

# Agrifood

## Sector Report

2019

A key sector for the economy  
and for society

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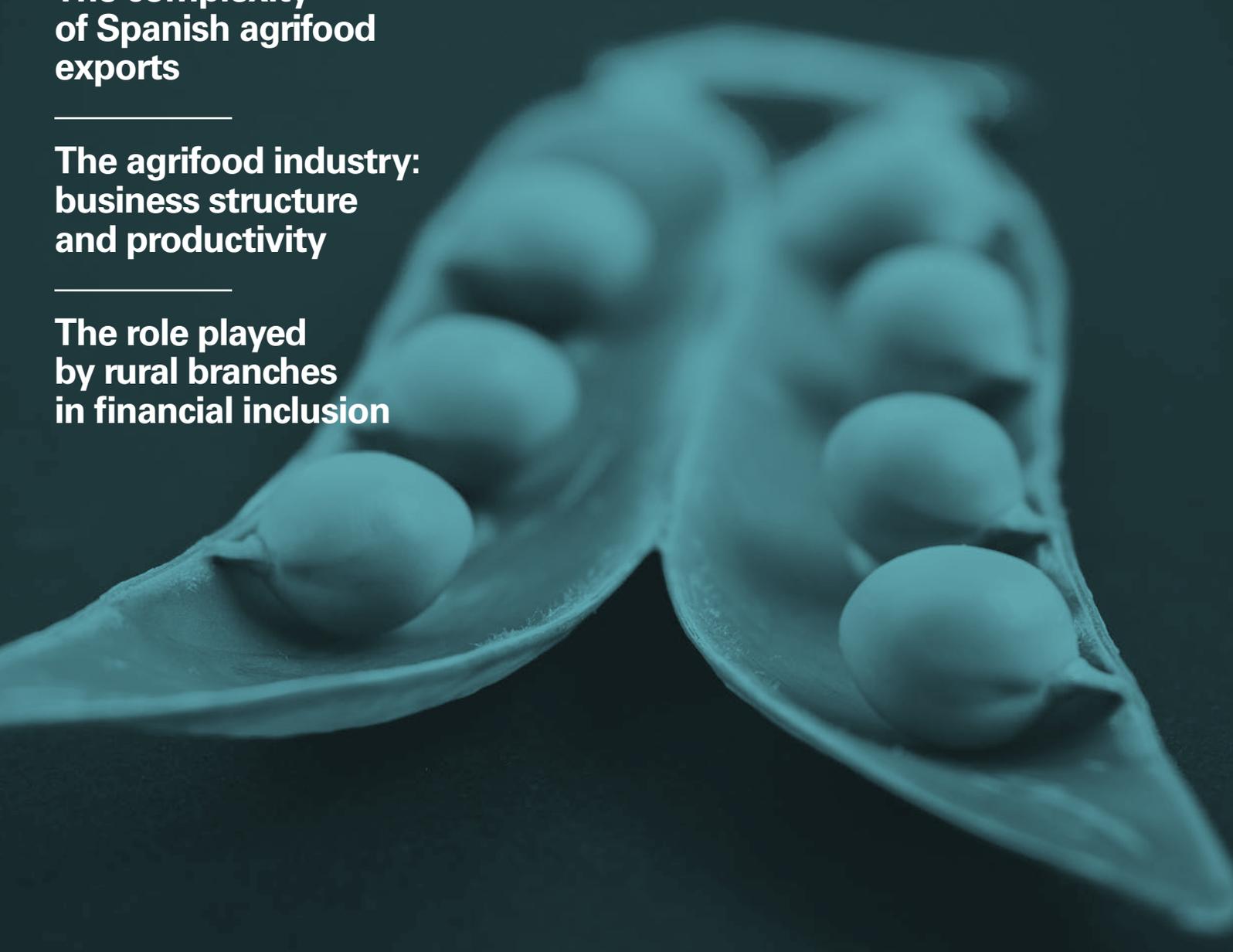
The complexity  
of Spanish agrifood  
exports

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The agrifood industry:  
business structure  
and productivity

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The role played  
by rural branches  
in financial inclusion





## SECTOR REPORT Agrifood 2019

The *Sector Report* is a publication produced by CaixaBank Research

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# Summary

## 2019



**01 SITUATION AND OUTLOOK**  
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«Of all the occupations by which gain is secured, none is better than agriculture, none more profitable, none more delightful, none more becoming to a free man»

CICERO



# Agrifood

## Spain's agrifood sector

Contributes 5.8% of the whole Spanish economy's GVA, 11% if we include all the activities in the food chain\*



### PRIMARY SECTOR



Contributes **3%** of the whole economy's GVA



Made up of **945,000** agricultural businesses



The rural milieu occupies **84.2%** of the land in Spain, although it only has **16.5%** of the population

### AGRIFOOD INDUSTRY

**31,000** companies



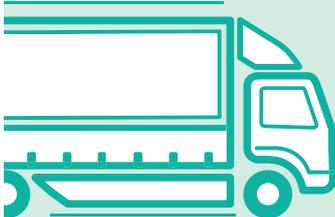
The **FIRST INDUSTRIAL BRANCH** in terms of value added and employment: Contributes 20.3% of GVA and 18.6% of employment in the manufacturing industry

Dominated by **SMALL FIRMS**: 96.5% have fewer than 50 employees



**STORAGE AND TRANSPORTATION**

### TRADE AND DISTRIBUTION



**RETAIL CONSUMPTION**



€88 billion spent on food in the home



**AWAY FROM HOME CONSUMPTION**



35% of total expenditure on food takes place in restaurants and canteens



**EXPORTS**  
€47.6 billion  
in agrifood exports

### THE COMPLEXITY OF EXPORTS

A key concept in measuring the knowledge intensity required to produce exported goods:

- Asturias and Aragon produce the most complex agrifood goods.
- Spain exports more complex agrifood products to more distant locations.

Notes: (\*) The agrifood sector is made up of the primary sector and the food, beverages and tobacco industry. The agrifood system also includes the rest of the activities in the food chain. Data from 2018 except the contribution of the agrifood system (data from 2016) and GVA of the agrifood industry (data from 2017). Source: CaixaBank Research, based on data from Eurostat, Spanish Agriculture Ministry and the National Statistics Institute.

