

# DATA & TRENDS

## EU FOOD AND DRINK INDUSTRY

2017





# EU FOOD AND DRINK INDUSTRY FIGURES

## TURNOVER

**€1,098 billion**

Largest manufacturing sector in the EU

## EMPLOYMENT

**4.24 million people**

Leading employer in the EU

## SALES WITHIN THE SINGLE MARKET

**90%**

of food and drink turnover

## EXTERNAL TRADE

**€102 billion**

Exports

**€71.9 billion**

Imports

## VALUE ADDED

**1.7%**

of EU gross value added<sup>1</sup>

## NUMBER OF COMPANIES

**289,000**

## SMEs<sup>1</sup>

**48.3%**

of food and drink turnover

**€30.1 billion**

Trade balance

**17.3%**

EU share of global exports

## CONSUMPTION

**14%**

of household expenditure on food and drink products

## R&D EXPENDITURE

**€2.8 billion**

**62.1%**

of food and drink employment

<sup>1</sup> For definition, see page 24

Sources: Eurostat; JRC; UN COMTRADE



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# INTRODUCTION

The 2017 edition of the 'Data & Trends of the EU Food and Drink Industry' report offers a comprehensive picture of the structure and economics of Europe's food and drink sector, the largest manufacturing industry in the EU in terms of turnover, value added and employment.

The report provides in depth analysis of the Single Market, world markets, and a global ranking of food and drink companies.

This report covers the whole EU28 food and drink industry, which is identified by the NACE rev2 codes C10 (food products) and C11 (drinks).

All figures presented here come from official sources and have been elaborated by FoodDrinkEurope.



## SINGLE MARKET

# CONTRIBUTION TO THE EU ECONOMY

The largest manufacturing sector in terms of turnover, value added and employment

### 1.7%

Contribution of the food and drink industry to EU gross value added (GVA)<sup>1</sup>

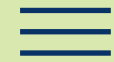
### 15.4%

Share of food and drink turnover in manufacturing

### 12.8%

Share of food and drink value added in manufacturing

<sup>1</sup> For definition, see page 24



- The food and drink industry is a major contributor to Europe's economy, ahead of other manufacturing sectors, such as the automotive industry.
- The industry maintains the characteristics of a stable, resilient and robust sector.
- In 2016, the volume of food and drink production was the highest since 2008.
- The EU food and drink industry generated a turnover of €1,098 billion (2015) and a value added of €219 billion (2014).

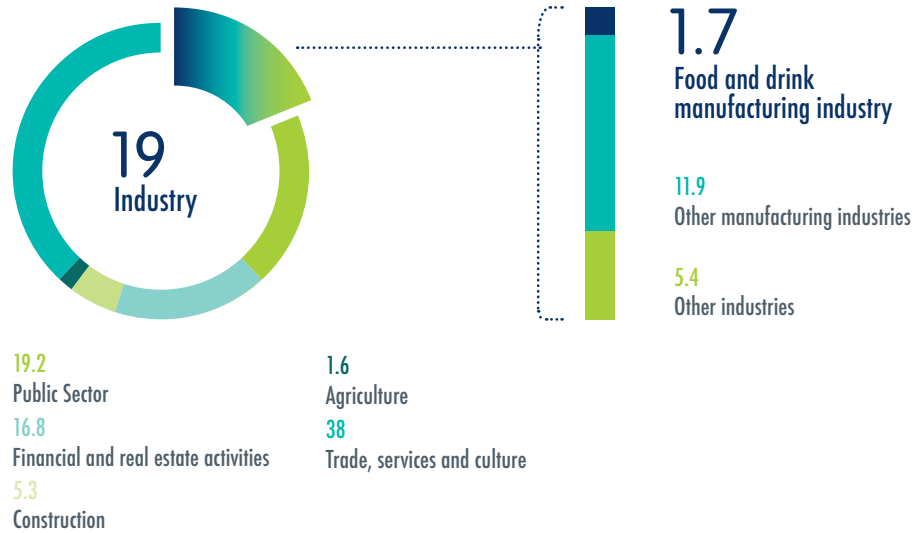
### Recent developments in the EU food and drink industry

	2014	2015	% change
Turnover (€ billion)	1,095	1,098	+0.26 ▲
Value added (€ billion)	219	-	-
Number of employees (million)	4.24	-	-
Number of companies (1,000 units)	292	289	-0.9 ▼

Source: Eurostat (SBS)

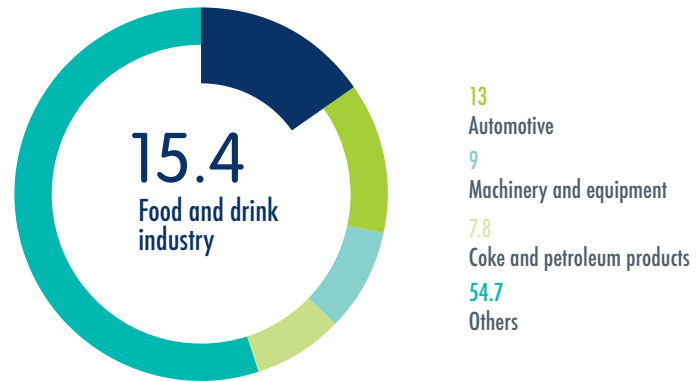


### Contribution of the food and drink industry to the EU economy (2014,%)



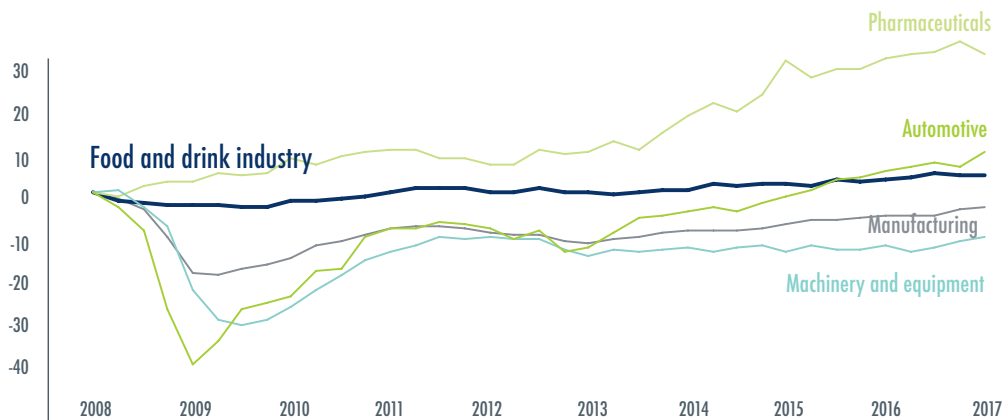
Source: Eurostat (National Accounts and SBS)

### Share of turnover in the EU manufacturing industry (2014,%)



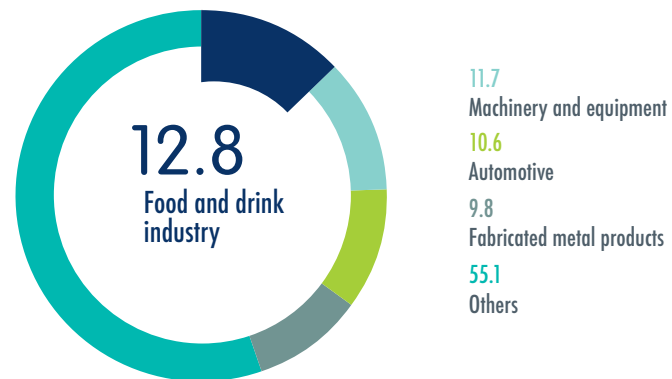
Source: Eurostat (SBS)

### Production in the EU manufacturing industry (% change relative to the first quarter of 2008)



Source: Eurostat (STS)

### Share of value added<sup>1</sup> in the EU manufacturing industry (2014,%)



Source: Eurostat (SBS)

<sup>1</sup> For definition, see page 24



# EMPLOYMENT

Leading employer in the EU

**4.24 million**

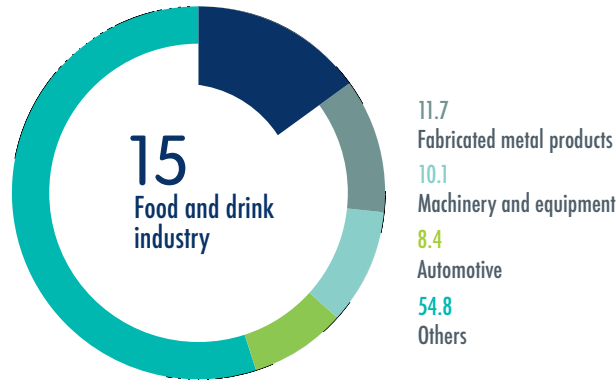
Total number of employees in the food and drink industry

**15%**

Share of food and drink industry employment in manufacturing

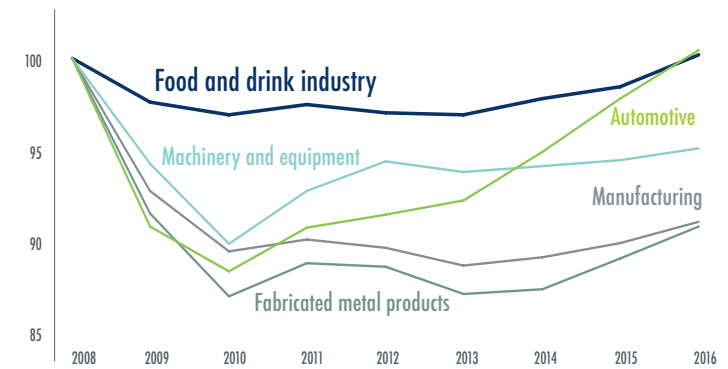
- Compared to other manufacturing sectors, the EU food and drink industry is a key job provider and a relatively stable employer.
- On average, labour productivity in the food and drink industry is lower than in the manufacturing sector as a whole.
- The average number of persons employed by a food and drink company is 15, i.e. 1 more than the average manufacturing company.

