % in Poland. The organic sector represented in 2011 5 % of the total permanent crop areas in Greece and 4 % in Portugal (European Commission 2013b).

Figure 22 shows the share of each crop in the total permanent organic crop area in EU-27 in 2011, where it can be observed that fruit and olives amount together for 52 % of the area.

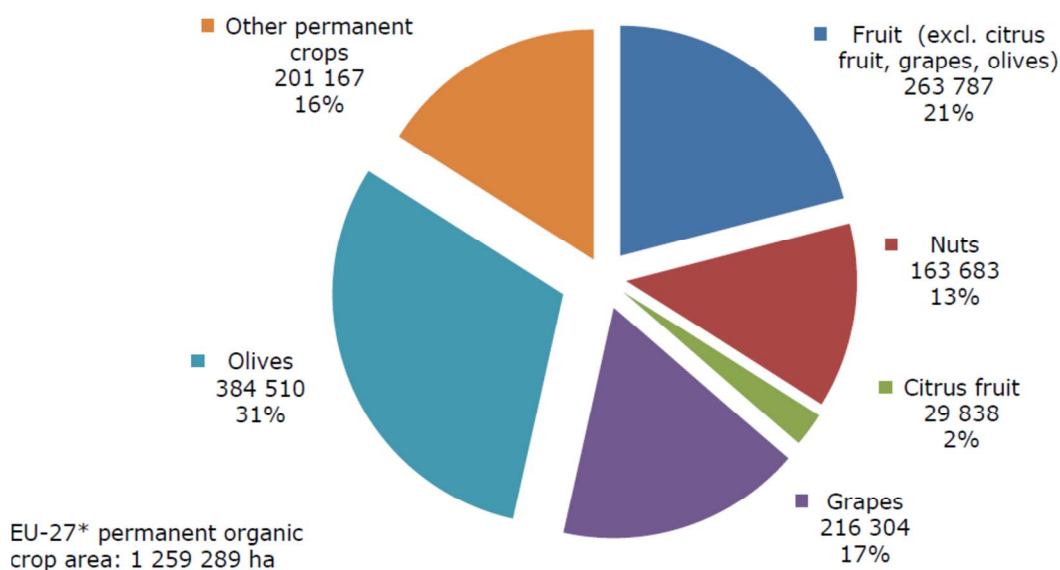


Figure 22: Major organic permanent crops (ha and % of EU total) in 2011 (European Commission, 2013b)

Major arable crops: cereals, oilseeds and dry pulses

2.5 % of the total cereal production in the EU was organic in 2011 and this area represents 14.6 % of the total organic arable land (European Commission, 2013b). The largest cereal areas are in Germany (around 0.20 million ha) and in Italy and Spain (almost 0.18 million ha each). In 2011, France, the largest EU producer of cereals, grew 119 000 ha of organic cereals. Poland comes fifth with 109 511 ha (European Commission, 2013b).

The organic oilseed area is approximate 142 048 ha in 2011, 1.4 % of the EU organic crop area (European Commission, 2013b).

With regards of dried pulses, it is estimated that 211 568 ha of organic dried pulses were cultivated in 2011 in the EU-27. Germany is the largest producer (25 500 ha). Organic dried pulses represent 15.9 % of total EU dried pulse area (European Commission, 2013b).

Animal sector

According to the information collected by the European Commission in the report 'Facts and figures on organic agriculture in the European Union' (European Commission 2013b), statistics on the number of organic animals are not complete, however the information available allows building a representative appraisal of the organic animal sector, which reveals that this organic sector is very limited, compared to the total animal production in the EU as shown in Table 16 (European Commission 2013b).

Table 16: Percentage of organic out of total animal heard in the EU-27 (European Commission 2013b)

Animal sector	% organic out of total
Bovines	2.90 %
Sheep and goats	2.82 %
Pigs	0.33 %
Poultry	0.95 %
Total	0.96 %

There has been a 50 % increase of bovine animals and a 70 % increase of poultry between 2007 and 2013 (**Table 17**). It is likely that laying hens (egg production) and dairy cows are mainly responsible for this growth since the market share of organic milk and organic eggs have increased most on the organic product market (see Section 2.2.4.1).

Table 17: Organic livestock in the EU for 2013 (Source: Adapted from: FiBL and IFOAM, 2015).

	EU Animals (number of heads)	Share of all animals	Increase 2007-2013
Bovine Animals	3 108 312	3.9 %	+50 %
Sheep	4 156 842	4.2 %	+26 %
Pigs	644 866	0.5 %	+31 %
Poultry	32 738 116	2.2 %	+70 %

2.2.4 Procurement of food

There are not much data available on the food categories mainly procured in the public sector. However, one source was found describing the public foodservice in Ireland. Table 18 presents the expenses breakdown by food product type. Meat is the category on which most of the money is spent. Bakery, vegetables and fruits are following it. This data refers to spending but not volumes of consumption.

Table 18 shows the food categories grouped together, whilst Table 19 shows them individually. Bread is part of bakery, which may be one reason for that group to be so large in expenditure.

Table 18: Product breakdown of Irish Foodservice, per value, of buying prices for operators, in 2014 (Adapted from: Bord Bia, 2014)

Food category	Percentage	Value (€M)
Meat	35 %	791
Vegetables and fruits	16 %	359
Bread/Bakery Savoury	11 %	241
Sweet bakery confectionary desserts	8 %	185
Dairy	8 %	181
Fish	3 %	79
Others (incl. grocery)	19 %	431
Total	---	2 267

Table 19: Purchase value of food products in foodservice in Ireland (Source: Bord Bia, 2014)

Product category	Operator Purchase (€ M) Year 2013	Operator Purchase (€M) Year 2014
Poultry	251	254
Beef	248	251
Bacon	186	188
Pork	89	91
Lamb	7	7
Fruits and vegetables	355	359
Bread/Bakery Savoury	238	241
Sweet bakery	127	129
Confectionery	27	27
Desserts	27	29
Dairy	181	181
Fish	78	79
All other	396	393
Grocery	36	38
TOTAL	2 246	2 267

An amount of 82 million food and drink products are bought in Europe every day (and 30 billion products every year) from vending machines (i.e. by both public and private consumers) (EVA, 2014). There are 3.77 million machines available in Europe and 80 % of all these are in: France, Germany, Italy, Spain, the Netherlands and the UK (EVA, 2014). Furthermore, Figure 23 show which type of vending machines are used in Europe. Of the hot drink machines around 50 % are espresso/bean coffee machines, and the glass-front machines are those that sell both food (snacks) and drinks. The total turnover of these products was, in 2012, €11.3 billion.

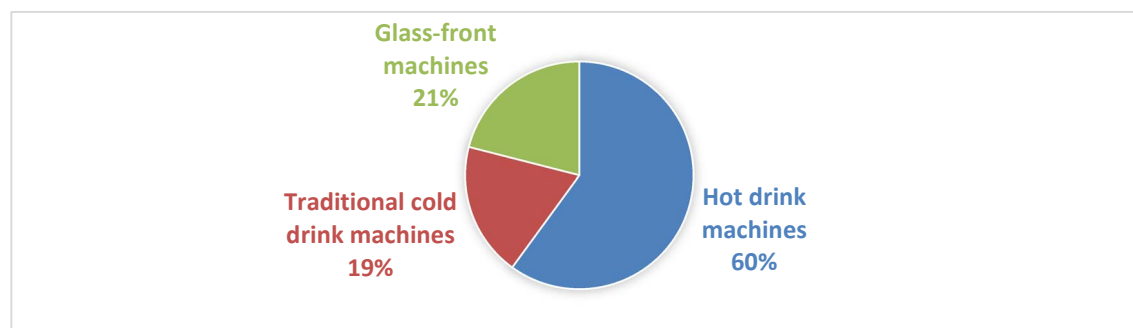


Figure 23: Type of vending machines used in Europe (Source: EVA, 2014).

2.2.4.1 Organic food products

Figure 24 shows that the growth in the EU organic food market continued at a steady rate between 2004 and 2012. The growth between 2011 and 2012 is 6 %. The main driver for the demand is that consumers believe organic products are healthier compared to conventional products and that they are also better for the environment (Kearney, 2010). Sales of organic eggs reflect the high concern of consumers with regard to animal welfare, and their readiness to pay relatively high prices (FiBL and IFOAM, 2014). In Germany, organic eggs are at least double the price of conventional eggs – one of the highest price differentials to be found within organic product groups (FiBL and IFOAM, 2014). Organic meat and meat products are very successful with market shares of around 10 % in Belgium, the Netherlands, Finland and France. However, in many other countries the markets are not yet well developed due to a lack of production capacity and the higher prices compared to conventional products (FiBL and IFOAM, 2014).

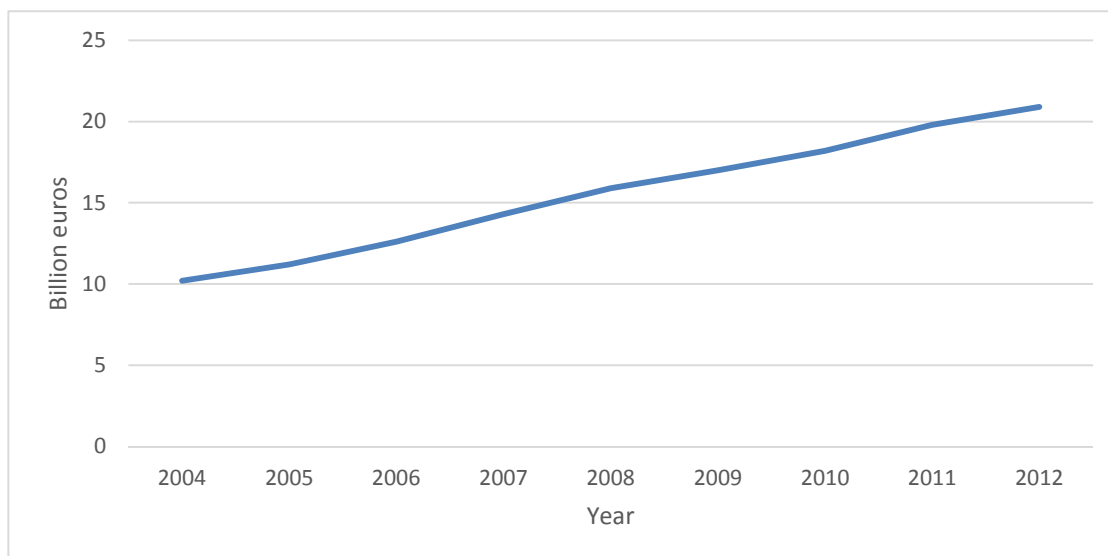


Figure 24: European Union: Organic market development 2004-2012 (Source: FiBL and IFOAM, 2014)

Although Figure 24 shows a steady growth in organic sales this is dominated by a relatively small number of countries: Germany and France account for nearly 50 % of the total market (Figure 25). The FiBL and IFOAM (2014) report concludes that one of the key issues for growth of the organic market across the EU is the development of the domestic markets in many of the new EU Member States. In terms of future food availability, there are concerns that organic production will not be able to produce enough food due to lower yields compared to for instance, conventional production.