## Situation and outlook

# A key sector for the economy and for society

The agrifood sector contributes a lot of value to Spain's economy, accounting for 5.8% of its GDP, 11% when all the activities in the food chain are included. It is also notable for its great export potential and a resilience that has helped it to weather the ups and downs of the economy over the years. Consequently, although the main markets for Spanish agrifood exports have slowed as a result of increased trade tensions and uncertainty over Brexit, available activity indicators show that, for the time being, the industry is withstanding the situation reasonably well.

## Contribution of the agrifood sector to the economy

**The agrifood sector is of vital importance to the Spanish economy.** Specifically, it contributes 5.8% of the gross value added (GVA) of the economy, compared to 5.3% in 2007, showing how the sector has grown in the past decade compared with the Spanish economy as a whole. It is made up of around 945,000 agricultural businesses<sup>1</sup> which contribute 3.0% of the total GVA, and more than 31,000 companies dedicated to food processing,<sup>2</sup> contributing 2.9% of the GVA. The relative weight of the agrifood sector in the Spanish economy as a whole is significantly greater than its share in the EU (3.8%),<sup>3</sup> a figure that reflects the greater preponderance of agrifood production in Spain. In fact, Spain's agrifood sector occupies a key position among European countries: it is the third country in terms of its contribution to the EU's agrifood sector with a 11.9% share of GVA,<sup>4</sup> only behind France (15.6%) and Germany (13.9%).

① Survey by Spain's National Statistics Institute on the structure of agricultural businesses (2016).

② Companies in the agrifood industry are classified under codes 10, 11 and 12, according to the National Classification of Economic Activities (CNAE), produced by the National Statistics Institute (2018). For more details, see the article «The agrifood industry: business structure and productivity» in this Report.

③ Eurostat data (national accounts) corresponding to 2017, latest year available.

④ A much higher contribution than the share of the Spanish economy in the EU (7.7%).

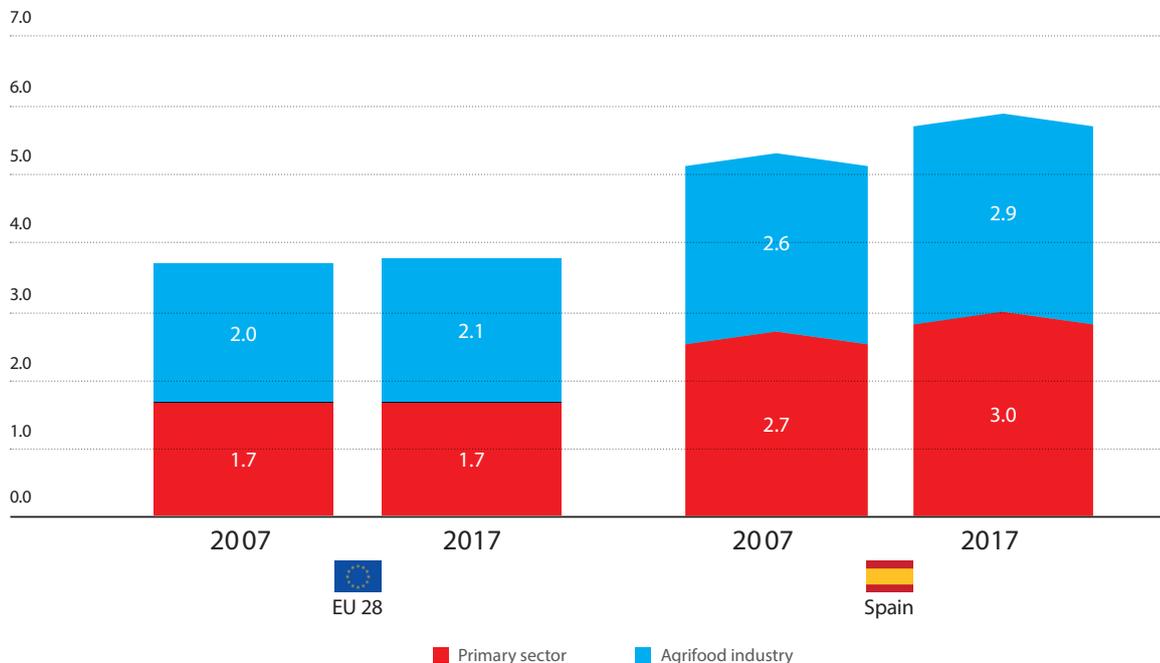
**The agrifood sector's contribution to the Spanish economy as a whole is 5.8%, above the average for the European Union (3.8%)**





## Relative weight of the agrifood sector in the economy as a whole

% of the GVA of the whole economy



Source: CaixaBank Research, based on data from Eurostat.

If, in addition to the agrifood sector, we take into account all the activities carried out throughout the life cycle of food; i.e. the added value of each of the sectors that make up the **Spanish agrifood system, its contribution to the Spanish economy is around 11% of GDP.**<sup>5</sup> These sectors include those «upstream» of the food chain, supplying the primary sector with inputs and services such as fertilisers and seeds; and «downstream» sectors, which include services such as transport, distribution and sale to the final consumer (retail channel or out-of-home consumption). In a broader context, it is important to point out that the relevance of the sector goes beyond its own economic activity, since the rural milieu occupies 84.2% of the whole area of Spain and its activity has important implications for other areas such as environmental sustainability, territorial balance and rural development. In this respect, it is vital to have a resilient, competitive agrifood sector that can successfully tackle the challenges in all these areas.

<sup>5</sup> From 2011 to 2016, the contribution made by the agrifood system went from 9% of GDP to 10.6%. «Contribución del Sistema Agroalimentario a la Economía Española», Ministry of Agriculture, Fishing and Food, 2018.

### Recent performance of Spain's agrifood sector

We will now examine the state of the agrifood sector, made up of the primary sector and the agrifood industry, based on the main indicators for the industry from the point of view of supply (value added and production), demand (expenditure on food and beverages), labour market, credit flow and foreign sector.