Share of employment in the EU manufacturing industry (2014,%)



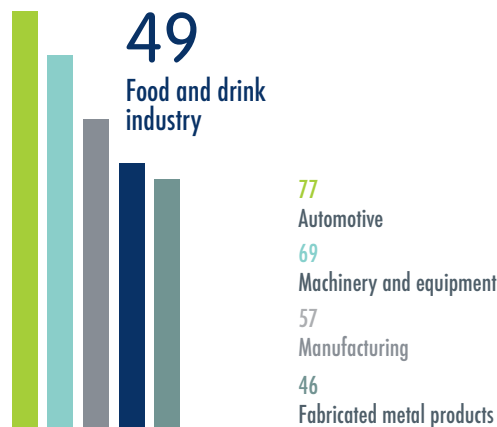
Source: Eurostat (SBS)

Employment in the EU manufacturing industry (index, 2008=100)



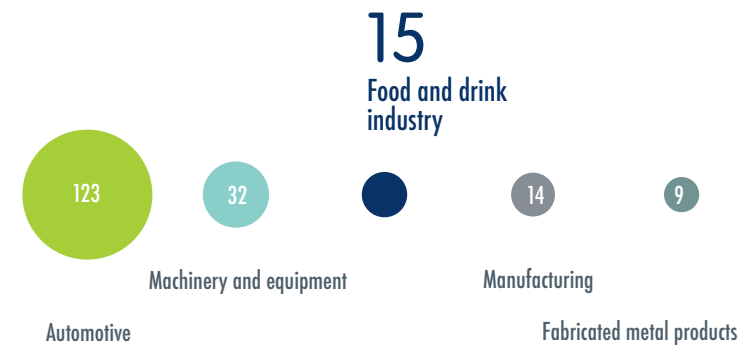
Source: Eurostat (STS)

Labour productivity<sup>1</sup> in the EU (2014,€1,000/person)



Source: Eurostat (SBS)

Average number of persons employed per company in the EU (2014)



Source: Eurostat (SBS)

<sup>1</sup> For definition, see page 24



## VALUE ADDED

Sustained growth over the past 20 years<sup>1</sup>

**+€413 billion**

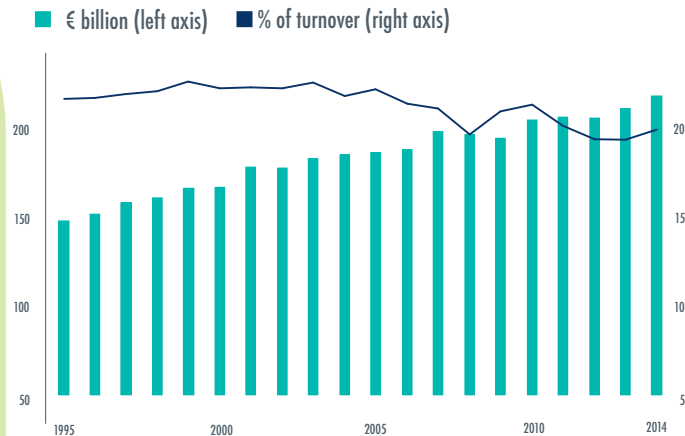
Growth of food and drink turnover over the past 20 years

**20%**

Share of value added<sup>2</sup> in turnover of the food and drink industry

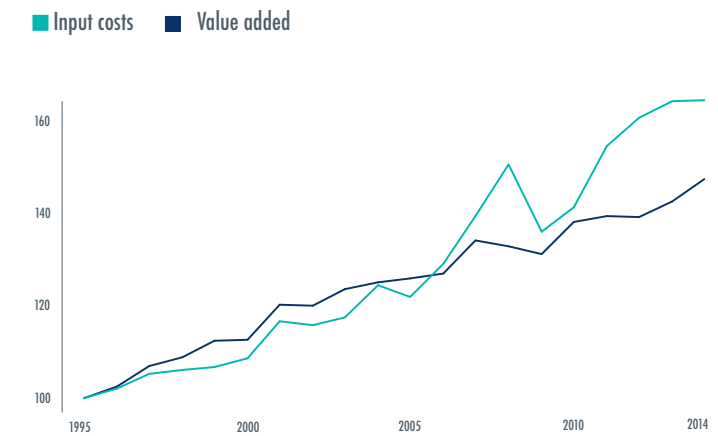
- In 2014, the EU food and drink industry generated a turnover of €1,095 billion, 80% of which was spent in input costs. Value added resulted in €219 billion.
- Value added of the EU food and drink industry is being outpaced by input costs: between 2005 and 2014 value added has grown by 1.8% per year while input costs have grown by 3.4% per year.
- Over the past decade, the growth of value added in the food and drink industry has been higher than the overall manufacturing growth.
- Nevertheless, the growth of input costs has significantly squeezed the value added of the food and drink industry, compared to manufacturing in general.

### Value added of the EU food and drink industry



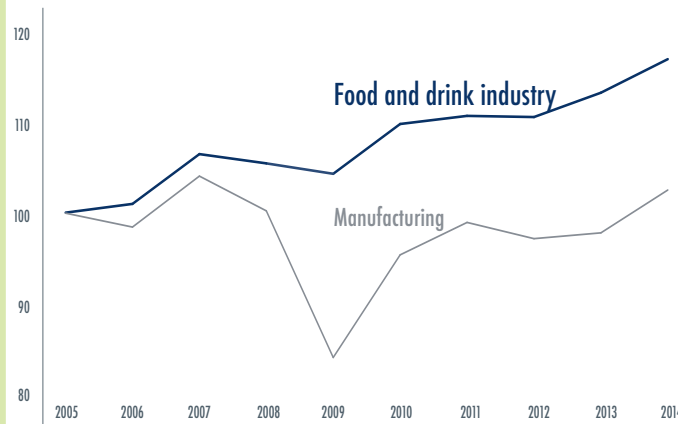
Sources: Eurostat (SBS); Wageningen Economic Research

### Value added and input costs of the EU food and drink industry (index, 1995=100)



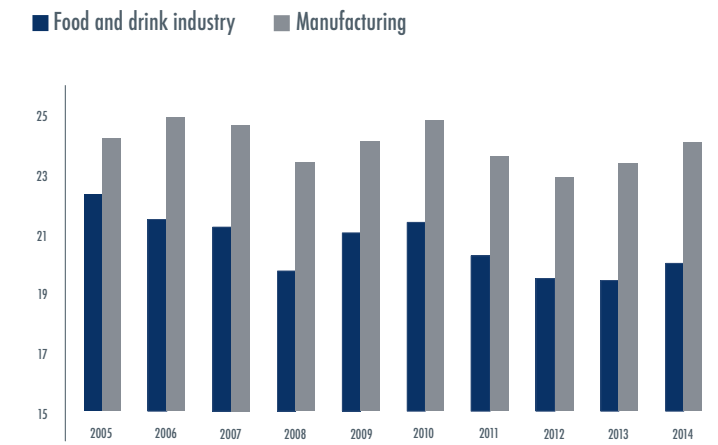
Sources: Eurostat (SBS); Wageningen Economic Research

### Value added in the EU food and drink industry and in manufacturing (index, 2005=100)



Source: Eurostat (SBS)

### Value added as a share of turnover in the EU food and drink industry and in manufacturing (%)



Source: Eurostat (SBS)

<sup>1</sup> For more information, read FoodDrinkEurope's report 'A Competitive EU Food and Drink Industry for Growth and Jobs'

<sup>2</sup> For definition, see page 24



## SECTORS AT EU LEVEL

Offering a wide variety of food and drink products to all consumers in the EU

**20%**

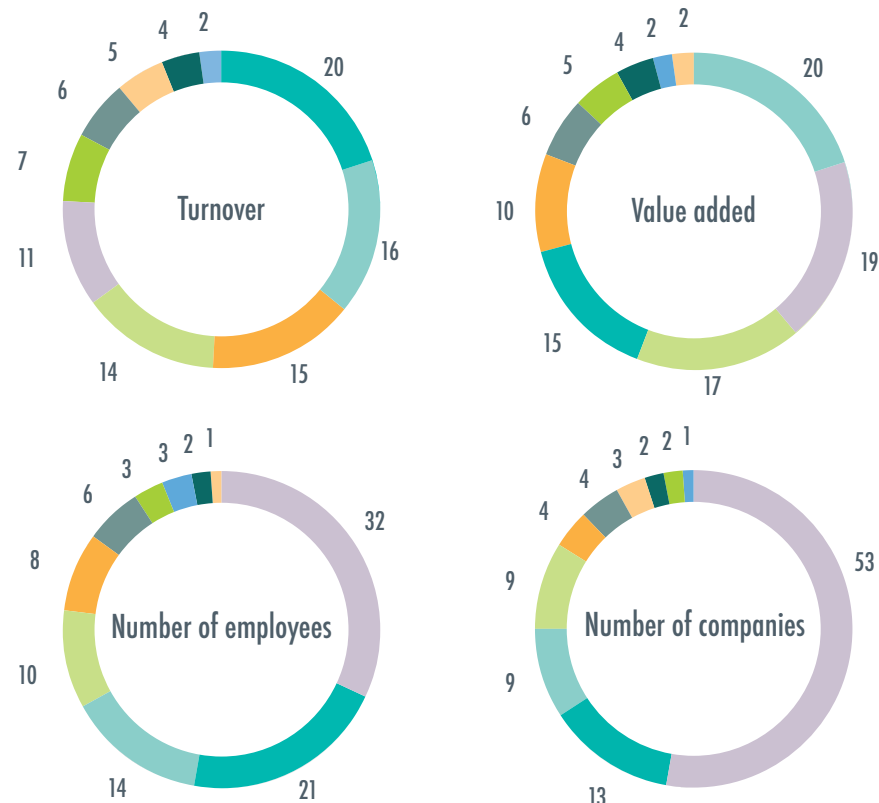
Meat sector's share of turnover

**32%**

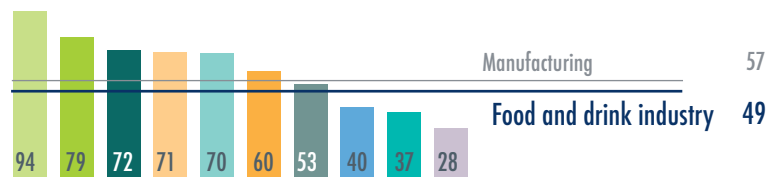
Share of employees working in the bakery and farinaceous sector

- The EU food and drink industry is diverse, with a variety of sectors ranging from fruit and vegetable processing to dairy production and drinks.
- The top 5 sectors (bakery and farinaceous products, meat products, dairy products, drinks and the "various food products" category) represent three quarters of the total turnover and more than 80% of the total number of employees and companies.
- Labour productivity varies by sector. For drinks and animal feeds, it is much higher than for overall manufacturing.