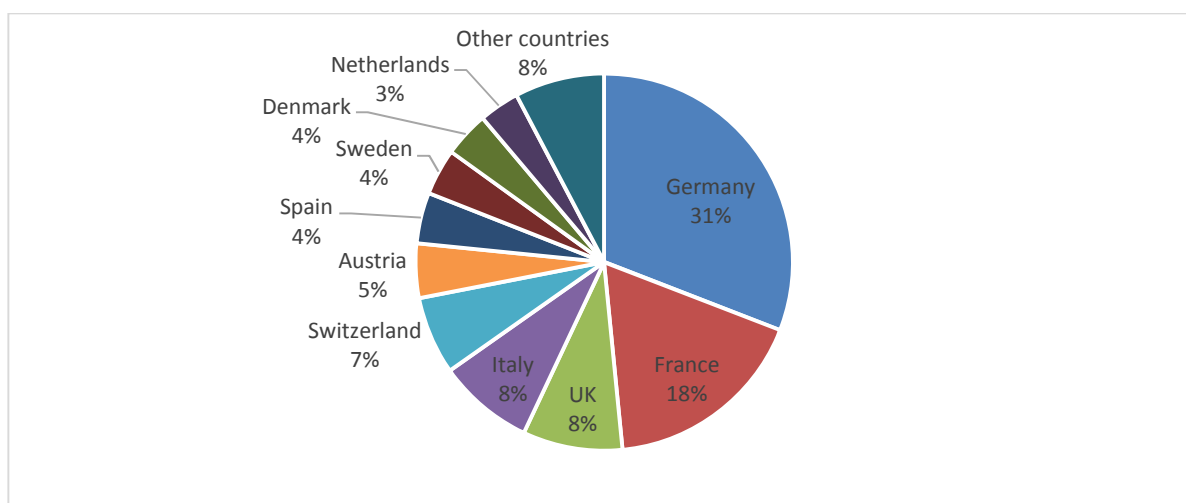


Figure 25: A breakdown of the European market for organic products by country 2012 (Source: FiBL and IFOAM, 2014)

Certain organic products are more dominant than others in the European organic market. The FiBL and IFOAM (2014) report identifies the following key products and product groups:

- Eggs: 20 % market share in Switzerland, and around 10 % in other countries. It is high mainly for animal welfare reasons.
- Fruit and vegetables: shares of between one third and one fifth of many national organic markets.
- Dairy products: 10 % share in Switzerland and around 5 % in other countries
- Meat products: apart from northern Europe, meat has a low market share due to the high cost

- Hot beverages (coffee, tea, cocoa) stand for 3 to 5 % of the overall market
- Bread and bakery also have a share of around 10 % in a few of the Member States

An insight to the sales of organic products in retail and in catering services for nine European countries is given in Table 20. From this example it is highlighted that organic products in the retail sector ranges between 0.3 % (in Hungary) and 7.6 % (in Denmark), of the total retail sales (by value). Furthermore, when comparing the sales of organic products in retail with the sales of organic products in the catering sector, it is clear that the spending of the catering sector in organic food products is substantially lower (by value).

Table 20: The market for organic food in Europe in 2012. (Source: FiBL and IFOAM, 2014)

Country	Organic product sales by the Retail sector		Organic product sales by the catering sector (€m)
	Value (€m)	Share of all retail sales (%)	
Austria (2011)	1 065	6.5	64
Denmark	887	7.6	109
France	4 004	2.4	169
Hungary (2009)	25	0.3	0
Italy	1 885	1.5	290
Netherlands	791	2.3	143
Norway (2011)	209	1.2	11
Slovenia	44	1.5	0
United Kingdom	1 950	N/A	20
Total	10 860		806

2.2.4.2 Food waste

The European Commission (2010) reported that the EU-27 generated 89 million tonnes of food waste. Figure 16 shows that food service and hospitality accounted for an estimated 14 % of total food waste, i.e., circa 12.5 million tonnes. Table 21 shows the summary of a study undertaken in the UK (WRAP, 2013a). It shows that the food waste generated in the health, education and services sectors in 2012 were around 312 000 tonnes with a cost of £592 million (c. €730⁶¹). The study did not distinguish between public or private staff catering, illustrating only total food wastage per sector (WRAP, 2013a).

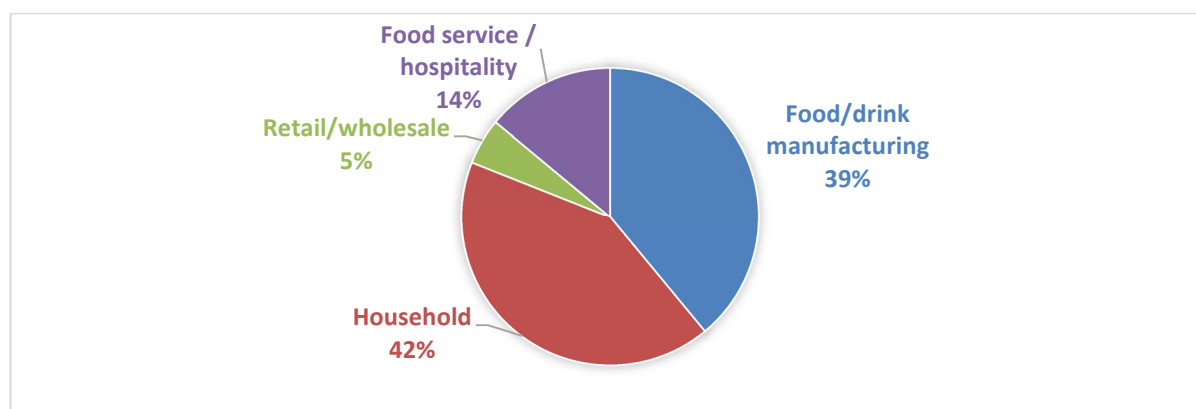


Figure 26: EU-27 food waste percentage by weight by food sector (Source: European Commission, 2010)

⁶¹ Calculated from GBP to Euro by the average exchange rate of year 2012, available in Appendix D (Table D.1).

Table 21: The quantity and cost of food waste, by the UK Hospitality and Food Service sector, by sub-sector in 2012 (Source: WRAP, 2013a)

Sub-sector	Number of outlets with foodservice	Total food waste ('000 tonnes)	Cost total food waste (€/tonne)	Total cost € million
Restaurants	40 958	199	5 550	1 080
Pubs	45 087	173	3 300	566
Hotels	45 763	79	6 300	504
Quick service restaurants	31 450	76	5 500	439
Leisure	9 255	60	6 300	382
Healthcare	19 257	121	3000	365
Services	2 029	68	2 700	178
Education	34 744	123	3 300	396
Staff catering	7 172	21	3 500	70
Total	235 715	920	-	3 980

The value in Euro is approximate and calculated from GBP to Euro by the average exchange rate of year 2012, available in Appendix D - Table D.1.

2.2.4.3 Consumer trends

In Germany there are trends to buy regional and convenience food. Moreover, healthy food is popular and also to buy ready prepared food from retail (GAIN, 2013). In Ireland there has been consumer demand for better quality food and ingredients, which has led to companies providing a larger range of sandwiches (with different types of bread), salads (with new kinds of ingredients) and a wider selection of coffee beverage types. As lunch breaks are short, 'grab-to-go' food has become increasingly popular (Bord Bia, 2014). The market is still cost sensitive, and operators are therefore improving the range of offerings at the same time as trying to avoid cost increases (Bord Bia, 2014).

The provision of food at education facilities has changed much in recent years in Ireland due to health regulations. The foodservice operators have to consider sugar, calories, allergens and to provide more healthy meals overall (Bord Bia, 2014). The number of vending machines is expected to decline. Instead quick serve restaurants and different types of coffee chains are likely to be more common (Bord Bia, 2014). Not only is healthy eating more regulated, there is also a trend amongst students at all levels of education to eat healthily and to consider origin and nutritional composition (Bord Bia, 2014).

As for vending machines, the number of traditional machines that sell cold drinks is declining, whilst glass-front machines are increasing in use. The reason for this is that these vending machines can provide a wider range of products, such as snacks and food. Furthermore, there is a movement away from cans towards 50 cl PET bottles, which the glass-front machines help achieve (KioskMarketplace, 2014).

The Sustainable Restaurant Association in the UK conducted a study in 2009 and again in 2013 that asked consumers what issues they thought were most important for restaurants to focus on. There were a number of suggestions available, such as seasonality, animal welfare, organic produce and sustainable fish. The results from 2013 stated that 'food waste' and 'customer health and nutrition' shared first place as the main issue that restaurants should focus on, whilst 'locally sourced' came second and 'employee treatment' came third. The most notable changes were that 39 % more consumers in 2013 thought food waste should be focused on, and 33 % more consumers thought

that health and nutrition was important. Meanwhile 'organic produce' dropped 39 % in perceived importance since 2009 (Sustainable Restaurant Association, 2013).

2.2.4.4 Trends and practices of supply chains

Changing political will - in response to pressure from consumers, NGOs, civil society and the media (e.g. celebrity chefs in the UK⁶² and Ireland⁶³) - seems to be the main driver behind the emerging interest in the provision of 'fresh' in some parts of Europe. In Sweden, for instance, media stories on 'bad food', 'bad caterers' and so on are considered by one stakeholder to have played a large part in accelerating the popularity of fresh, organic, seasonal produce.⁶⁴ This has in turn driven government initiatives such as the 2010-2014 programme '*Sweden: The New Culinary Country*' which aims to increase the quality of public sector food provision and improving food education, which are likely to be taken up later in 2015 by a new initiative called '*Better Meals*'.⁶⁴ Public procurement criteria in Sweden are also now framed in such a way as to promote these sustainability priorities.

For Member States such as Spain, 'proximity' of food - i.e. encouraging 'local' food - is another key trend, with consumer demand for 'fresh', 'seasonal' or 'organic' produce less apparent than for instance in the UK and Sweden. According to a representative of a leading contract caterer, this localism is being driven by the political imperative to reduce the environmental impacts of transportation but also, and perhaps more importantly, by the desire of autonomous regions to protect their own identity.⁶²

One aspect of changing consumer preference - the increasing demand for transparency in the supply chain and assurance about provenance and traceability - may be tied in a series of media events from fears over salmonella in egg production and foot-and-mouth outbreaks, to the recent Europe-wide horsemeat scandal. Even the largest contract caterers in Europe find that demonstrating traceability 'from farm to fork' can be extremely challenging. Part of the reason for this is the huge diversity in suppliers, and particularly the wholesalers (or traders) from which they purchase ingredients. Even the largest wholesalers geared to the food service sector operate in no more than a handful of Member States.