The trend in the agrifood sector in the past few years has been very positive, although the latest data, corresponding to the first half of 2019, show a substantial slowdown compared with 2018, sharper in the primary sector than in the industrial branch. Regarding the primary sector, real GVA fell by 4.6% year-on-year in Q2 2019, a figure that should not alarm us given the high volatility of the historical series due to the very nature of the sector and its dependence on weather conditions. If we look at a longer timeframe, we can see average annual growth of 2.5% between 2015 and 2018, a similar increase to the 2.8% growth posted for the economy as a whole. Regarding the agrifood

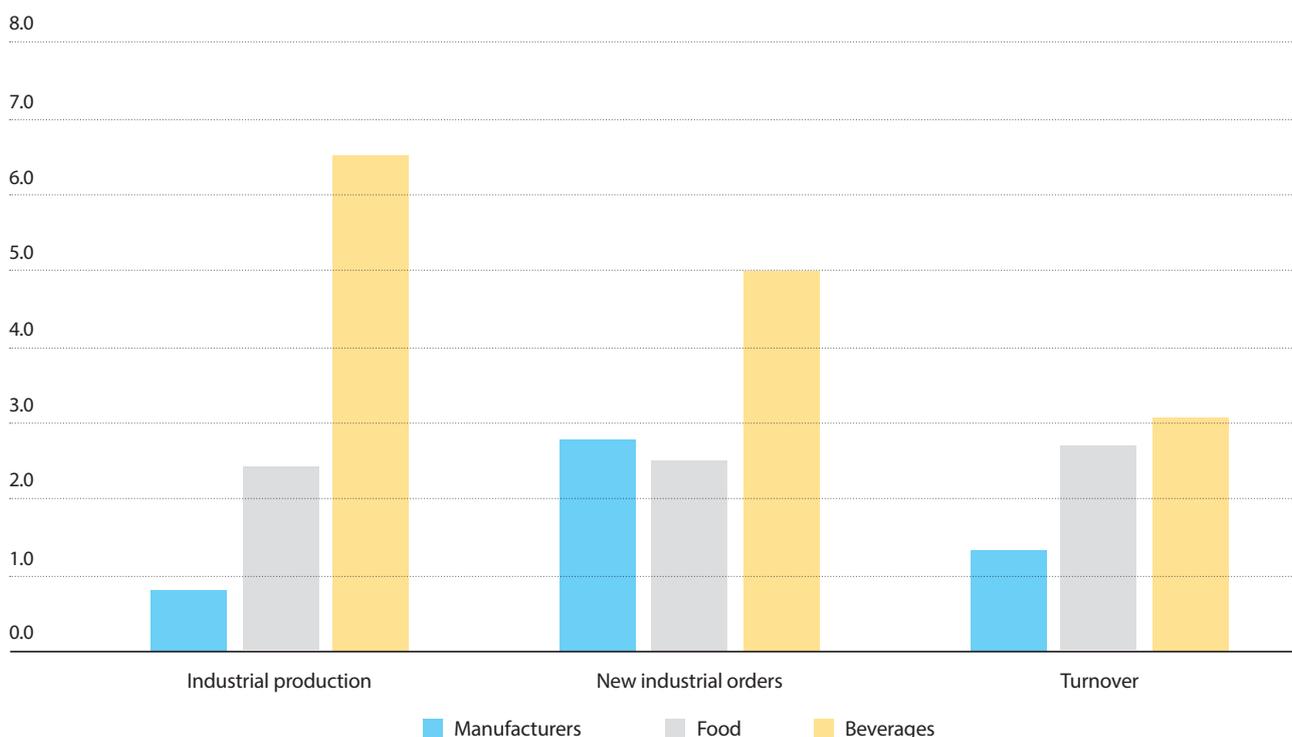
industry, GVA rose by a substantial 4.7% per year on average between 2015 and 2017, although the latest data are not available, so we must use other supply indicators published more frequently to analyse the state of the sector.

## The food and beverages industry is withstanding the slowdown seen in Spain's manufacturing sector as it is less closely linked to the economic cycle

Among these indicators, **industrial agrifood production continues to post good growth rates**, up by 2.4% and 6.5% in the food and in the beverages sectors, respectively, between January and July 2019. These figures are particularly positive when compared with manufacturing activity as a whole, which rose by 0.8% in the same period due to the slowdown that threatens the sector as a whole in the face of increased uncertainty regarding the future of international trade policy and a slowdown in world trade flows. A similar pattern can be seen in the industry's order intake index and turnover index, as shown in the enclosed chart.

### Agrifood sector indicators are withstanding the slowdown in manufacturing

Variation (%)



**Note:** Variation between January and July 2019 compared with the same period one year previously.

**Source:** CaixaBank Research, based on data from the National Statistics Institute.



For its part, the primary sector's labour market is also showing a poorer performance. Specifically, the number of people registered with Social Security **rose by 0.1%** year-on-year in September. On the other hand, **worker registration in the agrifood industry is withstanding the slowdown**: this rose by 2.1% year-on-year in September, just below the figure of 2.4% for the economy as a whole but higher than the manufacturing sector's 1.3%.

**The agrifood industry has generated 1 out of every 3 industrial jobs in the past year and totals 519,600 employees, accounting for 2.6% of all employment in Q2 2019**

The agrifood sector, investment-intensive and with significant borrowing requirements, is being **supported by highly favourable financing conditions**. The latest data, corresponding to Q2 2019, show that the outstanding balance of credit has grown by 4.1% in the primary sector and by 4.0% in the agrifood industry, figures that contrast with the decline still being recorded for all production activities as a whole. It is also important to note that the NPL ratio has been falling since 2013, now at 5.9% for the primary sector and 4.2% for the industrial branch.

It is also revealing to analyse the sector's performance based on demand indicators. On the one hand, consumers acquire products in commercial establishments to consume them at home and, on the other, go to catering establishments (commercial or collective, such as college, hospital or company canteens). In 2018, expenditure on food and beverages at home totalled over EUR 88 billion, 15.9% of all household spending. Expenditure away from home, on the other hand, which accounts for around 35% of all expenditure on food, totalled EUR 49 billion.<sup>6</sup> **The latest demand indicators suggest a slight weakness in food consumption:** the retail sale index for food establishments grew by a moderate 1.7% year-on-year in August 2019, lower than the general index at 3.3%. Over the coming quarters, in which we predict a macroeconomic slowdown, the rate of growth in the demand for food is likely to remain contained.