Turnover, value added, number of employees and companies in EU food and drink industry sectors (2014,%)



Labour productivity<sup>1</sup> in the EU (2014,€1,000/person)



Sources: Eurostat (SBS)

- Meat products
- Various food products
- Dairy products
- Drinks
- Bakery and farinaceous products
- Animal feeds
- Processed fruits and vegetables
- Oils and fats
- Grain mill and starch products
- Fish products

<sup>1</sup> For definition, see page 24





## THE NATIONAL PICTURE

A key industry in the economies of the EU Member States

### #1 employer

The food and drink industry is the biggest employer in manufacturing in half of the Member States

**66%**

Share of turnover of the EU's 5 largest food and drink producers

- The food and drink industry ranks among the top three manufacturing industries in terms of turnover and employment in most Member States.
- France, Germany, Italy, the UK and Spain are the largest EU food and drink producers by turnover.

Food and drink industry data as published by FoodDrinkEurope National Federations<sup>1</sup> (2015)

	Employment ranking in manufacturing	Turnover (€ billion)	Value added (€ billion)	Number of employees (1,000)	Number of companies
Austria	5	22.7	5.5	83.3	3,893
Belgium	1	48.6	8.1	88.5	4,452
Bulgaria	2	5.2	1.0	95.6	6,182
Croatia	1	5.3	1.2	61.0	3,256
Czech Republic	4	13.3	2.7	115.4	9,157
Denmark	2	25.4	4.5	61.6	1,607
Estonia	2	1.8	0.4	15.4	575
Finland	4	10.9	2.6	37.6	1,846
France	1	179.9	45.0	427.2	57,290
Germany <sup>2</sup>	3	168.6	36.7	569.2	5,812
Greece <sup>3</sup>	1	14.2	2.8	87.2	1,225
Hungary	1	11.5	2.0	106.6	6,812
Ireland	1	27.1	-	47.3	1,583
Italy	2	132.0	24.2	427.0	56,315
Latvia	1	1.7	0.4	23.7	1,120
Lithuania	1	4.0	0.8	44.1	1,609
Netherlands	1	70.0	11.3	128.6	6,065
Poland	1	55.6	9.9	417.5	14,534
Portugal	1	15.3	2.9	107.5	10,996
Romania	1	12.0	-	180.8	8,826
Slovakia <sup>2</sup>	3	4.0	0.8	29.3	278
Slovenia	3	2.2	0.5	16.5	2,258
Spain	1	104.2	19.3	349.2	26,016
Sweden	4	18.1	4.5	50.5	4,240
United Kingdom	1	131.6	38.9	418.2	6,620

<sup>1</sup> Or by Eurostat (SBS)

<sup>2</sup> Companies with more than 20 employees

<sup>3</sup> Small food and drink producers excluded



# SMALL AND MEDIUM-SIZED ENTERPRISES<sup>1</sup>

Small Scale, Big Impact

- The food and drink industry is a highly diversified sector with many companies of different sizes.
- SMEs generate almost 50% of the food and drink industry turnover and value added and provide two thirds of the employment of the sector.
- The food and drink industry accounts for more than 285,000 SMEs.

**€529 billion**  
Turnover

**€103 billion**  
Value added

**2.8 million**  
Employees

**99.1%**  
of food and drink companies

## Contribution of SMEs and large companies to the EU food and drink industry (2014,%)

■ SMEs ■ Large companies



## SMEs in the food and drink industry (2014,% by company size)

■ Turnover ■ Value added ■ Number of employees ■ Number of companies



Source: Eurostat (SBS)

<sup>1</sup> For definition, see page 24

<sup>2</sup> 2013 data



# FOOD SUPPLY CHAIN

Driving forces in the food supply chain: agriculture, the food and drink industry and retail

**6%**  
Share of the food supply chain in EU gross value added

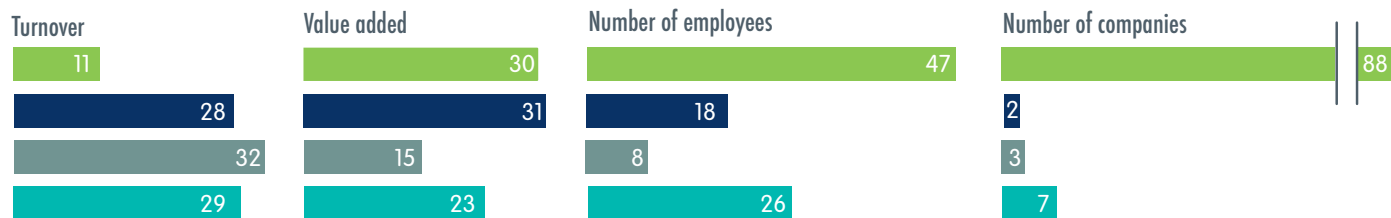
**10%**  
Share of the food supply chain in EU employment

- In 2014, there were 24 million people employed in the food supply chain.
- The total turnover amounts to €3.9 trillion and the value added almost reaches €700 billion.
- Around 31 million professionals work in the extensive food supply chain across the EU, from agriculture and the input industry to food and drink services.

## Structural overview of the food supply chain (2014)

	Agriculture	Food and drink industry	Wholesale of agricultural and food products	Food and drink retail <sup>1</sup>
Turnover (€ billion)	414	1,095	1,254	1,114
Value added (€ billion)	211	219	104	164
Number of employees (million)	11.2	4.2	1.9	6.3
Number of companies (1,000 units)	10,800	292	341	803

## Turnover, value added, employees and companies in the food supply chain (2014,%)



■ Agriculture ■ Food and drink industry ■ Wholesale of agricultural and food products ■ Food and drink retail

## Employment in the extensive EU food supply chain (2014,%)



Source: Eurostat (National Accounts, SBS, FSS, Economic Accounts for Agriculture)

<sup>1</sup> 2013 data except for the number of companies



## R&D AND INNOVATION

Innovation<sup>1</sup> activities of EU<sup>2</sup> food and drink companies: crucial for competitiveness

**46%**

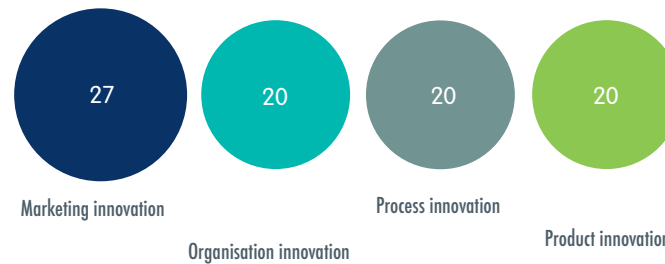
Share of innovative companies

**21%**

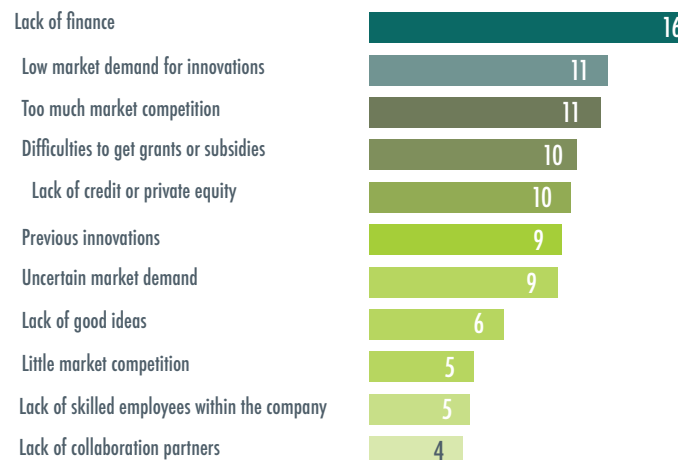
Share of non-innovative companies that did not innovate due to barriers

- During the period 2012-2014, more than one quarter of all food and drink companies reported marketing innovations. Organisation, process and product innovations took place in 20% of all companies.
- Half of product and/or process-innovative food and drink companies were engaged in acquisition of machinery, equipment and software. 45% run in-house R&D activities.
- Key barriers to innovation were: lack of finance, low market demand for innovations and too much market competition.
- 62% of innovative food and drink companies introduced innovations with environmental benefits.

### Types of innovation of EU<sup>2</sup> food and drink companies (2012-2014,% of total)<sup>3</sup>



### Important barriers to innovation for EU<sup>2</sup> food and drink companies (2012-2014,% of non-innovative companies)

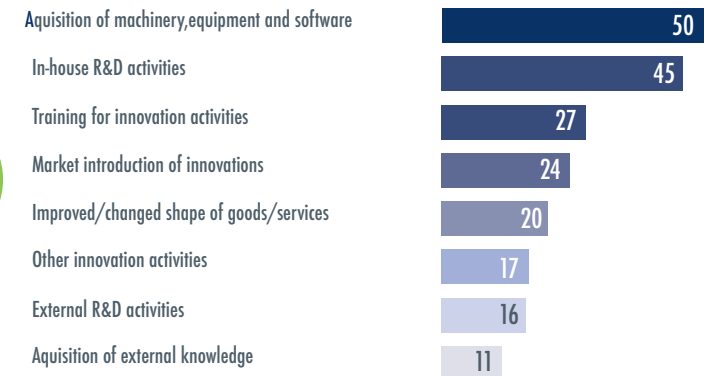


<sup>1</sup> Innovation is defined here as: the implementation of a new or significantly improved product or process; a new marketing method; a new organisational method.