Impact

Any increase in the use of fresh, rather than longer shelf-life frozen or ambient, ingredients can result in more food waste due to inaccuracies in matching supply and demand. To a certain extent, waste can be offset by skilled chefs who are able to use safe, edible leftovers in new recipes, and some argue that the rising costs of landfill is incentive enough for waste to be prevented.⁶⁵ However, hospitals, schools, universities have been known to find alternative disposal routes for the waste such as sending it for composting or anaerobic digestion, rather than reaping the greater savings opportunity of preventing it arising in the first place. In certain contexts, the innovations discussed above which can reduce the lead time between ordering and serving, may also play a role in cutting food waste while providing 'fresh' meals of the rising quality demanded by consumers.

According to several industry experts interviewed, moves towards increased procurement of fresh, local, seasonal or organic food will invariably lead to rising costs which - given recent economic turbulence across Europe - public sector organisations are currently reluctant to countenance. Any move towards favouring local food is generally resisted by contract caterers concerned that their

⁶² Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

⁶³ Representative of a Catering Association, Ireland. Personal communication, 9 March 2015.

⁶⁴ Representative of a Governmental Authority, Sweden. Personal communication, 25 February 2015.

⁶⁵ Representative of a specialised magazine, UK. Personal communication, 24 February 2015.

ability to source goods from the cheapest source, regardless of origin, is hampered.⁶⁶ Public procurers are still loath to prioritise nutritional or sustainability criteria in tenders for new catering contracts, awarding around 80 % of the points on price alone.⁶⁶ The same stakeholders, however, note that - as pressure from consumers and government grows - procurers may eventually be forced to accept these higher costs and to start favouring non-cost-related aspects of bids. In Ireland, too, dramatic public sector cuts and mass emigration linked to the 2007-2008 recession are influencing the quality of public meals. Not only are the procurement and staff training budgets low, but potential new recruits are unavailable.⁶⁷ In Sweden the situation is very different, with the greater potential cost of GPP of meals seemingly less of an obstacle.⁶⁸

Average costs per meals

A study undertaken in Northern Ireland (DE & DFP, 2012) highlighted that the scale of production is a key factor in the cost per meal (Figure 27). It is clear that more meals per kitchen bring down cost per meal. According to one stakeholder, cost has been the most important driver of centralisation across Europe in subsectors such as hospitals and schools.

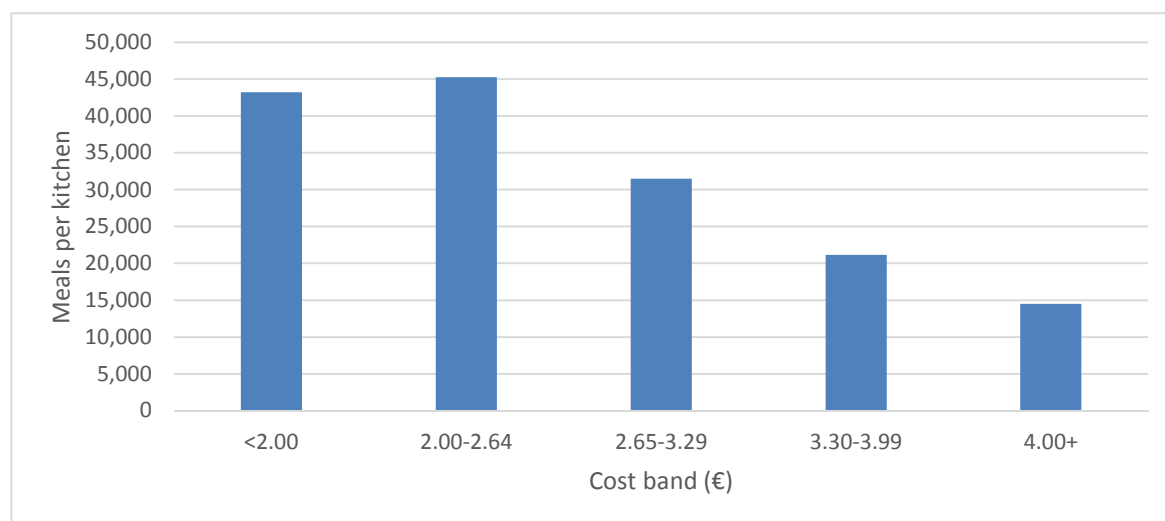


Figure 27: Scale of production by cost band (Source: DE & DFP, 2012)

Additionally, a study undertaken by WRAP in the UK (WRAP, 2013b) shows the significance of food purchase costs and labour costs (Table 22). Reducing the impact of these two cost elements is a major driver to the move to centralised production.

Table 22: Average labour and food purchase costs in the UK (Source: adapted from WRAP, 2013b)

Segment	Food purchases (€/meal)	Labour costs (€/meal)
Staff catering	1.296	1.072
Healthcare	0.777	0.777
Education	0.730	0.924
Services	0.931	0.704

The HACCP (Hazard Analysis and Critical Control Points) rules have had a big impact on public sector catering in France and potentially elsewhere, and it has been suggested that the state ministry of health used new food safety regulations to drive change in the sector leading to higher costs and

⁶⁶ Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

⁶⁷ Representative of a Catering Association, Ireland. Personal communication, 9 March 2015.

⁶⁸ Representative of a Governmental Authority, Sweden. Personal communication, 25 February 2015.

further pressure on public authorities to move to off-site preparation.⁶⁹ The need to cut food waste while maintaining food quality may also be a motivator, especially for the introduction of cook-freeze systems within the health sector.

One stakeholder from Germany suggests that a driver for the hospitals sector is that the average length of time patients spend in hospital has significantly reduced.⁷⁰ The precise linkage is not clear, but the interviewee was possibly referring to the fact that the cook-chill systems used with centralised production enable lead times to be reduced allowing caterers to respond to rapid patient turnover.

Forecast

In Member States such as Finland at least one stakeholder believes that the trend towards off-site preparation will remain “strong”.⁷¹ This would support the off-site preparation model in combination with franchises which have been evidenced in the UK and the Netherlands. However, while several large contract caterers are pioneering these delivery models, others suggest that growing customer preference across Europe for ‘fresh’ food when prepared on site from raw ingredients, might militate against off-site approaches and are not planning to introduce these.⁷²

A representative of a large contract caterer predicts that companies like this will grow their business in Europe as governments continue to seek to cut costs. Moreover, he asserts, the private sector has the ability to innovate and adapt far more quickly – and cost-effectively – to growing customer expectations than can in-house operations.⁷² A stakeholder believes that public sector organisations will choose to focus on their core functions, and delegate catering to the private sector.⁷¹

An interviewee from another multinational contract caterer suggests that the near future will see a continuing trend in northern Europe for companies such as his to offer ‘bundled’ services, with food offered alongside cleaning, reception and security. However, in countries such as Italy, Spain, France, Portugal and Switzerland, public sector procurers will tend to purchase food services separately.⁷³ Among other anticipated trends may be the expectation among hospital patients that they will be able to order their meals electronically. Such innovations are predicted to arise across Europe including in Central and Eastern European Member States.⁷⁴

2.2.4.5 Impact of VAT

After the financial crisis in 2008, many Member States introduced lower rates of value added tax (VAT) for foodservice, in the hope of strengthening the industry and its ability to employ more people. For instance, in 2011 Ireland introduced a VAT rate of 9 % and the outcome has been higher consumer spending on foodservice as well as a driver for tourism (Bord Bia, 2014). France lowered its VAT in 2009 from 19.9 % to 5.5 % but this led to only a marginal increase in eating out (GAIN, 2012). FERCO (2012) raises the issue that VAT rates are being applied in a way that favours self-operating public bodies and gives them a competitive advantage over contract catering firms.

⁶⁹ Representative of a local government, France. Personal communication, 24 February 2015.

⁷⁰ Representative of an Institute, Germany. Personal communication, 6 March 2015.

⁷¹ Representative of a Business Organisation, Finland. Personal communication, 10 March 2015.

⁷² Representative of a Catering Service Provider, UK (b). Personal communication, 6 March 2015.

⁷³ Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015.

⁷⁴ Representative of a Catering Service Provider, Hungary. Personal communication, 10 March 2015.

2.3 Future trends in foodservices

2.3.1 In-house vs. outsourced services

Contract caterers are specialists in what they do and argue that they can marshal the technical, human and financial resources necessary to deliver a significantly more cost-effective and safer service than in-house caterers. Contract caterers contend that, given the size of their organisations, they can often enjoy greater buying power than their clients and can thus procure ingredients at lower prices.⁷⁵ Furthermore, when tendering for new contracts third-party catering companies will often, as part of their sales proposal, include an offer to invest in upgrading and updating of cooking and serving areas which can be viewed as ‘an easy win’ by the procuring organisation.⁷⁶ One representative from a large contract catering organisation reports that the recent economic recession had led to a ‘huge demand’ for their organisation’s services over the last 5-7 years, whereas during the previous 20 years when the economy was doing well it was difficult to engage with the public sector.⁷⁷

According to a representative of another large multinational contract caterer, one driver of success is that diners now expect a more diverse range of food offerings and this expectation is better met by specialist caterers than by in-house operations. This is part of the reason offered for why contract catering has yet to take off in the less developed parts of eastern Europe where consumers are, at least historically, less likely to demand a similar range of meals.⁷⁸

In France, one reason for the success of third-party contractors lies in their ability to interpret and adhere to ever more complex food safety legislation, itself driven by the HACCP Regulations⁷⁹ in the late 1990s – something that in-house providers have struggled with.⁸⁰ However, since 2008, France has experienced a slowdown in the previously rapid growth of the contract catering industry. According to one local authority stakeholder, this in part reflects recognition that costs can, in practice, be lowered when food provision is taken back in-house. In the French health service, for example, a major re-organisation in 2009 resulted in the new ARS system (*Agences Régionales de Santé* – Regional Health Agencies) which is better equipped to understand and comply with all the necessary HACCP rules.⁸⁰ Thus, reliance on the expertise of private third-party providers, in the health service at least, was lessened.