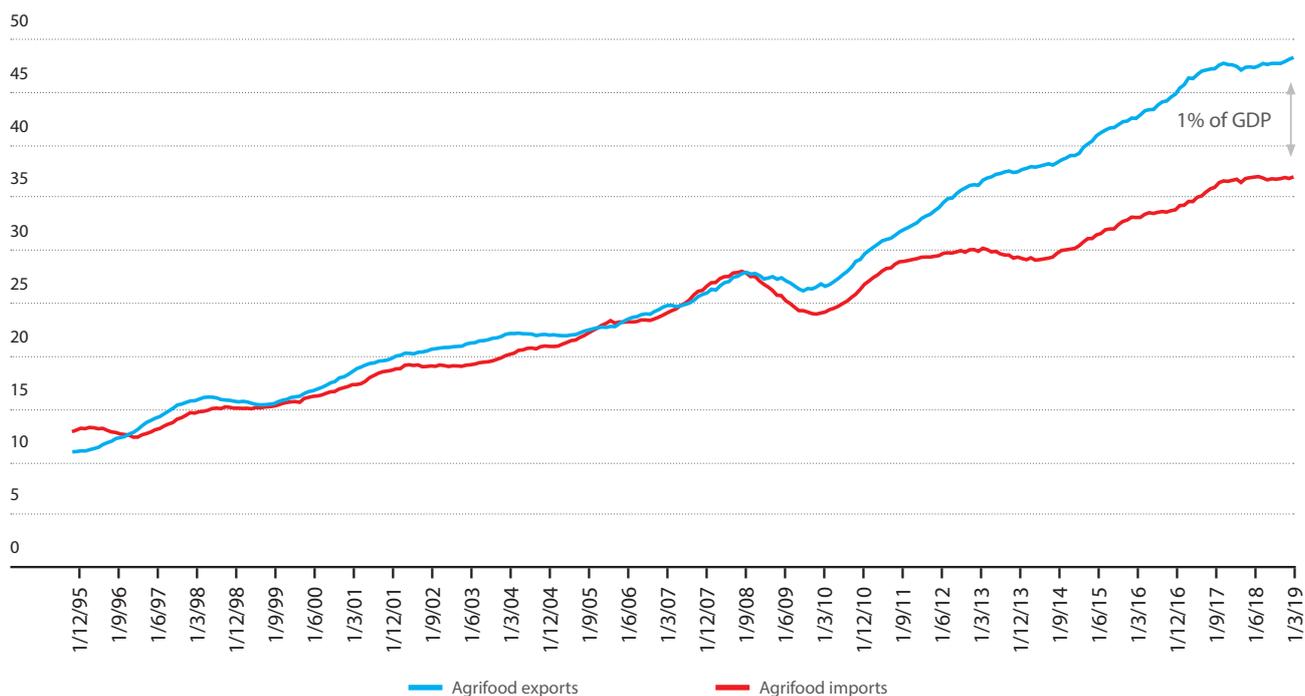
<sup>6</sup> Survey of household budgets by the National Statistics Institute.

### A key industry that looks increasingly towards other countries

One crucial factor in evaluating the trends in the agrifood sector is international trade. In fact, the significant growth in agrifood exports over the past 20 years has placed Spain in a strong position internationally: it ranks eighth in the world among food product exporters and fourth in the European Union. With regard to 2019, **agrifood exports still look quite strong**, up by 3.8% year-on-year between January and June compared with 1.7% growth for all exports of goods. Agrifood imports, on the other hand, have fallen by 2.2% over the same period, widening **the agrifood trade surplus even further, which now represents 1% of GDP**.

## Spain's agrifood trade surplus is increasing

Billion euros



Source: CaixaBank Research, based on data from DataComex.



## Agrifood exports total almost EUR 50 billion (4% of GDP) and account for 16.9% of all goods exported

The product groups<sup>7</sup> that contributed most to the growth in agrifood exports in the first six months of 2019 were legumes and vegetables (10.1% year-on-year) and animal meat (12.9%), followed by products derived from cereals, bakers' wares, pastry and biscuits (8.7%), and cereals (39.5%), in the latter case due to the strong growth in wheat. On the other hand, exports of citrus fruits, olive oil and wine have fallen compared with the same period the previous year, although they are all in the top 10 exported agrifood products.<sup>8</sup>

<sup>7</sup> Product groups are defined based on the 2-digit TARIC code and the products are identified using the 4-digit level of detail.

<sup>8</sup> For a detailed analysis of the agrifood products exported, see the article «The complexity of Spanish agrifood exports» in this Report.

### Which group of agrifood products does Spain export the most?

What is the trend for the first half of 2019?

TARIC (2 digits)	Product group	Exports in 2018 (million euros)	Share* in 2018	Variation January-June 2019
08	EDIBLE FRUIT & NUTS; PEEL OF CITRUS FRUIT OR MELONS	8,427	19.1%	▲ 1.4%
07	EDIBLE VEGETABLES & CERTAIN ROOTS & TUBERS	6,067	14.7%	▲ 10.1%
02	MEAT & EDIBLE MEAT OFFAL	5,587	11.4%	▲ 12.9%
15	ANIMAL OR VEGETABLE FATS & OILS	4,337	9.0%	▼ -3.7%
22	BEVERAGES. SPIRITS & VINEGAR	4,418	8.7%	▼ -2.3%
03	FISH. CRUSTACEANS. MOLLUSCS & OTHER AQUATIC INVERTEBRATES	3,178	6.1%	▼ -4.1%
20	PREPARATIONS OF VEGETABLES. FRUIT. NUTS OR OTHER PARTS OF PLANTS	2,945	6.0%	▲ 1.5%
19	PREPARATIONS OF CEREALS. FLOUR. STARCH OR MILK; PASTRYCOOKS' PRODUCTS	1,678	3.3%	▲ 8.7%
21	MISCELLANEOUS EDIBLE PREPARATIONS	1,591	3.3%	▲ 3.5%
16	PREPARATIONS OF MEAT. FISH OR CRUSTACEANS. MOLLUSCS OR OTHER AQUATIC INVERTEBRATES	1,593	3.2%	▲ 2.9%
04	DAIRY PRODUCE; BIRDS' EGGS; NATURAL HONEY	1,405	2.9%	▲ 2.7%
23	RESIDUES & WASTE FROM THE FOOD INDUSTRIES; PREPARED ANIMAL FODDER	1,038	2.1%	▲ 4.8%
01	LIVE ANIMALS	703	1.5%	▼ -9.9%
12	OIL SEEDS & OLEAGINOUS FRUITS; MISC. GRAINS. SEEDS & FRUIT; INDUSTRIAL OR MEDICINAL PLANTS; STRAW & FODDER	659	1.2%	▼ -4.2%
17	SUGARS AND SUGAR CONFECTIONERY	594	1.2%	▲ 6.8%
18	COCOA & COCOA PREPARATIONS	611	1.1%	▲ 5.3%
09	COFFEE. TEA. MATÉ AND SPICES	507	1.1%	▲ 0.2%
06	LIVE TREES & OTHER PLANTS; BULBS. ROOTS & THE LIKE; CUT FLOWERS AND ORNAMENTAL FOLIAGE	389	1.0%	▲ 4.6%
13	LAC; GUMS. RESINS & OTHER VEGETABLE SAPS & EXTRACTS	384	0.8%	▲ 24.0%
10	CEREALS	407	0.7%	▲ 39.5%
05	PRODUCTS OF ANIMAL ORIGIN NOT ELSEWHERE SPECIFIED OR INCLUDED	313	0.7%	▼ -0.1%
11	PRODUCTS OF THE MILLING INDUSTRY; MALT; STARCHES; INULIN; WHEAT GLUTEN	248	0.5%	▲ 7.7%
24	TOBACCO & MANUFACTURED TOBACCO SUBSTITUTES	229	0.5%	▲ 12.0%
14	VEGETABLE PLAITING MATERIALS	10	0.0%	▼ -1.5%
<b>TOTAL AGRIFOOD EXPORTS</b>		<b>47,601</b>	<b>100%</b>	<b>3.8%</b>