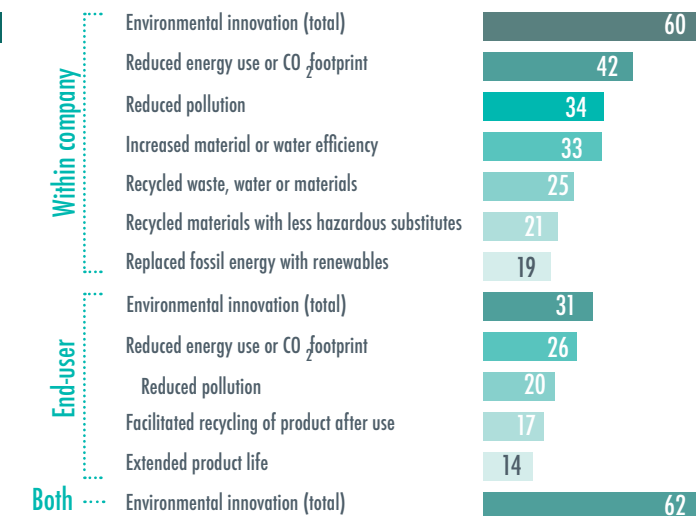
<sup>2</sup> Based on available data

<sup>3</sup> Individual companies may have introduced more than one of these types of innovation.

### Innovation activities of EU<sup>2</sup> food and drink companies (2012-2014,% of product and/or process-innovative companies)<sup>3</sup>



### EU<sup>2</sup> food and drink companies that introduced innovations with environmental benefits (2012-2014,% of innovative companies)<sup>3</sup>



Source: Eurostat (Community Innovation Survey, 2014)



# CONSUMPTION

Food and drink products: the second largest household expenditure

**14%**

Share of EU household expenditure on food and drink products

**€1,116 billion**

EU household expenditure on food and drink products

- In 2015, the share of household expenditure on food and drink products remained stable compared to the previous year.
- Across Member States, household expenditure on food and drink products varies from 10% to 32%.

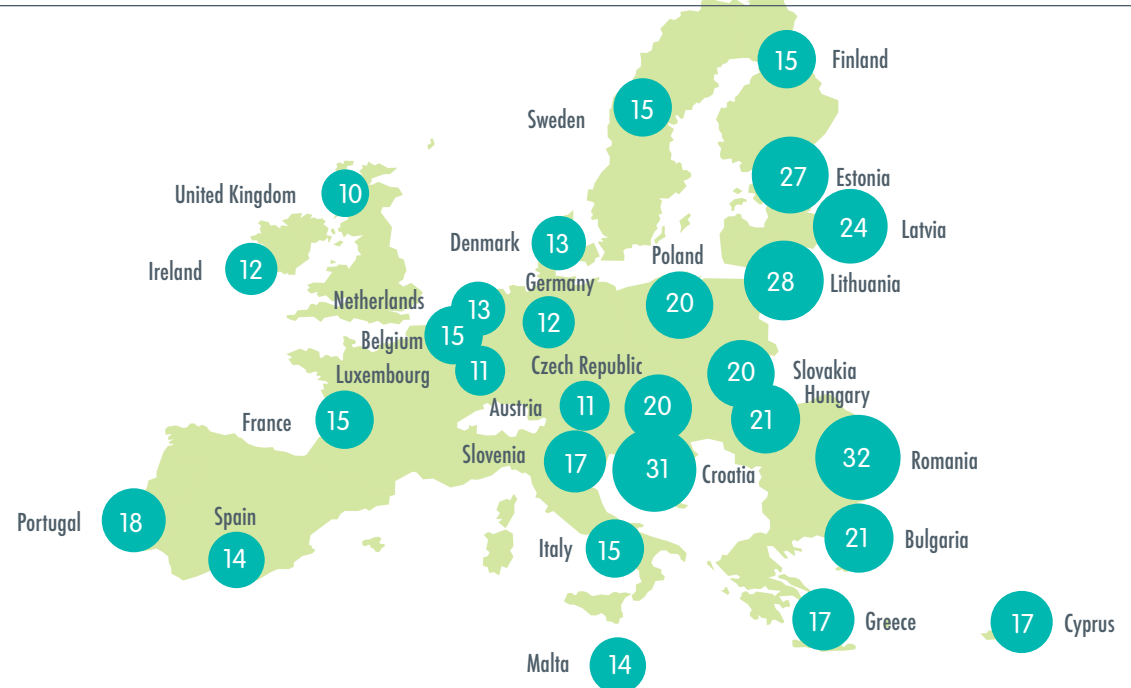
Breakdown of EU household consumption expenditure (2015,% of total expenditure)



- 24 Housing, water and energy
- 13 Transport
- 9 Recreation and culture
- 8 Restaurants and hotels
- 32 Others

Source: Eurostat (National Accounts)

Household consumption expenditure on food and drink products by Member State (2015,% of total expenditure)



Sources: Eurostat (National Accounts); Croatian Bureau of Statistics



# TRADE WITHIN THE SINGLE MARKET

The first market for EU food and drink products

**€254.6 billion**

Intra-EU exports

**€102 billion**

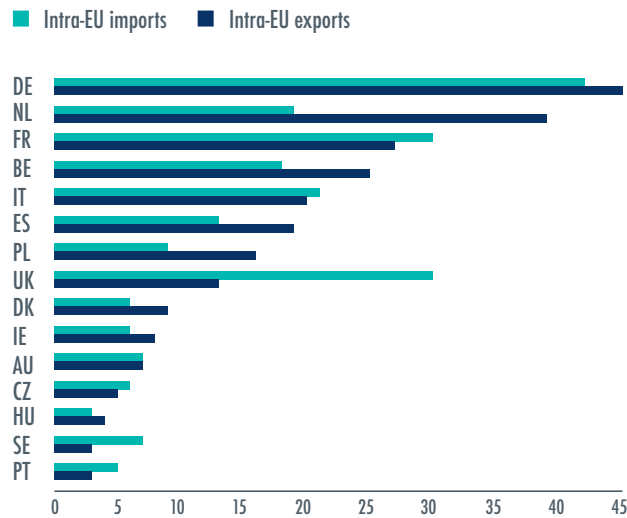
Extra-EU exports

**€356.6 billion**

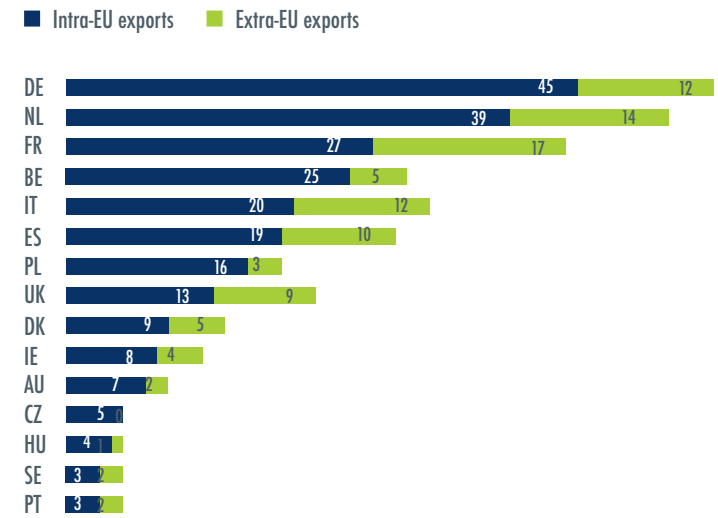
Total exports

- Almost ¾ of EU food and drink exports are destined for the Single Market.
- Intra-EU exports account for more than 25% of the turnover.
- Germany is the first EU exporter and importer of food and drinks within the Single Market.
- More than 50% of the Dutch and Belgian turnover are generated by exports to other EU Member States.
- The EU drink sector exports as much to the Single Market as to third countries, contrary to other sectors where intra-EU exports by far exceed extra-EU exports.

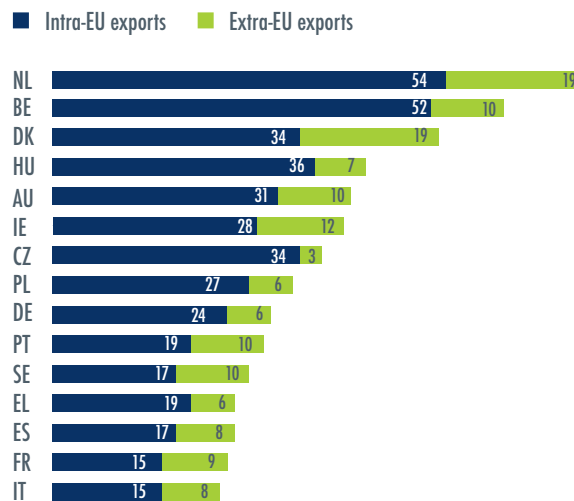
Intra-EU food and drink trade for the top 15 exporters (2016, € billion)



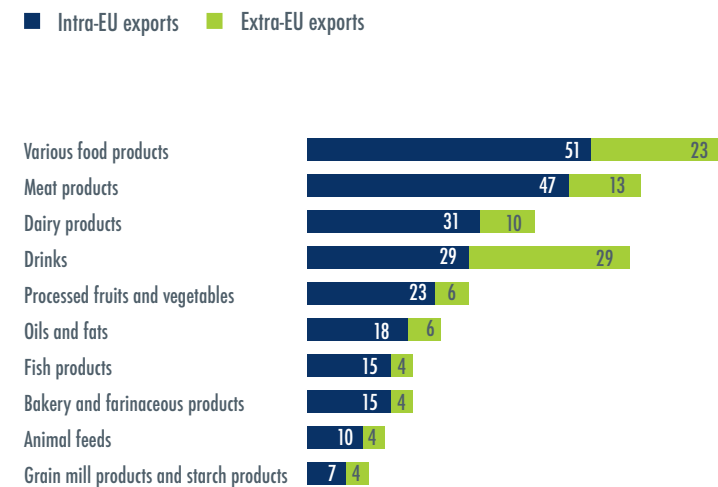
Intra and extra-EU food and drink exports for the top 15 intra-EU exporters (2016, € billion)



Intra and extra-EU trade as a share of turnover for the top 15 intra-EU exporters (2016, %)



Intra and extra-EU exports of sectors (2016, € billion)



Source: Eurostat (Comext)



## EU27-UK TRADE

The UK is the largest trading partner of the EU27

**€31.3 billion**

EU27 food and drink exports to the UK

**€12.9 billion**

EU27 food and drink imports from the UK

**€18.4 billion**

Trade balance

- EU27 exports of food and drink products to the UK amounted to €31.3 billion in 2016. This corresponds to almost twice the exports to the US and three times the exports to China.
- The UK deeply relies on the EU27 both as an export destination and sourcing market.
- Among the EU27 Member States, Ireland has by far the strongest trade link with the UK. More than a third of its food and drink exports are destined for the UK and about half of its imports stem from the UK.
- Wine is the EU27 most prominent product exported to the UK, while spirits dominate the EU27 imports from the UK.