According to one Finnish stakeholder⁸¹, critics of outsourcing argue that external caterers provide a lower quality service than in-house staff, and they also fear that jobs are lost due to outsourcing. Despite this, however, this interviewee anticipates that contract catering will in fact grow in Finland. In the opinion of another interviewee from Eastern Europe, contract caterers are indirectly disadvantaged there by the expectation that they must provide ‘additional value’ if supplanting in-house incumbents – although there is no explicit ‘veto’ on outsourcing.⁸²

⁷⁵ Representative of a Catering Association, UK (a). Personal communication, 17 February 2015.

⁷⁶ Representative of a specialised magazine, UK. Personal communication, 24 February 2015.

⁷⁷ Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015.

⁷⁸ Representative of a Catering Service Provider, UK (b). Personal communication, 6 March 2015.

⁷⁹ Hazard Analysis Critical Control Point

⁸⁰ Representative of a local government, France. Personal communication, 24 February 2015.

⁸¹ Representative of a Business Organisation, Finland. Personal communication, 10 March 2015.

⁸² Representative of a Catering Service Provider, Hungary. Personal communication, 10 March 2015.

2.3.2 Possible impacts on sustainability by outsourcing

One example of an impact arising from the way agreements are framed concerns the resource efficiency of catering equipment purchased. In some cases, as noted above, contract caterers will simply use the equipment already owned by the client. However, where contractors are required to supply the equipment then they are likely to purchase or rent the cheapest possible equipment that provides the required minimum level of functionality, especially if the contract length is short (e.g. less than three years). This scenario may result in equipment being purchased and operated with a poor energy or water efficiency performance, and the contractor may have little incentive to invest in regular and comprehensive servicing of the equipment.⁸³ In such situations, third-party companies are also unlikely to invest sufficiently in staff training⁸⁴ which could again impact negatively on resource efficiency, as well as on safe food preparation.

Similarly, where the client pays the energy or water bill for the site then there is no incentive for the contract caterer to be resource efficient. There is, however, an emerging phenomenon of facilities management (FM) companies diversifying into offering a full package of services within a building (a 'turnkey' solution) including not just catering but also security, cleaning and gardening. In such cases, the contractor is generally responsible for the overall environmental impacts, encompassing - for example - the energy use of the building. Often FM companies will assess the whole life costs of the building and take all measures necessary to minimise these.

It should be noted that the distinction between FM company and contract caterer is blurred, with food service often simply one of many functions: many of the larger contract caterers will offer a 'bundle' of services including, for example, cleaning and laundry⁸⁵. It has also been suggested that certain universities are starting to take a more 'joined up' approach to mitigating site-wide environmental impacts with the example given of purchasing departments subsidising catering departments to invest in more expensive, but more energy efficient, equipment.⁸⁶

2.3.3 Barriers to sustainability

Organisations like the Soil Association and the Sustainable Restaurant Association are trying to drive the development of sustainable catering and food service. The Soil Association had an event called *Big Food Debate* (25 June 2014) at which stakeholders from a wide range of sectors were present. During this event they summarised the main barriers for development of sustainable catering (Soil Association, 2014):

- the real cost of sustainable food production compared to what consumers are willing to pay
- the difficulties to find markets for products of small scale producers
- the understanding and awareness of consumers of sustainable farming and food

Furthermore, based on stakeholder feedback, the major barriers to sustainability include:

- Higher costs of food in price sensitive markets. (For example organic products may be out of scope for public organisations due to budget constraints)
- Poor availability of sustainable products.

⁸³ Representative of a Catering Association, UK (a). Personal communication, 17 February 2015.

⁸⁴ Representative of a Catering Service Provider, Spain & Portugal. Personal communication, 25 February 2015.

⁸⁵ Representative of a Catering Service Provider, UK (and internationally). Personal communication, 9 March 2015.

⁸⁶ Representative of a Catering Association, UK (a). Personal communication, 17 February 2015.

- Lack of life cycle costing/thinking. (If contracts are short or the contract caterer does not stand for costs of water and electricity, there is a risk that contract caterers buy or rent equipment that is not eco-efficient.)

2.3.4 Initiatives of sustainable food and catering service

The Soil Association in the UK has launched three new handbooks to be used by caterers in different foodservice sectors in order to make their operations more sustainable (Soil Association, 2015a). It includes a so called “Food for Life Catering Mark”, where there are three levels of sustainable standards: bronze, silver and gold (Soil Association, 2015b). This label is voluntary label that ensures fresh ingredients are used, free from GMO, harmful additives and trans-fats, and a higher animal welfare (Soil Association, 2015b). In 2014 this catering mark was used on meals in 25 % of English schools and 20 % of the Universities in England. Additionally more than 100 hospitals and care homes and more than 300 nurseries used this mark as well in England. In total this catering mark was used on one million meals, per day (Soil Association, 2015c).

In Sweden the National Food Agency has launched new guidelines for diets. This new guideline includes environmental aspects (based on the Swedish environmental policy) as an addition to health considerations (INNOCAT, 2015b). Not only Sweden is investigating sustainable diets, also the Netherlands, Germany, the UK, Brazil and Australia are looking into it.

INNOCAT (INNOCAT, 2015c) is a three years project which began in March 2013. It is supported by the European Commission’s Competitiveness and Innovation Framework Programme (CIP). INNOCAT aims to bring together a group of public and private buyers to publish a series of tenders for eco-innovative catering products, services and solutions. The aim is to help encourage eco-innovation in the catering sector by providing a sizeable launch market for new solutions. The main environmental and social hotspots addressed by this project are:

- Transport
- Waste re-use and recycling
- Bio-based products
- Energy-efficient equipment

The purchasing sectors targeted by INNOCAT are School catering services, vending machines, Bio-waste disposal systems, health and welfare catering services

Another objective is to disseminate project results and to promote an active experience exchange between buyers interested in eco-innovative catering.

2.4 Limitations of the study

There has been a lack of comprehensive data for the foodservice sector, especially data that separates public and commercial food and catering services. Furthermore, data on food consumption, production, import and export have also been limited in some aspects. Another issue has been that data available in the different studies is very unclear about what is included and excluded in scope. This has in some instances led to a high variance of numbers. Furthermore, stakeholders were contacted for telephone interviews to provide insight to the Market Analysis about the trends and practices in different Member States. Their information helped confirm some findings and values but they could not help provide more detailed data at country level. There is therefore not a complete set of data for each Member State in EU-28, although those countries with highest spend on food and catering services have been in focus. Therefore the results are relevant for the overall findings.

Specific limitations that were noted (which includes data gaps):

- **Limited European market data** on food and catering services has been found; especially for public sector activities, most likely because this is a small sector in comparison to the commercial sector.
- It was possible to find data on contract catering companies, such as expenditure and number of employees, but this data was **not available at a detailed level**, allowing distinction between contract catering for public sector and private sector.
- **Procurement volumes of anything except food (ingredients) and catering service** (as a whole) was not readily available; such as procurement of equipment, water, electricity, and other accessories.
- It was found that Education and Health/welfare are procuring most of the food and catering services in the public sector. However, **what type of food they procure** and what catering services they use (food systems) was not possible to find, except whether the service is kept in-house or outsourced.
- **Estimates of market share** between large contract catering companies and SMEs for foodservice has also been found as limited.
- As for food, the total data for production, consumption and trade in EU-28 as a whole was used. This provides the best available picture on **what food products is of relevance** and an assumption is that the occurrence of these food categories does not differ much between the public and private sector.
- **Data for food production, imports and exports** was not always available for the same year, some data is from 2012 and other from 2011, but it was assumed that the difference would not be too substantial.

2.5 Preliminary findings

EU market overview - The total expenditure on food and catering services in Europe is €206.3 billion (2011 data from Eurostat). France, Italy, United Kingdom and Spain spend the most. The sector (in total) includes 1.5 million enterprises, has a turnover of €354 billion, and employs 8 million people (2012 data from Eurostat). . The social foodservice market valued was to €82 billion in 2013 (GIRA Foodservice, 2014). France, Germany, United Kingdom and Italy spend the most on public social foodservice.

Structure of the market - Self-operating public bodies and contract caterers on average share the food and catering market around 50/50, but the difference is large between Member States (FERCO, 2012). The market penetration of contract catering organisations varies significantly across Member States and across public sector segments. In many Member States markets are dominated by the large multinational contract catering organisations. They overall have the largest market share in EU-28. There are a total of 3.77 million Vending machines in Europe, serving 82 million food and drink products per day. 80 % of these are in France, Germany, Italy, Spain, the Netherlands and the UK (EVA, 2014). Of all machines available in Europe 60 % are hot drink machines, 21 % is glass-front machines (drinks, food and snacks) and 19 % is cold drink machines.

Market segmentation - The most important sectors (in terms of purchase volume and value) in Europe that procure food and catering services are: health/welfare, Education and B&I. It is important to note that different sectors are included in calculations for different countries. For

instance, the term 'institutional food service' (from GAIN, 2013) was used differently between Member States.

Market elements for big caterers - What drives the success of large contract catering companies seems to be economies of scale: less labour and lower prices per meal.

Conclusions on food production and consumption - EU-28 is a large producer of dairy, cereals (e.g. wheat), fruit and vegetables, meat, potatoes, bread and cold beverages. But the EU is also dependent on imports of fish, fruit, vegetables, animal feed, coffee, tea and cocoa (Eurostat Statistics in focus, 2011). The main food categories found to be relevant for this project are:

- **Meat:** beef, pig and poultry
- **Fish:** wild caught cod and tuna; farmed salmon
- **Dairy and eggs:** milk and eggs
- **Fruit:** apples and oranges; (possibly imports of tropical fruits)
- **Vegetables:** tomatoes, onion, carrots
- **Other carbohydrates:** potatoes, bread and wheat (rice not included)
- **Hot drinks:** coffee
- **Cold drinks:** mineral water and soft drinks

It is likely that there are other food products too that are relevant, but the above are the ones that have been found during this investigation to have sufficient data to base decisions upon.

The consumption of organic production in the EU has been on a steady rise since 2004 (FiBL and IFOAM, 2014). Germany (31 %), France (18 %), UK (8 %) and Italy (8 %) are the countries that buy most organic products. All together these countries sum up about two thirds of the overall EU organic food sales in 2012. The most popular organic food products are: eggs, dairy, fruit, vegetables, hot beverages, meat (mainly in Northern Europe) and bread and bakery (in some Member States). However, it is stressed in Germany that the cost of procuring organic food can be significantly higher than for conventional products. The IFOAM study (2014) presents some single country data for the share of all retail sales for organic food at European market in 2012. Looking at the main consuming countries, it shows that for Germany the share of organic food in all retail sales is 3.7 %. For France the share is 2.4 % and for Italy 1.5 %. No figure is made available for UK (IFOAM, 2014). Denmark is leading, despite presenting a share below 10 % (and equal to 7.6 %).

Procurement of food - It was difficult to find data from Member States on what type of food is procured by public foodservice, but one study from Ireland showed that meat, fruit & vegetables and bread are the food categories on which most money is spent.