**Note:** (\*) The share is the value of agrifood exports from each product group out of the total Spanish agrifood exports. Variation between January and June 2019, compared with the same period one year previously.

**Source:** CaixaBank Research, based on data from DataComex.

## Top 10 agrifood products exported

TARIC	Product	Exports in 2018 (million euros)	Share* in 2018	Variation January-June 2019
0203	 MEAT OF SWINE, FRESH, CHILLED OR FROZEN	3,414	7.2%	▲ 14.0%
0805	 CITRUS FRUIT, FRESH OR DRIED	3,093	6.5%	▼ -3.8%
1509	 OLIVE OIL & ITS FRACTIONS, WHETHER OR NOT REFINED, BUT NOT CHEMICALLY MODIFIED	3,027	6.4%	▼ -1.0%
2204	 WINE OF FRESH GRAPES, INCLUDING FORTIFIED WINES	2,948	6.2%	▼ -9.2%
0709	 OTHER VEGETABLES, FRESH OR CHILLED	1,872	4.0%	▲ 12.9%
0810	 OTHER FRUIT, FRESH	1,606	3.4%	▲ 7.1%
0809	 APRICOTS, CHERRIES, PEACHES (INCLUDING NECTARINES), PLUMS & SLOES, FRESH	1,087	2.3%	▲ 1.4%
1905	 BREAD, PASTRY, CAKES, BISCUITS & OTHER BAKERS' WARES	953	2.0%	▲ 10.4%
2005	 OTHER VEGETABLES PREPARED OR PRESERVED OTHERWISE THAN BY VINEGAR OR ACETIC ACID, NOT FROZEN	938	2.0%	▲ 3.6%
0702	 TOMATOES, FRESH OR CHILLED	927	2.0%	▼ -1.2%

**Note:** (\*) The share is the value of agrifood exports of each product out of the total Spanish agrifood exports. Variation between January and June 2019, compared with the same period one year previously.

**Source:** CaixaBank Research, based on data from DataComex.

Spain's main trading partner is the EU, the destination for 74% of its agrifood products in 2018.<sup>9</sup> Across countries, the main member states are France (16.2%), Germany (11.9%), Italy (10.4%), Portugal (9.5%) and the United Kingdom (8.5%).<sup>10</sup> Growth in agrifood exports to these markets was not very strong in the first six months of 2019, partly due to them being mature markets but also due to situational factors related to the slowdown in the European economies' growth rate and the uncertainty caused by Brexit. These factors will continue to affect the trend in agrifood exports to European

<sup>9</sup> The percentage of agrifood products exported to the EU has decreased considerably in the past decade, from 81% in 2008 to 74% in 2018, although this percentage is still higher than the 65% average for all exports.

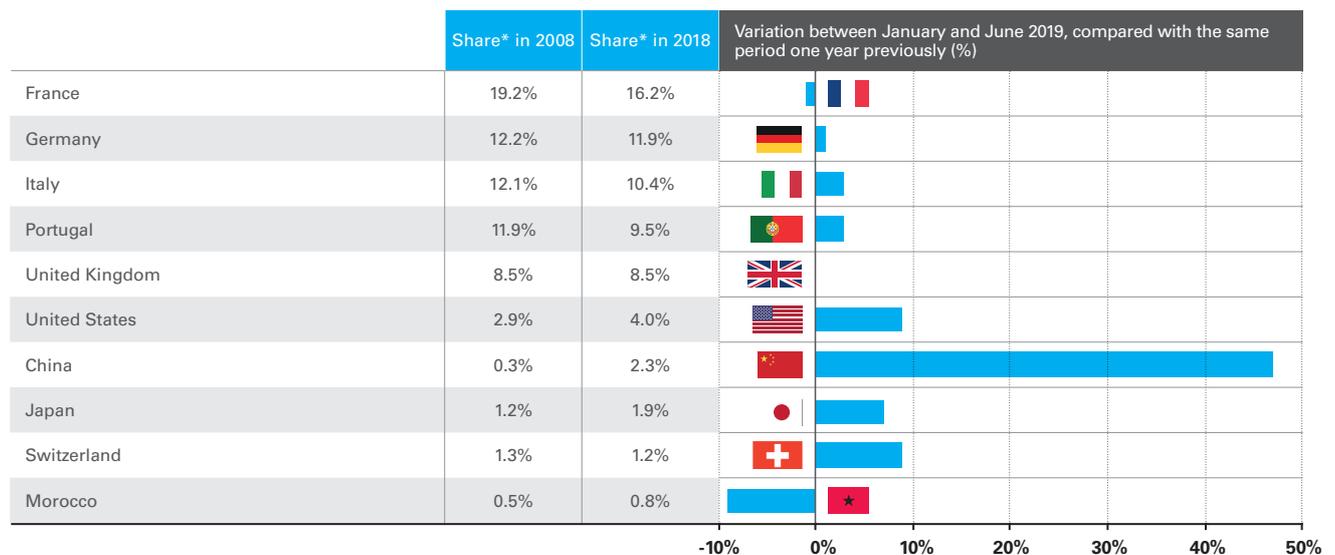
<sup>10</sup> Fruit and vegetables account for approximately 28% of Spain's agrifood exports to the United Kingdom, followed by wine and must (8%), olive oil (5%) and pork (3%). For more details, see the bilateral report on external agrifood trade with the United Kingdom published by the Ministry of Agriculture, (2017), available at: [https://www.mapa.gob.es/es/ministerio/servicios/analisis-y-prospecti-va/Comercio\\_Exterior\\_Union\\_Europea.aspx](https://www.mapa.gob.es/es/ministerio/servicios/analisis-y-prospecti-va/Comercio_Exterior_Union_Europea.aspx)