Share of EU27 exports to the UK by sector (2016,%)



21	Meat products
21	Various food products
16	Drinks
11	Processed fruits and vegetables
10	Dairy products
7	Bakery and farinaceous products
4	Fish products
4	Oils and fats
4	Grain mill and starch products
3	Animal feeds

Exports of food and drink products to the UK for the top 10 Member States (2016)

Member State	Exports to the UK (€ billion)	Share of Member States total exports <sup>1</sup> (%)	Rank of UK as export destination
Netherlands	5.3	10.0	3
France	4.5	9.8	3
Germany	4.3	6.6	1
Ireland	4.1	35.1	1
Italy	2.9	9.0	4
Belgium	2.8	7.9	4
Spain	1.9	6.5	4
Poland	1.8	9.4	2
Denmark	1.4	10.3	3
Greece	0.3	8.2	3

Top EU27-UK food and drink exports and imports (2016, € million)

Product	Exports	Imports	Trade Balance
Wine	2,415	276	2,140
Bread, pastry and biscuits	2,028	740	1,289
Chocolate	1,804	558	1,246
Cheese	1,620	413	1,207
Offal, poultry meat	1,410	328	1,081
Animal feed, petfoods	1,325	773	552
Bovine meat fresh, chilled and frozen	1,252	392	860
Prepared and preserved meat	1,223	281	941
Food preparations	1,148	612	536
Pork meat fresh, chilled and frozen	1,038	184	854
Mineral waters and soft drinks	986	373	614
Fat, meat smoked	734	68	666
Prepared and preserved vegetables	716	60	657
Fruit juices	691	146	544
Spirits	602	1,967	-1,365

Source: Eurostat (Comext)

<sup>1</sup> including intra and extra-EU



## WORLD MARKETS

# TRADE FIGURES

International trade: a key source of growth for the industry

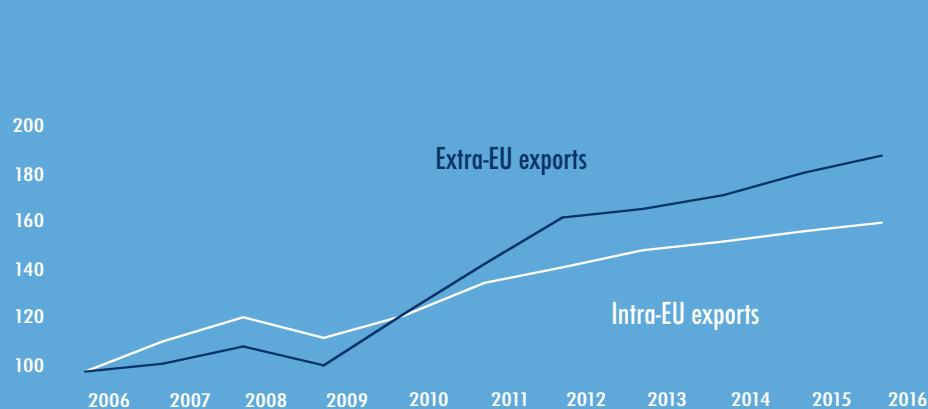
**€102 billion**  
Exports<sup>1</sup>

**€71.9 billion**  
Imports<sup>1</sup>

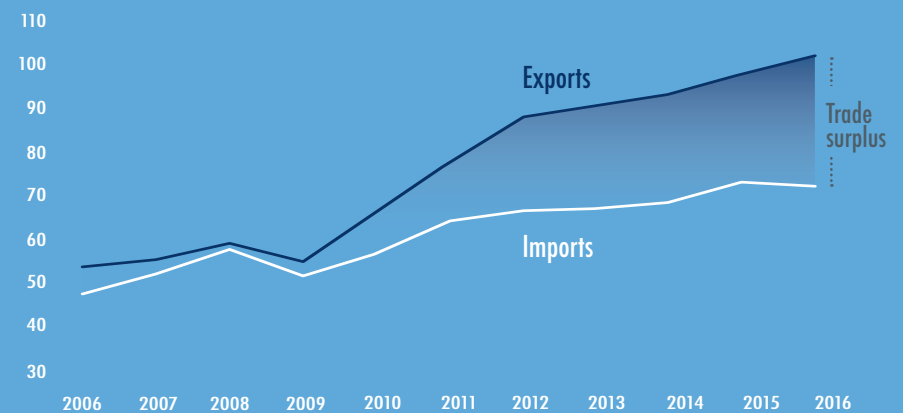
**€30.1 billion**  
Trade balance

- EU food and drink exports increased for the 7th consecutive year to reach €102 billion in 2016 (+4% compared to 2015), while imports amounted to €71.9 billion (-1% compared to 2015).
- The EU is a net exporter of food and drinks with a positive trade balance of €30.1 billion.
- 29% of Member States' food and drink exports were sold to non-EU countries. Extra-EU exports register higher growth than exports within the EU.
- Key export growth markets include China, US, Australia, Norway, Canada and Korea.
- NAFTA remains by far the EU's largest trading partner by region, followed by the China region, EFTA, ASEAN, the ACP group of countries and Mercosur<sup>2</sup>.

Evolution of extra and intra-EU exports (index, 2006=100)



EU food and drink trade (€ billion)



Source: Eurostat (Comext)

<sup>1</sup> Exports and imports refer to extra-EU trade, unless otherwise specified

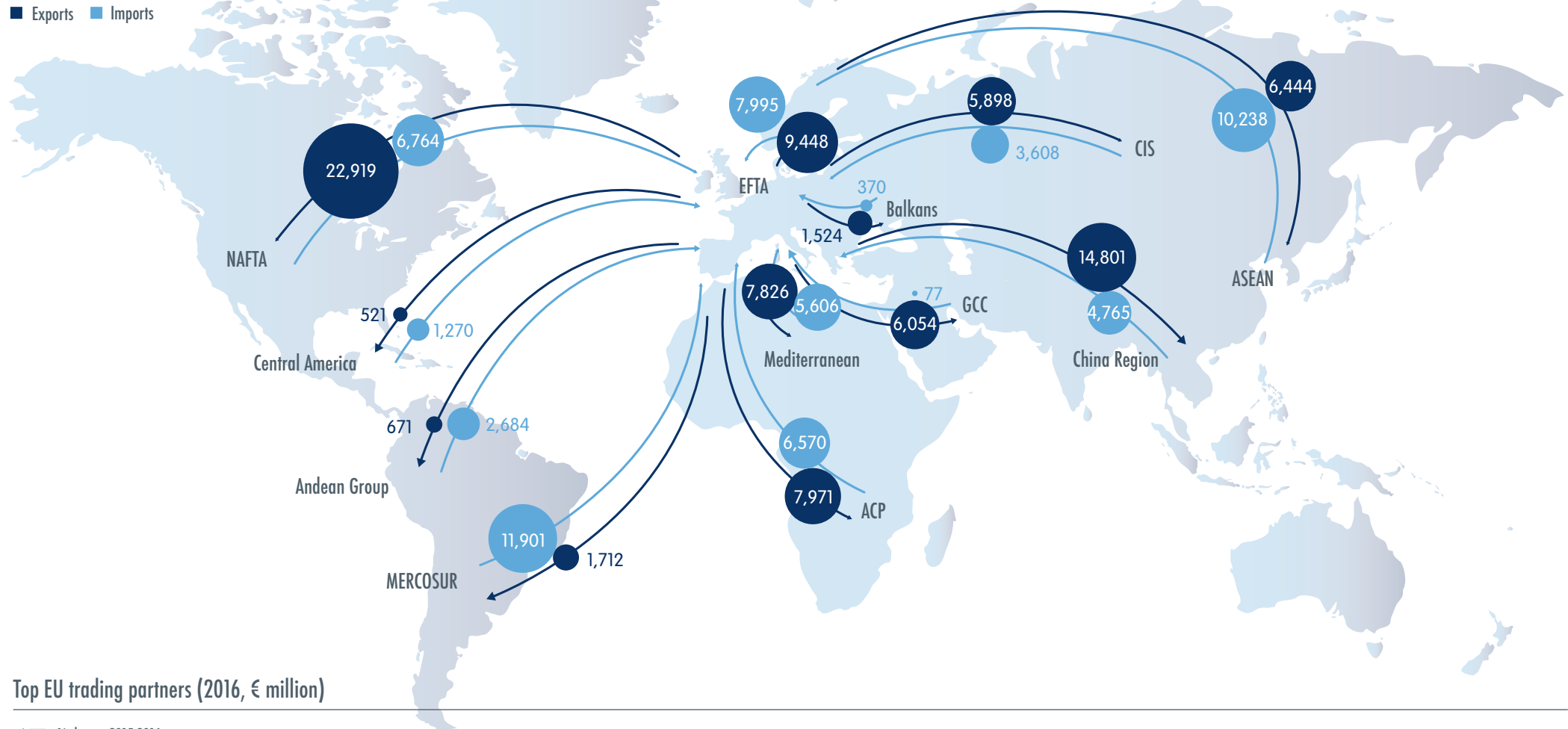
<sup>2</sup> For definition, see page 24