Trends and practises - There is a rising demand for healthy food and drink products both from private consumers and governments, especially in the education and health sectors. The cost of meals in the public sector is generally low, but a high level of variability occurs between countries and public sectors (FoodServiceEurope, 2014). It is clear that the more meals a kitchen makes, the lower the cost will be per meal (DE & DFP, 2012). Labour cost and food purchase cost, are the two most important factors that influences the price per meal (WRAP, 2013b). This may lead to public procurers choosing contract catering instead of having in-house personnel preparing meals, however other factors might influence in the decision making, for instance, the different VAT applied in each Member State to the procurement of catering services. Negative aspects of this could be short-termism and/or wasteful use of resources as contract caterers are not liable for the electricity, gas and water use in the facility, meaning that they will have minimal incentive to reduce the use of these resources.

Sustainable aspects in the service - In terms of future sustainability there is a significant focus in the catering industry on energy savings, packaging and food waste. In respect to the ***Future trends in food services*** it is likely that contract caterers will continue to grow in market share, due to their ability to provide a broad service to a low price. However, some sectors will be easier to develop in than others. The Soil Association in the UK and the Swedish National Food Agency are, among other, two examples of market innovations initiatives at country level where national dietary guidelines considers environmental aspects. Another initiative, INNOCAT, aims to gather public and private buyers to publish a series of tenders for eco-innovative catering products, services and solutions.

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Appendix C – Food production