countries over the coming quarters. However, one factor which could help to cushion the European slowdown is the increasing importance of other destinations outside the EU, especially the US, Japan, Switzerland and Morocco and Asian countries in general, particularly China, whose share has gone from 0.3% in 2008 to 3.1% in 2018.

## Trend in Spanish agrifood exports to the main destination markets



**Note:** (\*) The share is the value of agrifood exports from each product group out of the total Spanish agrifood exports.  
**Source:** CaixaBank Research, based on data from DataComex.



## Foreign sector

# The complexity of Spanish agrifood exports

Spain's agrifood sector is typically focused on exports: The range of agrifood products exported by Spain is getting wider and covering more destinations. However, another dimension should also be taken into account: export complexity, a concept that measures the knowledge intensity required to produce exported goods. Because not only the volume of exports is important but also what is exported.

Agrifood exports are undeniably a fundamental pillar of Spain's exports. Growth over the past decade has been 5.5% year-on-year on average (exceeding the 4.2% growth of all exported goods), totalling EUR 476 billion in 2018 and accounting for 16.7% of all exported goods (compared with 14.7% in 2008).<sup>1</sup> The relative weight of agrifood products is high for a developed economy that's as diversified as Spain and reflects the significant advantage enjoyed by the country to produce this kind of goods. Spain is therefore the fourth biggest exporter of agrifood products in the EU and the eighth worldwide, with a global market share of 3.3% (much higher than its 1.9% share of all exported goods).

<sup>1</sup> In this article, products are defined according to the TARIC nomenclature at the 4-digit level of detail, agrifood products being those classified between TARIC 0101 and 2403.

**Spain ranks eighth worldwide among countries exporting agrifood products: its exports have grown by 5.5% year-on-year in the past decade and totalled EUR 476 billion in 2018**