## EU food and drink trade by region (2016, € million)

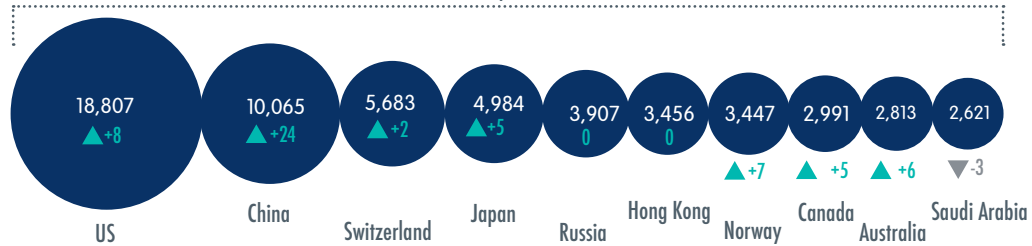
■ Exports ■ Imports



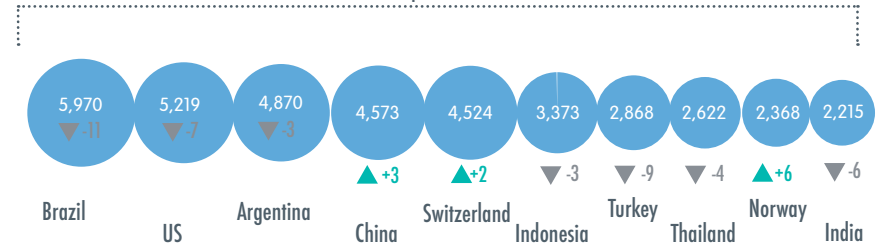
## Top EU trading partners (2016, € million)

▲▼ % change 2015-2016

Exports



Imports



Source: Eurostat (Comext)



## TRADE FIGURES BY SECTOR

External trade success backed by strong EU food and drink sectors

**50%**

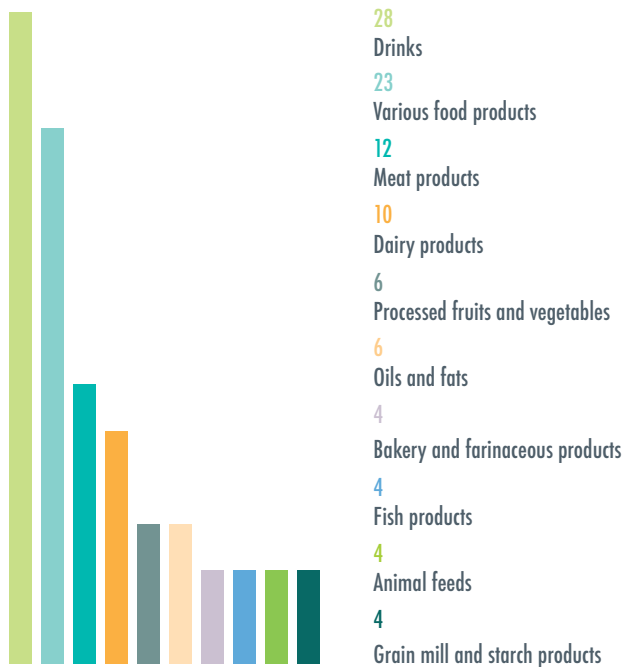
Combined export market share of the drinks, meat and dairy sectors

**60%**

Combined import market share of fish products, oils and fats and processed fruits and vegetables' sectors

- Top 3 best performing exports by sector: meat products +13%, oils and fats +8%, grain mill and starch products +7%.
- Top 3 best performing imports by sector: beer +20%, mineral waters and soft drinks +8%, animal feeds +7%.
- The combined exports of the EU drinks, meat and dairy sectors totalled €51.2 billion in 2016. The "various food products" category which includes goods like chocolate, biscuits, confectionery and food preparations generated €23.3 billion in exports.

Share of EU exports by sector (2016,%)



Source: Eurostat (Comext)

Exports and imports by sector (2016, € million)

	Exports		Imports	
	2016	% change 2015-2016	2016	% change 2015-2016
Drinks	28,675	+1	5,712	+1
of which: spirits	10,201	-1	1,532	+1
wine	10,115	+3	2,641	-5
beer	3,468	+3	497	+20
mineral waters and soft drinks	3,473	+4	997	+8
Various food products	23,320	+4	11,476	+3
of which: chocolate and confectionery	6,287	+4	3,207	+2
processed tea and coffee	2,156	-2	2,200	+1
Meat products	12,728	+13	6,786	-8
Dairy products	9,837	-2	710	0
Processed fruits and vegetables	6,183	+6	9,083	-5
Oils and fats	5,671	+8	15,874	-8
Bakery and farinaceous products	4,270	+2	770	+1
Fish products	3,731	+4	18,473	+5
Animal feeds	3,676	+6	1,103	+7
Grain mill products and starch products	3,644	+7	1,804	-4



# TRADE FIGURES BY PRODUCT

Diversified products and markets

>100

EU food and drink product categories exported worldwide

>180

Export markets

- Spirits and wine are the top EU exports.
- 9 out of the top 10 EU exports registered positive growth in 2016.
- Double digit growth in exports was recorded for pork meat (+32%) compared to 2015.
- While some top EU food and drink imports, such as shellfish and frozen fish increased significantly over the 2015-2016 period, imports of palm oil and wine decreased.

## Top 10 EU food and drink exports and imports by destination and origin (2016)

Exports	€ million	% change 2015-2016	Top 3 destinations
Spirits	10,201	-1	US, Singapore, China
Wine	10,114	+3	US, China, Canada
Infant food and other preparations	5,927	+5	China, Hong Kong, Saudi Arabia
Food preparations	5,475	+7	US, Saudi Arabia, Switzerland
Pork meat fresh, chilled and frozen	5,238	+32	China, Japan, Korea
Chocolate	3,818	+1	US, Russia, Switzerland
Cheese	3,620	+4	US, Switzerland, Japan
Animal feeds, pet food	3,616	+6	Russia, Japan, US
Bread, pastries and biscuits	3,457	+2	US, Switzerland, Norway
Beer	3,416	+3	US, China, Canada

Imports	€ million	% change 2015-2016	Top 3 origins
Fish fillets	5,263	+5	China, Norway, Iceland
Palm oil	4,084	-6	Indonesia, Malaysia, Papua New Guinea
Shellfish	2,709	+20	Morocco, India, China
Wine	2,641	-5	Chile, US, Australia
Prepared and preserved fish	2,634	-4	Ecuador, Morocco, Seychelles
Fruit juices	2,275	-4	Brazil, Costa Rica, Thailand
Frozen fish	2,029	+13	Norway, Russia, US
Prepared and preserved fruits and nuts	1,912	-14	Turkey, Thailand, US
Food preparations	1,782	+4	US, Switzerland, Turkey
Bovine meat fresh, chilled and frozen	1,751	-3	Brazil, Argentina, Uruguay



# EU FOOD AND DRINK MARKET SHARE

Number 1 exporter and number 2 importer of food and drink products in the world

**17.3%**

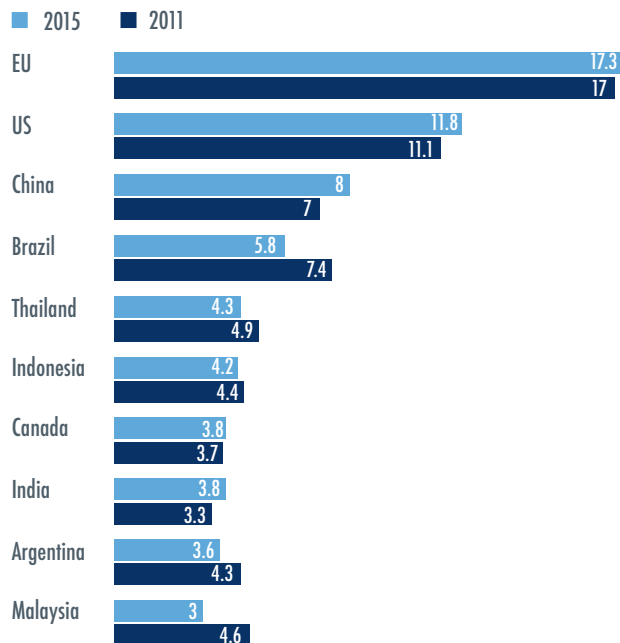
EU share in global food and drink exports

**13.4%**

EU share in global food and drink imports

- In 2015, global exports of food and drinks contracted by 10% compared to the previous year.
- While the EU share in global exports has declined over the past decade, it has stabilised in recent years at around 17%.
- The performance of EU products in selected third countries' imports is mostly positive, with a few exceptions – such as Russia – where EU market share has declined significantly in recent years.

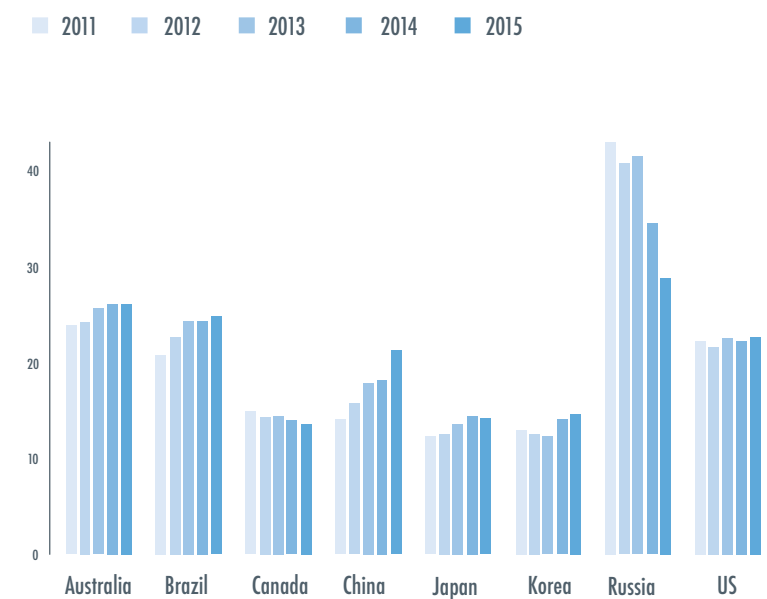
Share of global food and drink exports (%)



Top 10 exporters and importers of food and drink products (2015, \$ billion)



Share of EU products in total food and drink imports of selected countries (2011-2015,%)