All data is sourced from Eurostat PRODCOM

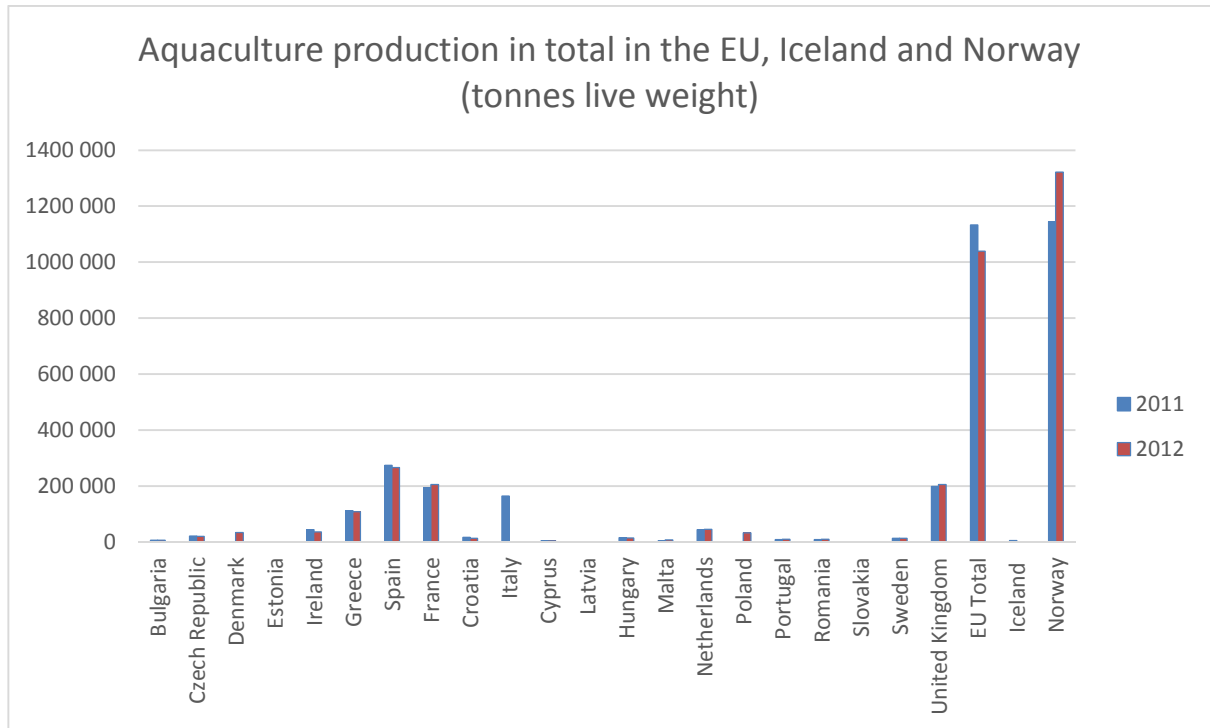


Figure C.1: Aquaculture production of total fishery products

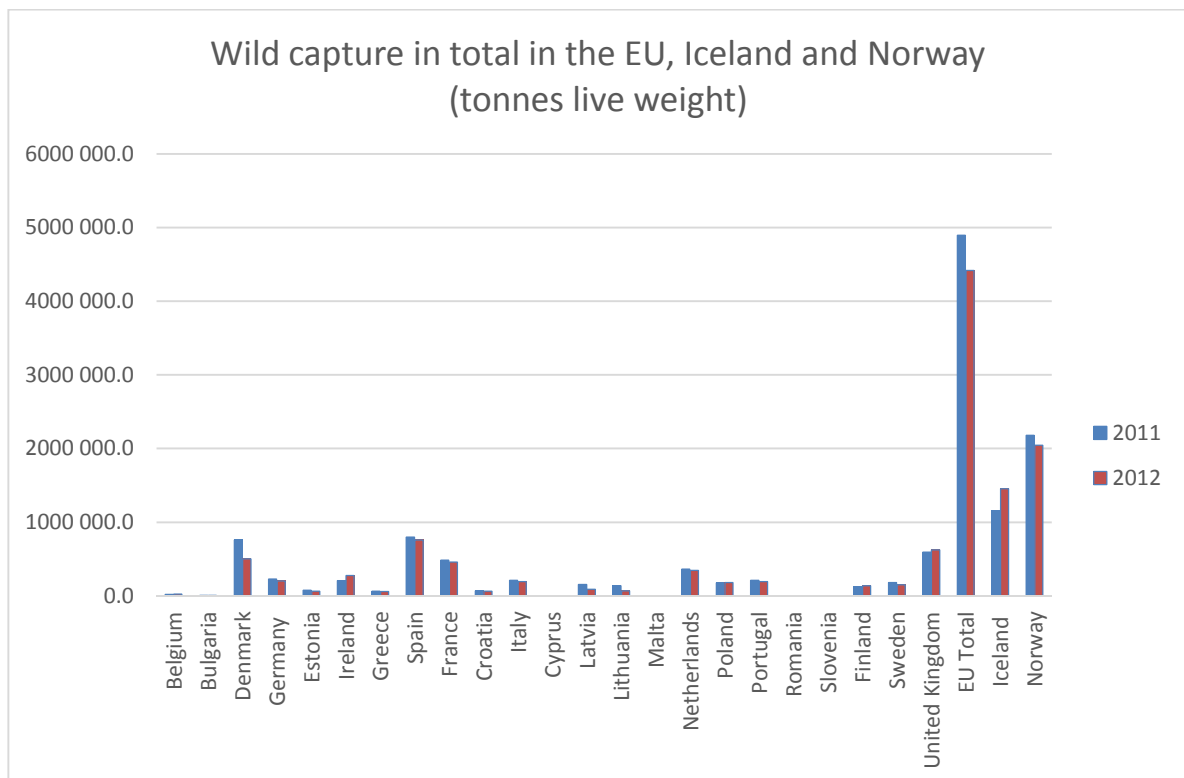


Figure C.2: Wild capture of total fishery products

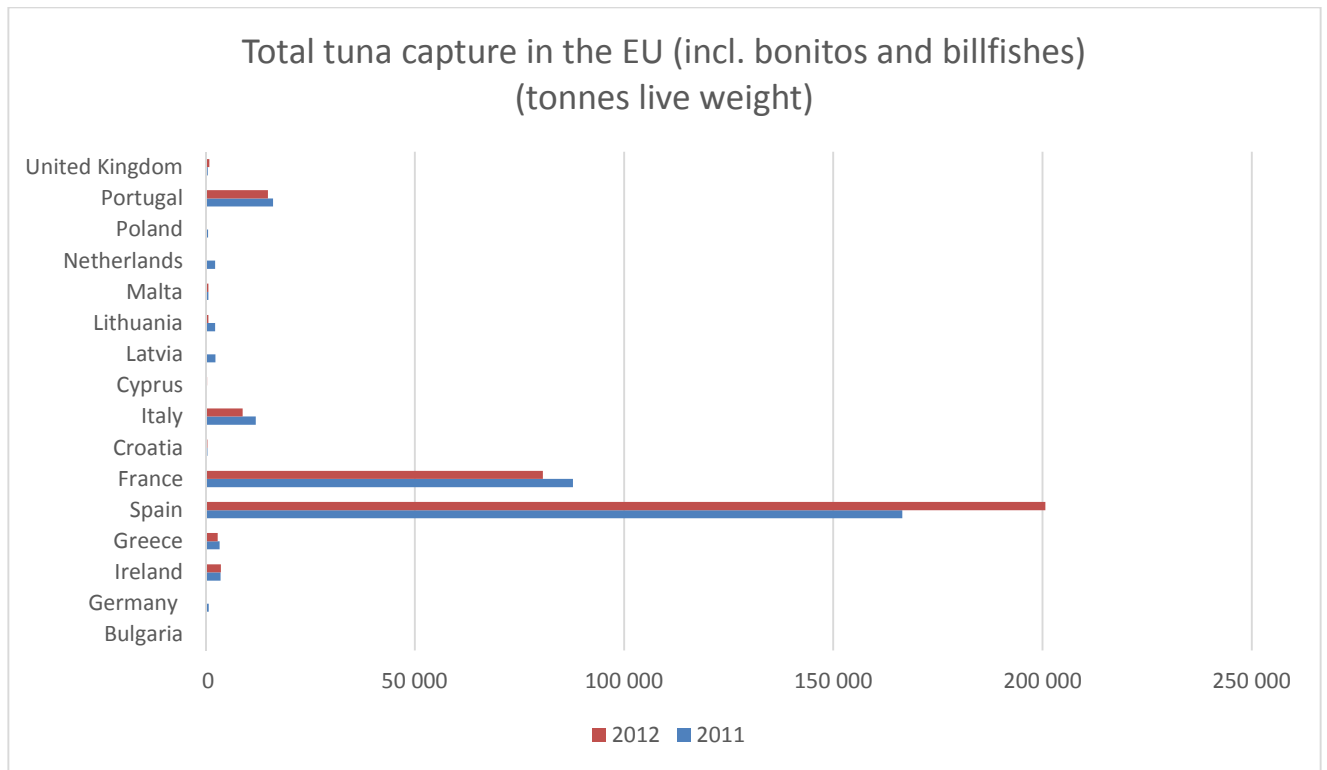


Figure C.3: Total tuna capture

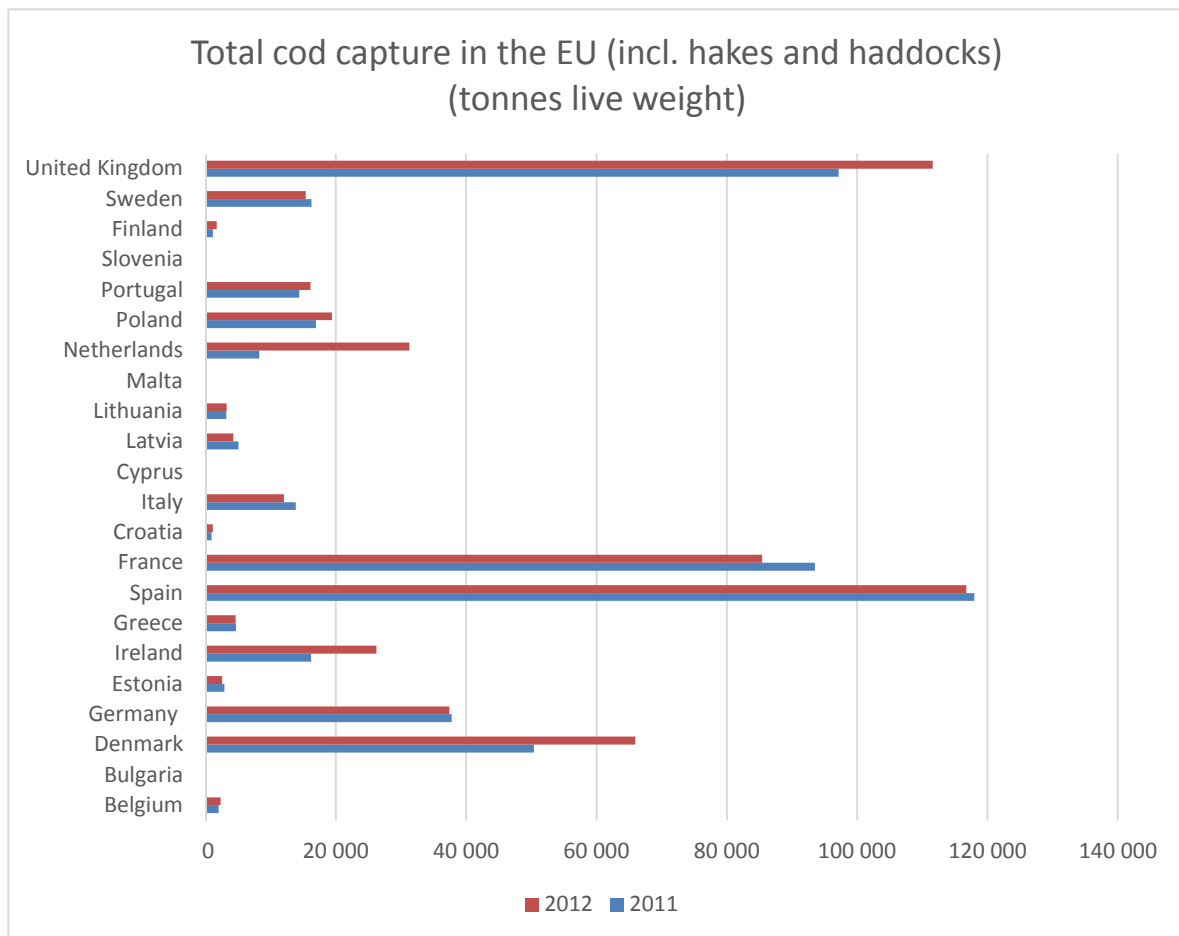


Figure C.4: Total cod capture

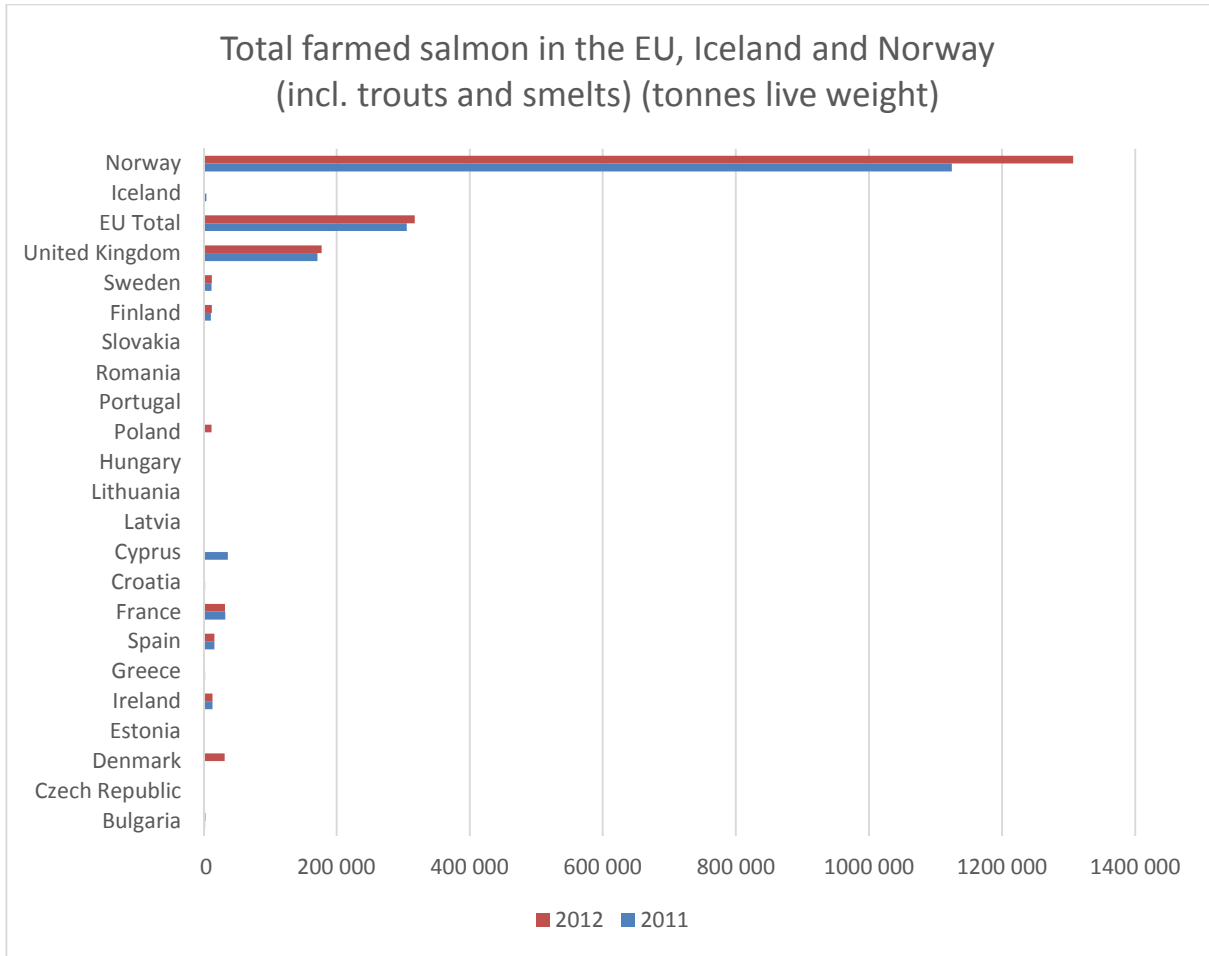


Figure C.5: Total farmed salmon

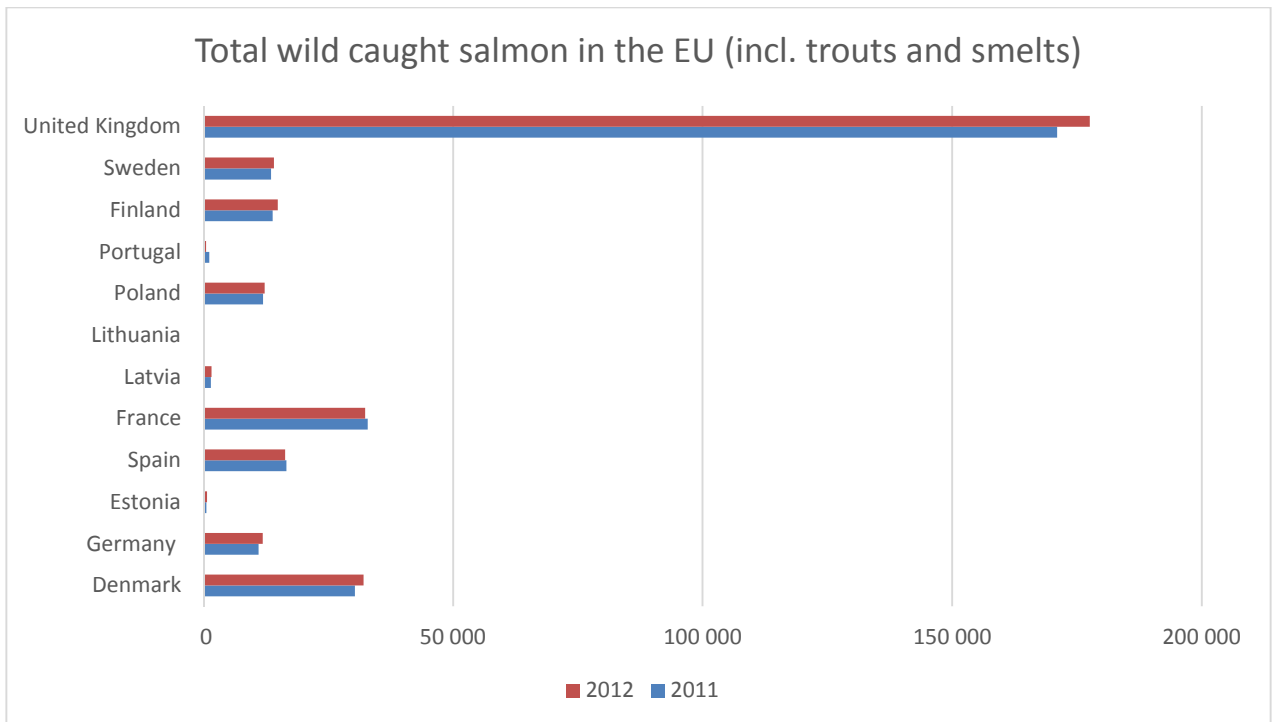


Figure C.6: Total wild caught salmon

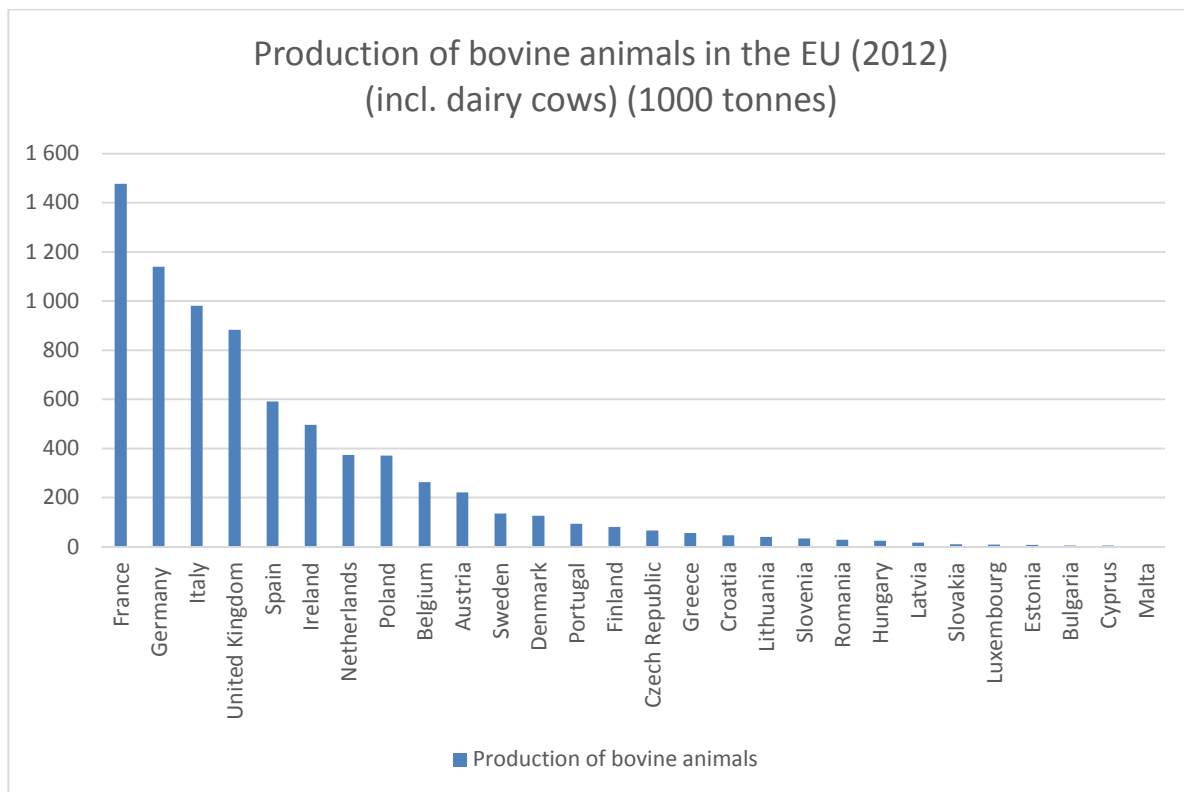


Figure C.7: Production of bovine animals

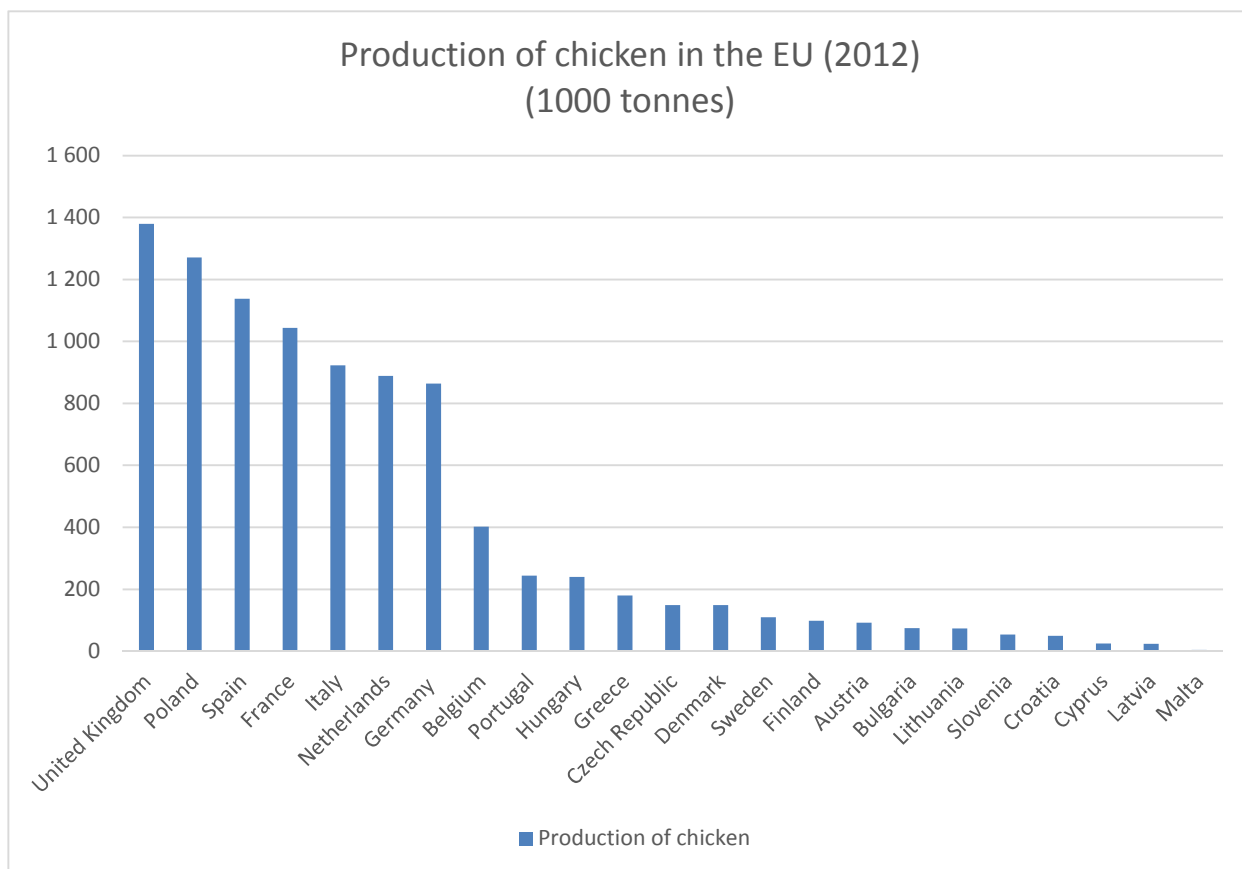


Figure C.8: Production of chicken

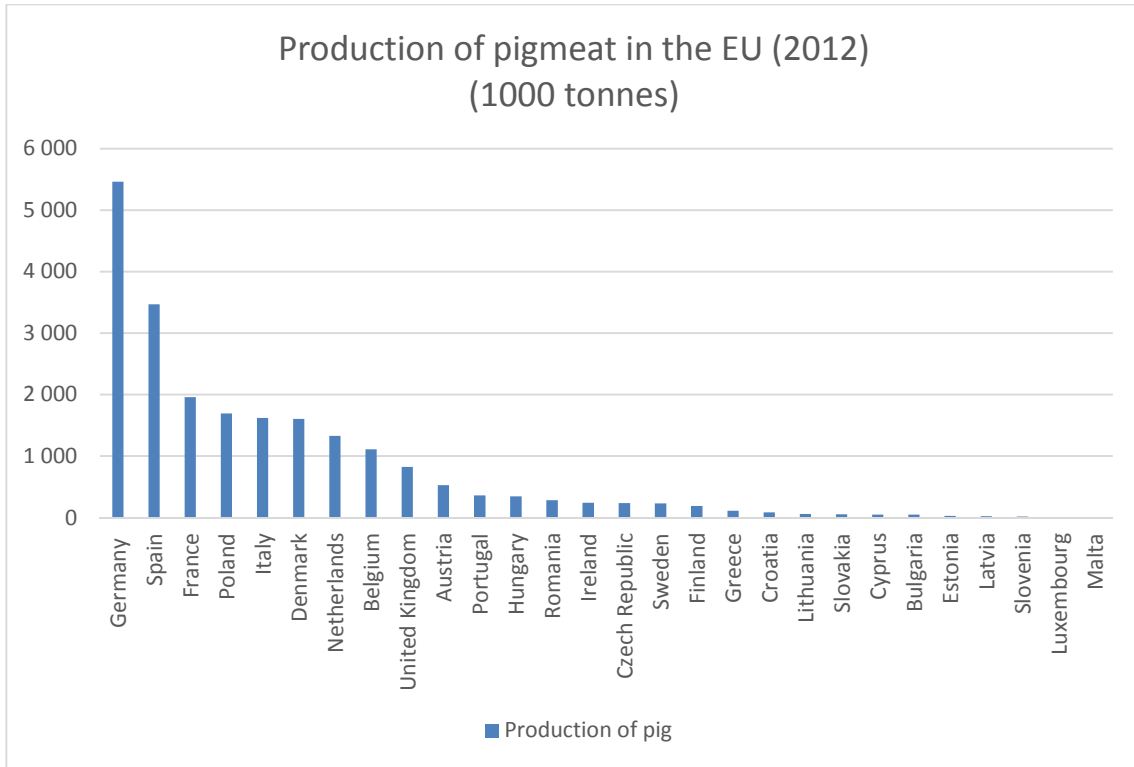


Figure C.9: Production of pig meat

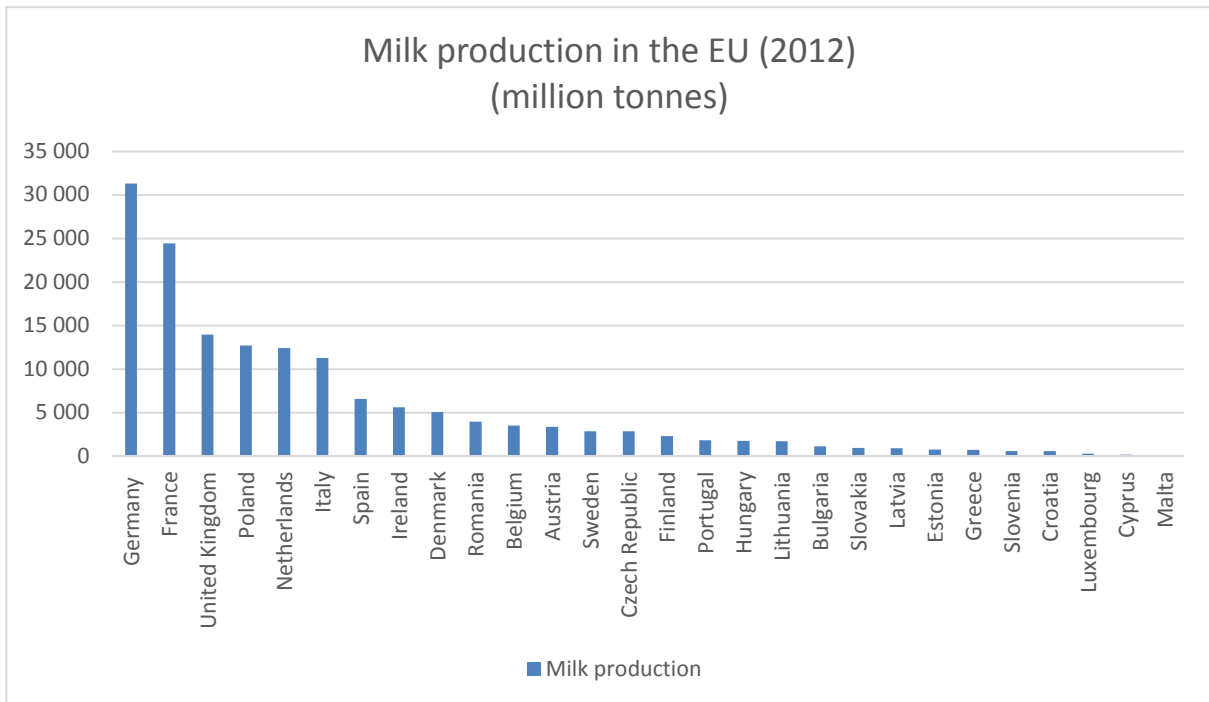


Figure C.10: Milk production

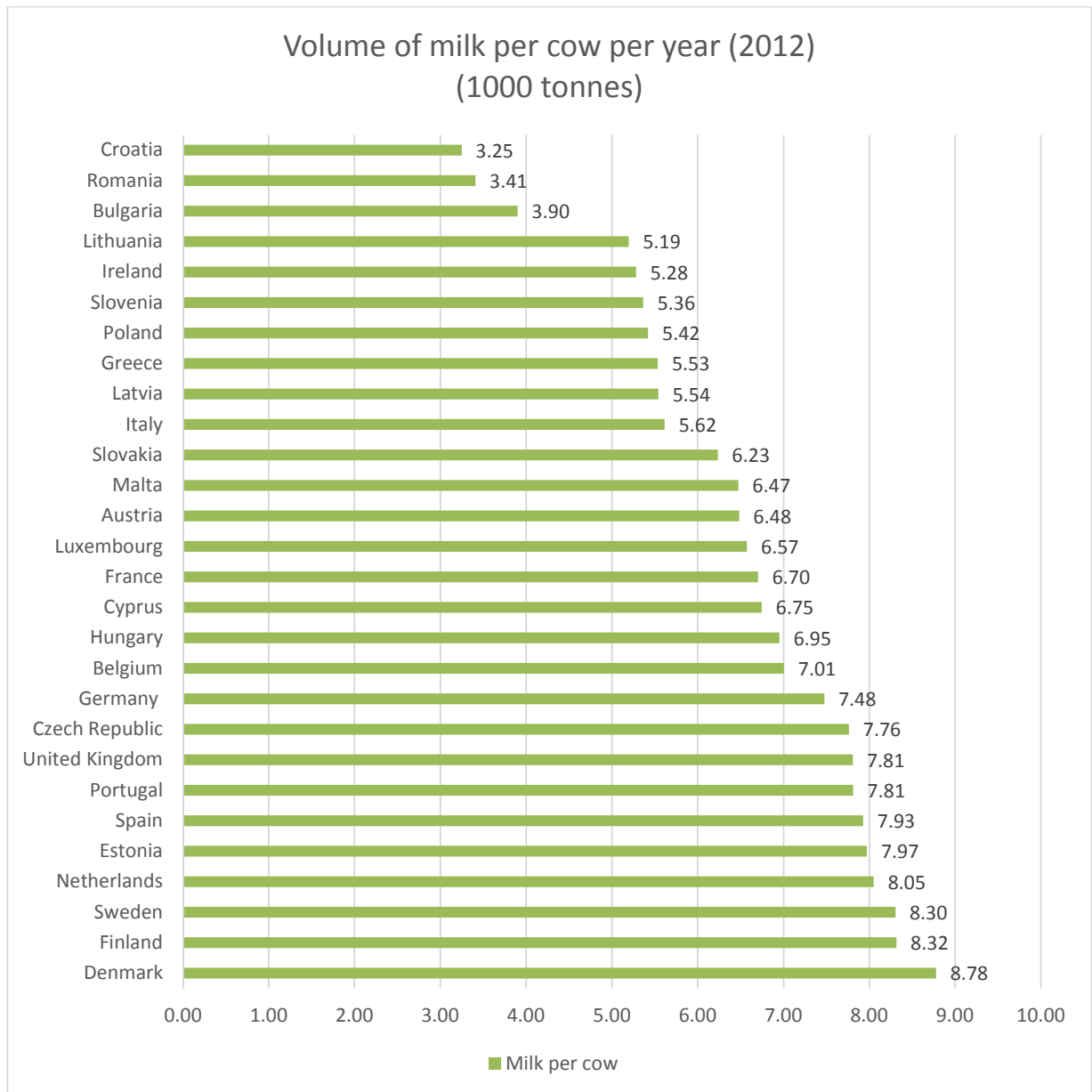


Figure C.11: Weight of milk per cow

Appendix D - Market elements for sector companies