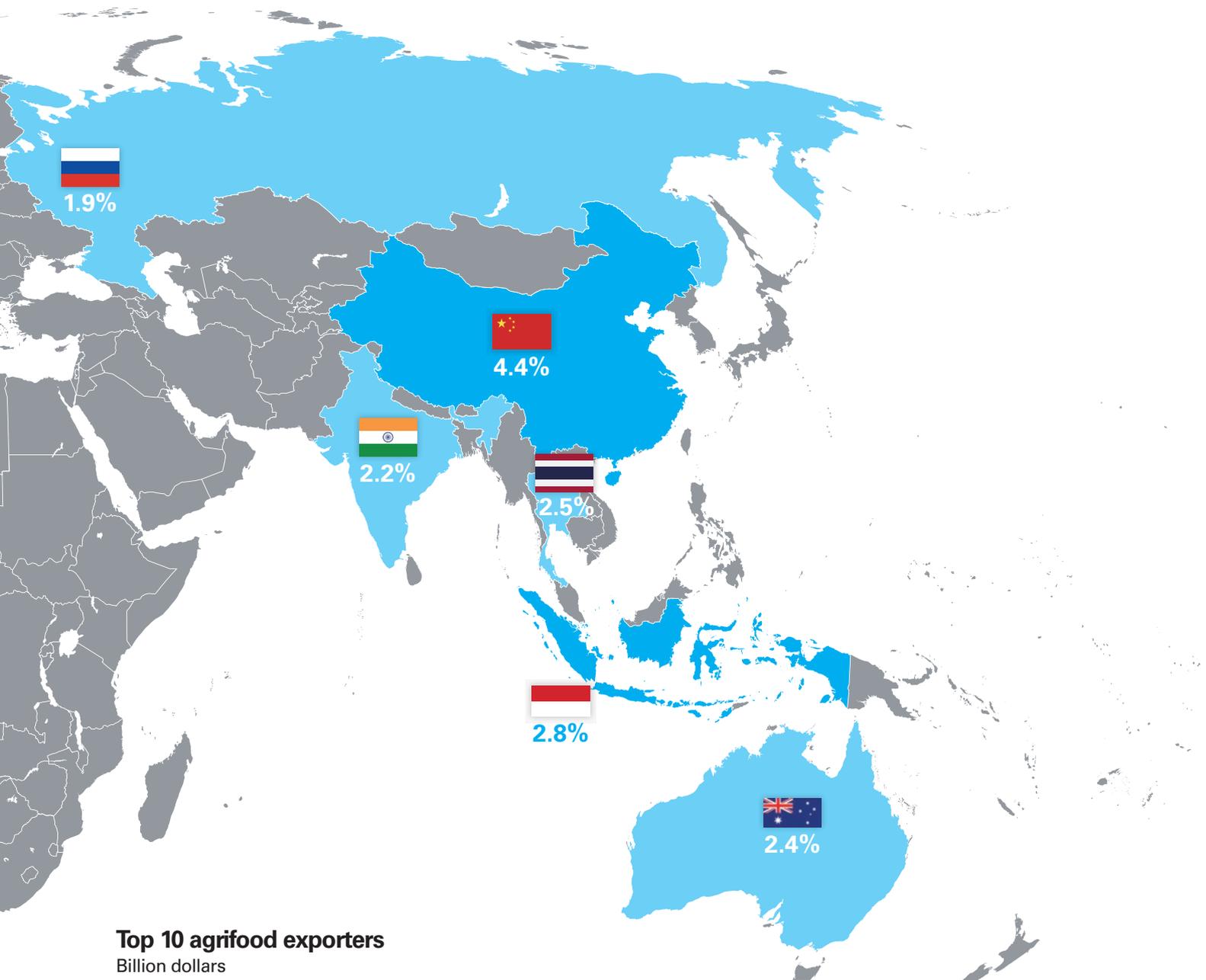




## World ranking of agrifood exporters

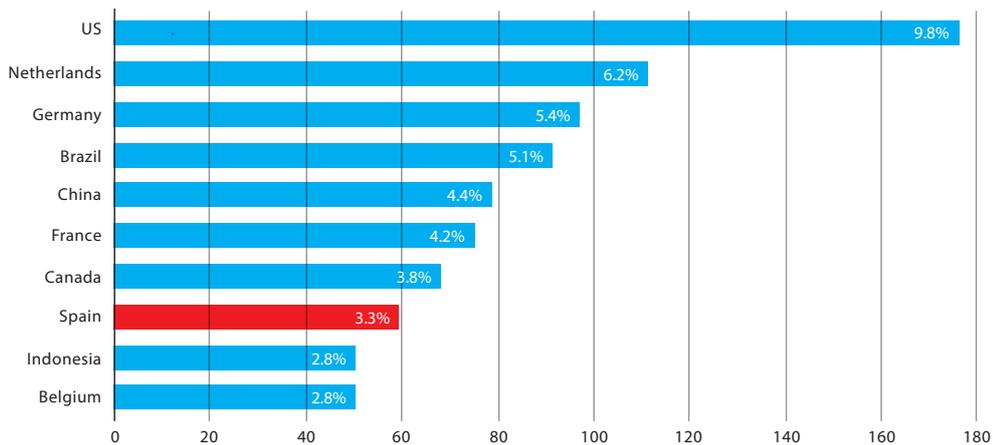


Note: Each country's share is the percentage of its agrifood exports out of the global total. Data from 2017.  
Source: CaixaBank Research, based on data from the WTO.



### Top 10 agrifood exporters

Billion dollars





The rise in agrifood exports in the past few years has been accompanied by diversification, both in terms of the country of destination and also the range of products exported. This last fact is indicated by the Herfindahl index, which measures the degree of concentration of the agrifood products exported:<sup>2</sup> the lower the index (which, in the case of Spain, went from 3,001 to 2,696 between 2008 and 2018), the more diversified the range of exports. For instance, the relative weight of citrus fruits, olive oil and wine in Spanish exports has fallen in favour of a much broader assortment of products. On the other hand, the industry has also managed to diversify the countries it exports to. Although the euro area is still the major market for agrifood exports, its share has gradually decreased (58.3% in 2018 compared with 66.5% de 2008) in favour of more distant markets such as Asia, Africa and America.

<sup>2</sup>The Herfindahl index measures the degree of concentration based on the relative weight associated with each agrifood product exported. Specifically, it is the sum of the square of the share of each product out of the total agrifood exports, resulting in a figure between 0 and 10,000, where 0 indicates maximum diversification and 10,000 implies total concentration.

## Spain's agrifood sector has seen strong growth in the past decade by focusing on diversifying products and destinations and also thanks to a strategy aimed at internationalisation

Like any other industry exposed to international markets, its future depends on its ability to continue being competitive. The way to achieve this involves the industry promoting a strategy that does not merely focus on increasing exports but also takes the type of product sold abroad into account. In this respect, one particularly useful concept to determine the industry's competitive capacity is the **complexity of its exports**. The theory of economic complexity, developed by various academics from the prestigious universities of Harvard and MIT<sup>3</sup>, claims that a country's production and knowledge capacity are reflected in the products it can produce and export competitively. Consequently, a country (or region) is more complex when it exports products that require greater knowledge intensity and which few economies

<sup>3</sup> For more details on economic complexity, see <http://atlas.cid.harvard.edu> and <https://oec.world/es>



can produce. Similarly, the **Product Complexity Index (PCI)** measures the relative intensity of the knowledge required to produce a product, taking into account the economic complexity of the countries that export this product. For instance, tomatoes (fresh or chilled) are less complex than canned tomatoes (a PCI of 25.0 and 33.2, respectively, in 2018).<sup>4</sup>

④ Note that products are defined based on the 4-digit TARIC code, which unfortunately does not allow us to differentiate between the quality of the different varieties of the same product.

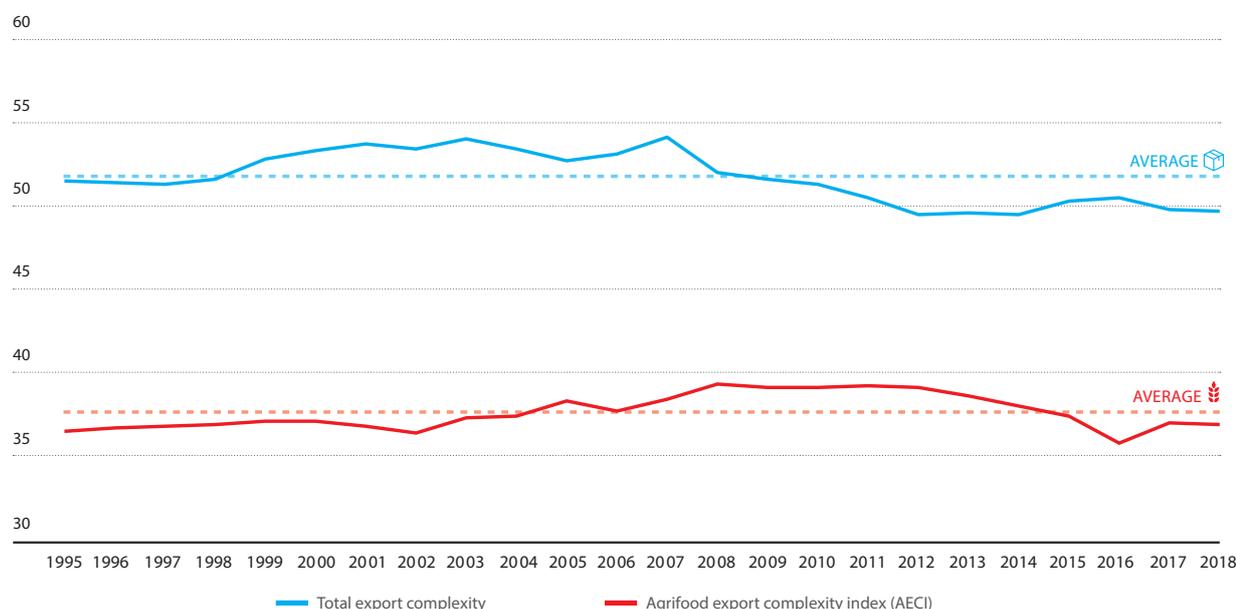
## Export complexity measures the intensity of knowledge required to produce exported goods. A more complex economy is in a better position to compete in the global market