# SUSTAINABILITY OF THE FOOD AND DRINK INDUSTRY

Implementing the United Nations Sustainable Development Goals

**9 billion**

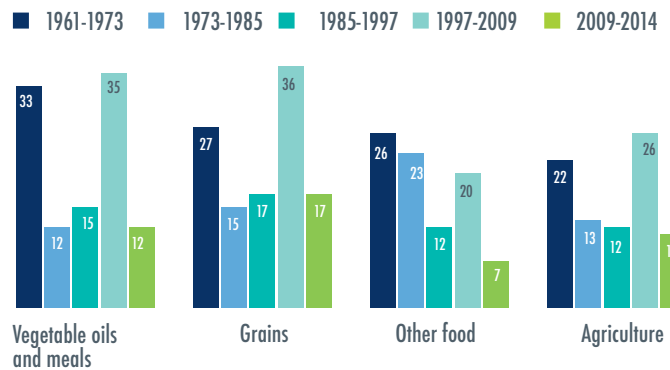
Global population in 2050

**60%**

Increase in global food supplies by 2050

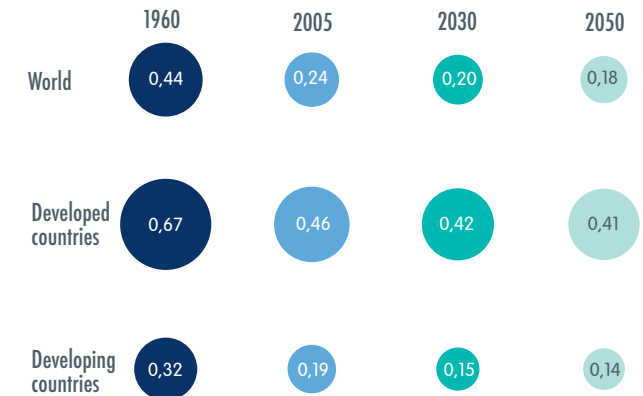
- Price volatility of agricultural commodities was peaking in the 1997-2009 period. Prices were more stable in more recent years. Overall highest volatility is noticeable for grains, followed by vegetable oils.
- In 1960, one hectare of land fed 2 people while in 2050 one hectare of land will be required to feed 5 people.
- Climate change increases the likelihood of more extreme temperatures and unpredictable weather events, which affect food production.
- Natural resources, upon which food production relies, will come under increased pressure in the future to meet a growing demand for food worldwide.

## Volatility of world prices of agricultural commodities (%)



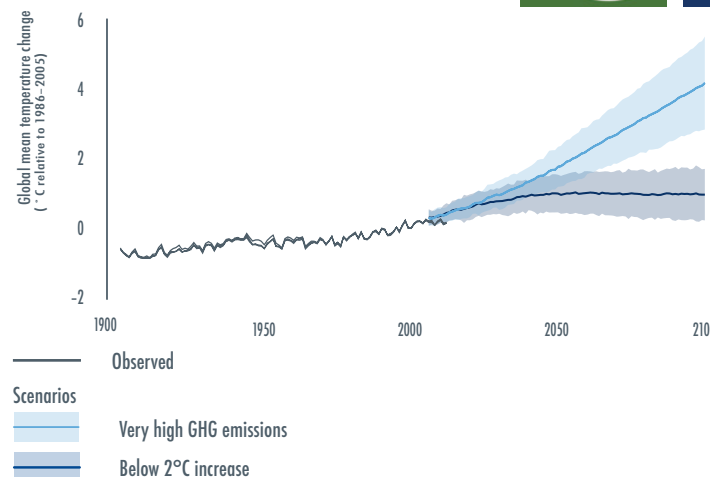
Source: European Commission, DG Agriculture and Rural Development

## Arable land per capita (hectares in use per person)



Source: World agriculture towards 2030/2050: the 2012 revision, FAO

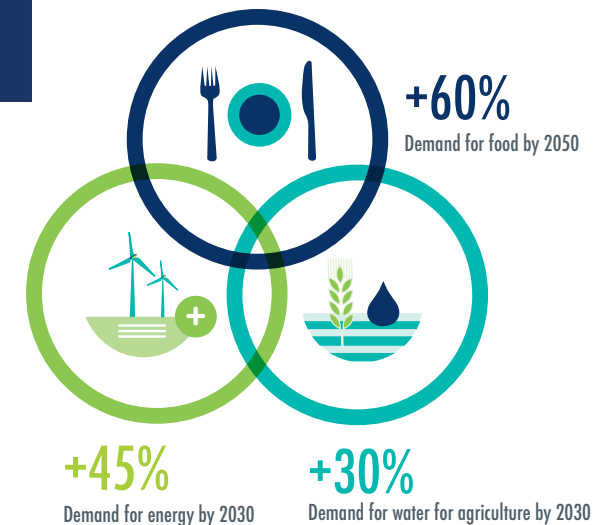
## Past and projected global temperature change



Source: Climate Change 2014: Synthesis Report, IPCC



## Future global challenges (% increase)



Sources: The Future of Food and Farming (2011), FAO



# INNOVATION AND CONSUMER TRENDS

Innovation key to greater consumer choice

## Pleasure

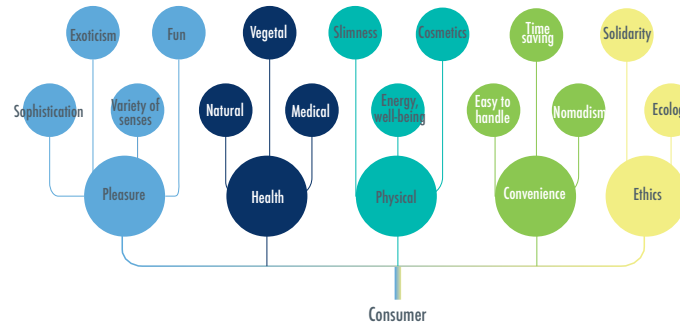
Leading driver of food innovation in Europe

#1

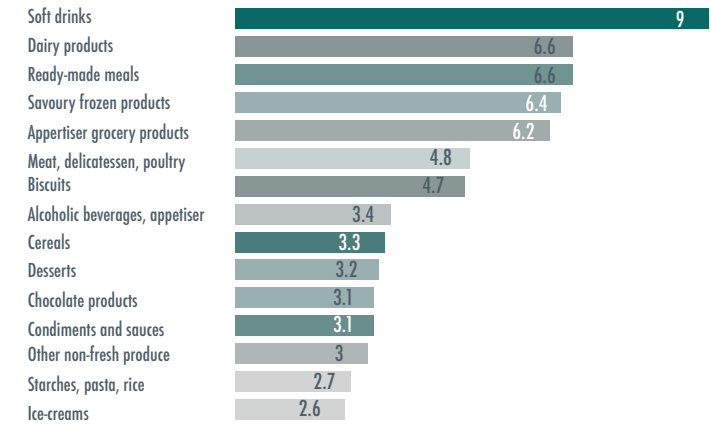
Soft drinks are the world's most innovative food sector

- Drivers of innovation can be divided into 15 trends, grouped along five axes, corresponding to general consumer expectations: pleasure, health, physical, convenience and ethics.
- Pleasure, including variety of senses and sophistication, is the leading driver of food innovation in Europe, with a 54% share in 2016.
- Health accounts for nearly one in four innovations launched. All the health trends (natural, medical and vegetal) gained ground in 2016, making health the most dynamic driver of food innovation in Europe in terms of growth.
- Soft drinks are world's leaders in innovation in 2016, pushing dairy products to second place. Ready-made meals stay at the third place.

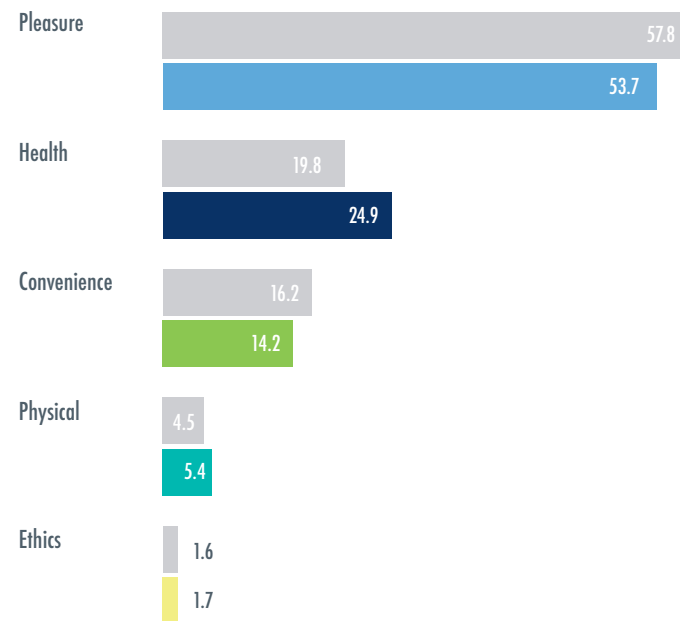
## Food innovation trends



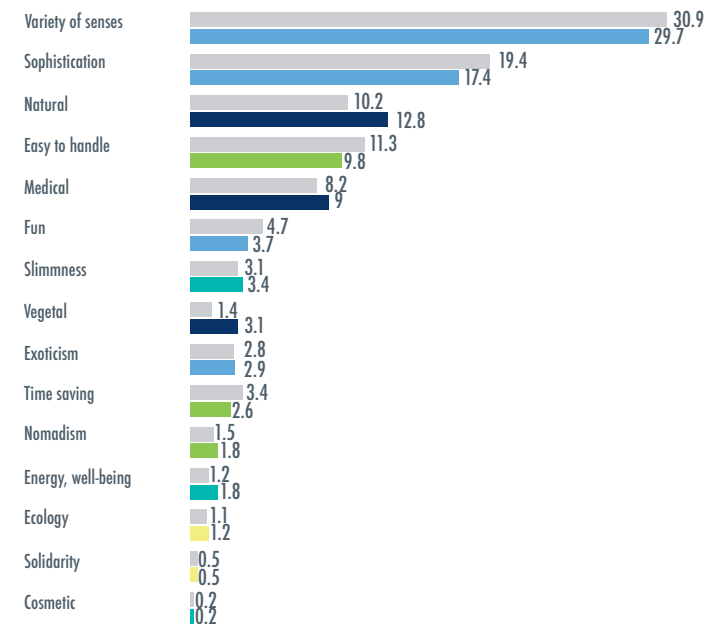
## The world's 15 most innovative food sectors (2016,%)