Compass Group operates worldwide in 50 countries and works in the following sectors: B&I (*canteens in workplaces*); healthcare and seniors (*hospitals, residential homes*); education (*kindergarten to college*); sports and leisure (*world sports events, exhibition centres, major events, visitor attractions*); defence, offshore and remote (*defence, mining, construction, oil and gas industries*)(Compass Group, 2014). Compass' revenue in Europe and Japan combined was £5.7 billion (c. €7.1 billion⁸⁷) in 2014, which accounted for 34 % of the whole group's revenue. This revenue is broken down by sector in Figure D.1. and it is clear that B&I is the major customer. The operating profit in 2014 was £409 million (c. €507⁸⁸ million). The revenue is 5 % lower than that in 2013, and the profit is almost 3 % lower.

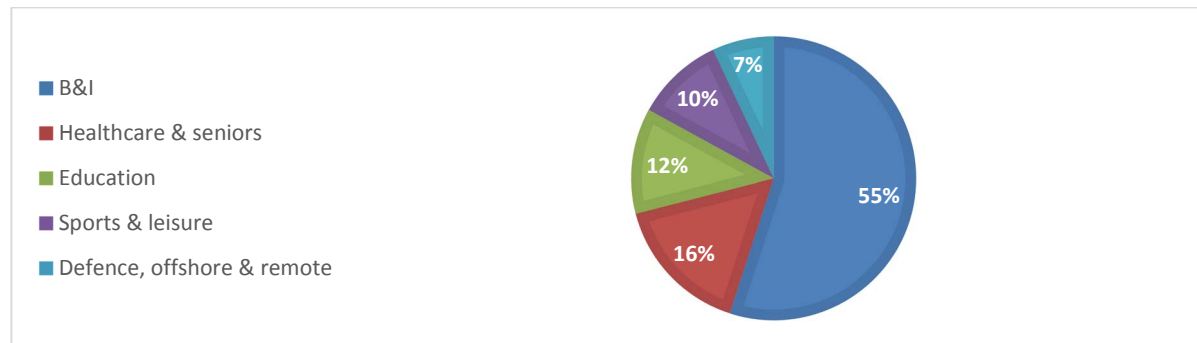


Figure D.1 Compass Group revenue by sector in % for Europe & Japan (Source: Adapted from Compass Group, 2014).

Sodexo group is operating in 80 countries and are working in the following sectors: education, health care, seniors, corporate, defence, sports and leisure, justice services and remote sites (Sodexo, 2014). Figure D.2. below shows the activity per sector, in percent. Corporate, education and health care are the largest sectors. Sodexo serves 75 million customers daily, had revenue in 2014 of €18 billion and employed 419 000 people (Sodexo, 2014). Europe stands for 34 % of the total revenue.

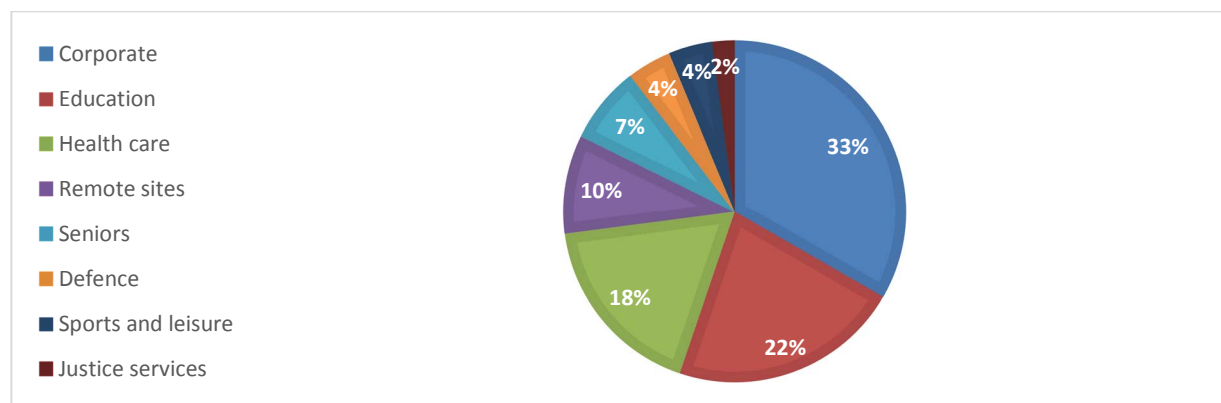


Figure D.2. Sodexo group on-site services by activity (Sodexo, 2014).

Elior operates in 13 countries and in following sectors: B&I, education, health care, motorways, airports, and city sites & leisure (Elior, 2014). Elior has a total revenue of €5.341 billion out of which B&I, education and health care stand for 70.7 % of the total. Elior serves 3.8 million customers yearly (Elior, 2014).

⁸⁷ Calculated from GBP to Euro by the average exchange rate of year 2014, available in Table a, Appendix D.

⁸⁸ Calculated from GBP to Euro by the average exchange rate of year 2014, available in Table a, Appendix D.

Table D.1: Exchange rates (UKForex, 2015)

Average annual exchange rates GBP to Euro (£1 = xx€)	
2005	1.461216
2006	1.466612
2007	1.461786
2008	1.259467
2009	1.12246
2010	1.165737
2011	1.15258
2012	1.233263
2013	1.177964
2014	1.240494

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