## Drivers of innovation in Europe (2015-2016,%)



## Food innovation trends in Europe (2015-2016,%)



■ 2015  
■ 2016

Source: XTC World Innovation Panorama 2017  
Copyright © XTC www.xtcworldinnovation.com



## GLOBAL TRENDS IN R&D

### Sustained levels of R&D investment

**0.20%**

EU<sup>1</sup> R&D private investment intensity

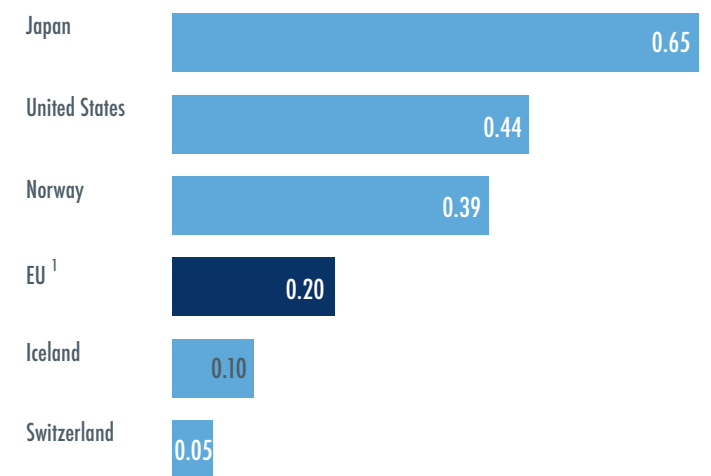
- Out of the world's top 2,000 companies for R&D private investment, 55 operate in the food and drink industry. Together, these companies invested €8.8 billion in R&D in 2015/16, €2.8 billion out of which were invested by 16 food and drink companies based in the EU.
- These 16 EU companies are located in the Netherlands and the United Kingdom (4/country), France and Germany (2/country), Belgium, Denmark, Greece and Ireland (1/country).
- The EU<sup>1</sup> food and drink industry<sup>2</sup> has a lower R&D investment intensity compared to several food and drink industries worldwide.
- Across EU Member States, R&D investment intensity varies from 0.61% to 0.01%.

R&D private investment of food and drink companies listed in the world's top 2,000 companies by R&D (2015/2016)

	R&D private investment (€ billion)	R&D private investment (% of total)	Number of companies
EU	2.8	31.2	16
US	2.3	25.5	15
Switzerland	1.8	20.5	2
Japan	1.7	18.9	16
New Zealand	0.1	1.3	1
China	0.1	1.0	2
Others	0.1	1.6	3
Total	8.8	100	55

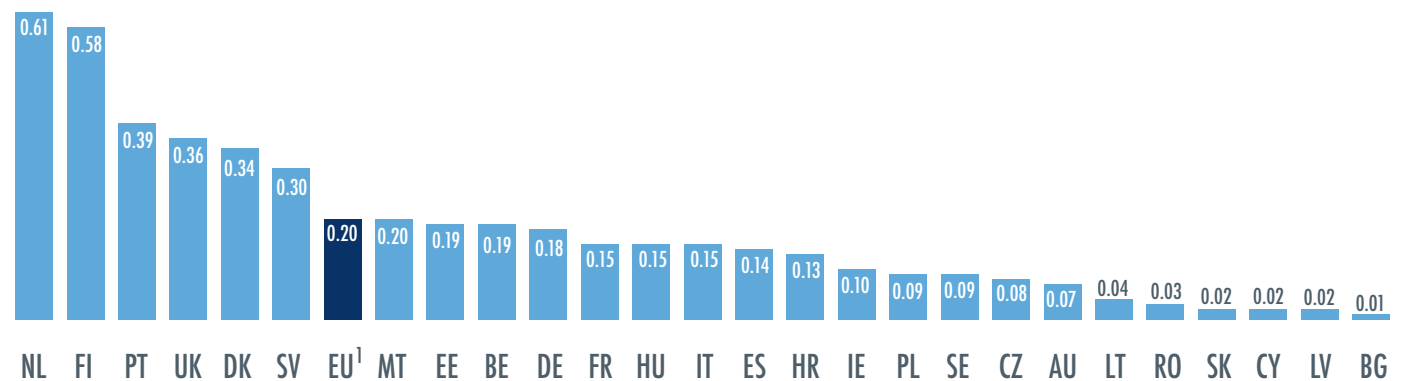
Source: The 2016 EU Industrial R&D Investment Scoreboard, JRC

R&D private investment of the food and drink<sup>2</sup> industry (average 2012-2014,% of output)



Sources: Eurostat (BERD and National Accounts); OECD (STAN)

R&D private investment of the food and drink<sup>2</sup> industry by Member State (average 2012-2014,% of output)



Source: Eurostat (BERD and National Accounts)

<sup>1</sup> Based on available data

<sup>2</sup> Including tobacco



# KEY FOOD AND DRINK COMPANIES



Ranking of agri-food companies by global agri-food sales<sup>1</sup>

Name	Headquarters	Sales (€ billion) <sup>2</sup>	Operations in the EU <sup>3</sup>	Main sectors
Cargill	US	100.5	•	multi-product
Nestlé	CH	82.0	•	multi-product
PepsiCo, Inc.	US	56.8	•	beverages, snacks
JBS	BR	43.7	•	meat, dairy
AB InBev	BE	41.2	•	beer
Bunge	US	38.2	•	multi-product
The Coca-Cola Company	US	37.8	•	beverages
Tyson Foods	US	33.3	•	meat
Mars	US	31.6	•	prepared foods, confectionery
Archer Daniels Midland Company	US	30.8	•	cereal processing
KraftHeinz	US	23.9	•	multi-product
Mondélez International	US	23.4	•	confectionery, snacks, dairy
Unilever	UK/NL	22.5	•	multi-product
CHS	US	22.5	•	multi-product
Danone	FR	21.9	•	dairy, water, baby & medical nutrition
Heineken	NL	20.8	•	beer
Suntory	JP	19.9	•	foods and non-alcoholic beverages
Femsa	MX	19.5	•	multi-product
WH Group	CN	19.5	•	meat
Lactalis	FR	17.0	•	dairy
General Mills	US	14.4	•	prepared foods
Kirin Holdings	JP	14.2	•	alcoholic beverages
Asahi Group	JP	14.1	•	beer, alcoholic beverages
Diageo	UK	14.1	•	beer, alcoholic beverages
Grupo Bimbo	MX	12.3	•	bakery





DuPont	US	11.6	•	multi-product
FrieslandCampina	NL	11.0	•	dairy
Kellogg Company	US	10.9	•	prepared foods, snacks, cereals
Meiji Holdings	JP	10.4	•	yoghurt, chocolate, pharmaceuticals
Fonterra	NZ	10.4	•	dairy
Ferrero	IT	10.3	•	confectionery
NH Nipponham	JP	10.1	•	meat and processed foods
Arla Foods	DK	9.6	•	dairy
Pernod Ricard	FR	9.0	•	alcoholic beverages
BRF	BR	8.7	•	meat
Hormel Foods	US	8.6	•	prepared foods
Carlsberg	DK	8.4	•	beer
Yili Group	CN	8.3	•	dairy
Associated British Foods	UK	8.2	•	sugar, starch, prepared foods
Danish Crown	DK	8.1	•	meat
Yamakazi Baking	JP	8.0	•	bread, confectionery, snacks
DSM	NL	7.9	•	multi-product
Campbell's	US	7.2	•	soups, sauces, snacks, beverages
ConAgra Brands	US	7.2	•	prepared foods
Dean Foods Company	US	7.0	•	dairy
Hershey Company	US	6.7	•	chocolate, confectionery
Kerry Group	IE	6.1	•	multi-product
Barry Callebaut	CH	6.1	•	chocolate, cocoa
Südzucker	DE	5.8	•	sugar, multi-product
Oetker Group	DE	5.5	•	multi-product

<sup>1</sup> Based on the most recent complete fiscal year

<sup>2</sup> Figures have been converted to Euro with ECB bilateral annual exchange rates series, but only figures in the original currency are relevant

<sup>3</sup> Operations in the EU refers to the presence of processing plants in one or more Member States



# GLOSSARY

## Abbreviation of world regions

### ACP

Africa, Caribbean and Pacific group of countries

### Andean Group

Bolivia, Colombia, Ecuador, and Peru

### ASEAN (Association of Southeast Asian Nations)

Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam

### Balkans

Albania, Bosnia-Herzegovina, Kosovo, Former Yugoslav Republic of Macedonia, Montenegro and Serbia

### Central America

Panama, Guatemala, Costa Rica, El Salvador, Honduras and Nicaragua

### China region

China, Hong Kong, Macao and Taiwan

### CIS (Commonwealth of Independent States)

Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan

### EFTA (European Free Trade Area)

Iceland, Liechtenstein, Norway and Switzerland

### EU

EU refers to EU28, unless otherwise specified

### GCC (Gulf Cooperation Council)

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates

### Mediterranean region

Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Tunisia, Syria, Occupied Palestinian Territory

### Mercosur

Argentina, Brazil, Paraguay, Uruguay and Venezuela

### NAFTA (North American Free Trade Agreement)

Canada, Mexico and the US

### Gross value added (GVA)

The gross value added is the value of goods and services produced by a sector minus the cost of the raw materials and other inputs used to produce them. GVA measures the contribution to the economy of each individual sector.

### Labour productivity

Labour productivity provides a measure of the efficiency of the workforce to produce goods and services. Labour productivity is calculated as the gross value added (GVA) divided by persons employed.

### Small and medium-sized enterprises (SMEs)

For Eurostat's Structural Business Statistics database: micro = less than 10; small = 10 to 49; medium-sized = 50 to 249; large = more than 250 employees. The SBS size-class data are solely based on the definition relating to the number of employees and not to the turnover level.

### Value added

The value added at factor costs is the gross income from operating activities after adjusting for operating subsidies and indirect taxes.



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