Taking into account the product complexity index (PCI), weighted for the share of exports of this product in the total agrifood exports, we can calculate the **agrifood exports complexity index (AECI)**. For 2018, the AECI was 36.9, considerably lower than the complexity index for Spanish exports as a whole (49.7).<sup>5</sup> This is not surprising as, in general, agrifood products have a relatively low complexity in comparison with other manufactured products such as high precision machinery and chemicals, whose production is more knowledge-intensive. The following chart shows that this gap has continued over time.

⑤ The Spanish economy comes 28th in the global economic complexity ranking. For an analysis of the export complexity of Spain's economy in general, see the article «From lettuce to cars: an analysis of the complexity of Spanish exports» in the *Monthly Report* for October 2018. <https://www.caixabankresearch.com/en/lettuce-cars-analysis-complexity-spanish-exports>

### Spain: trend in the complexity of total exports and agrifood exports

Export complexity index



**Note:** The export complexity index can range from 0 to 100 depending on the complexity of the products exported.  
**Source:** CaixaBank Research, based on data from DataComex and «The Atlas of Economic Complexity» (MIT).



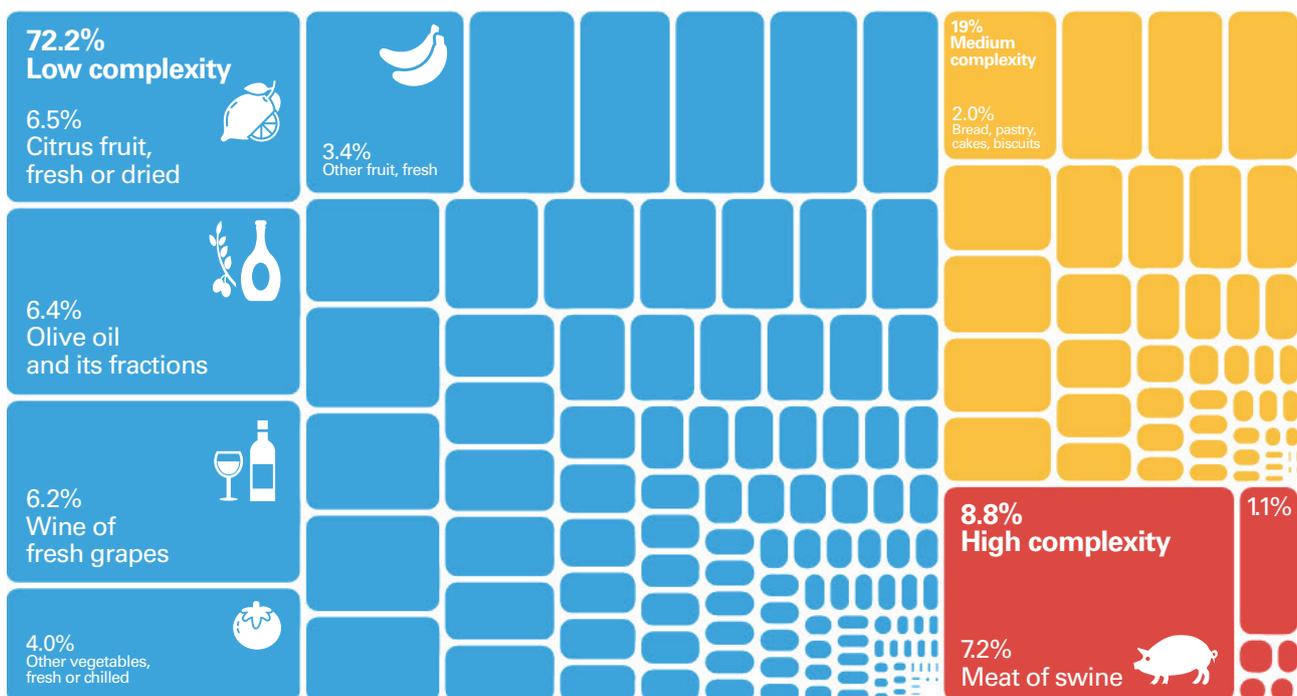
If we look at the trend in the AECI over the past decade, we can see it has fallen (from 39.3 in 2008 to 36.9 in 2018), suggesting a **moderate decrease in the complexity of agrifood exports**. However, before reaching any hasty conclusions, it is important to understand which factors are causing this phenomenon. Complexity is a relative concept; i.e. a product's complexity depends on how many countries can produce it so that, if increasingly more countries can export what one country exports, it loses complexity. And this is actually what has happened in the case of agrifood products.<sup>6</sup> In fact, shift in agrifood exports towards more complex products has prevented an even greater reduction in the AECI. In effect, **the relative weight of highly complex agrifood products has increased** (8.8% in 2018 compared with 7.2% in 2008).<sup>7</sup> If we look at the products in detail, pork especially stands out (TARIC 0203) because of its greater relative complexity and its increasing share of total exports, followed by meat & edible meat offal (TARIC 0210) and mushrooms and truffles (TARIC 2003) and pig fat (TARIC 1501). However, low complexity products still predominate in agrifood exports (72.2% of the total in 2018).

<sup>6</sup> If the value and PCI of each product had remained constant since 2008, the AECI would have increased to 39.7 in 2018.

<sup>7</sup> We classify agrifood products into three groups according to the value of its PCI (high, medium and low). Groups are defined based on percentile 33 (41.9) and percentile 66 (56.0) of the distribution and PCI.

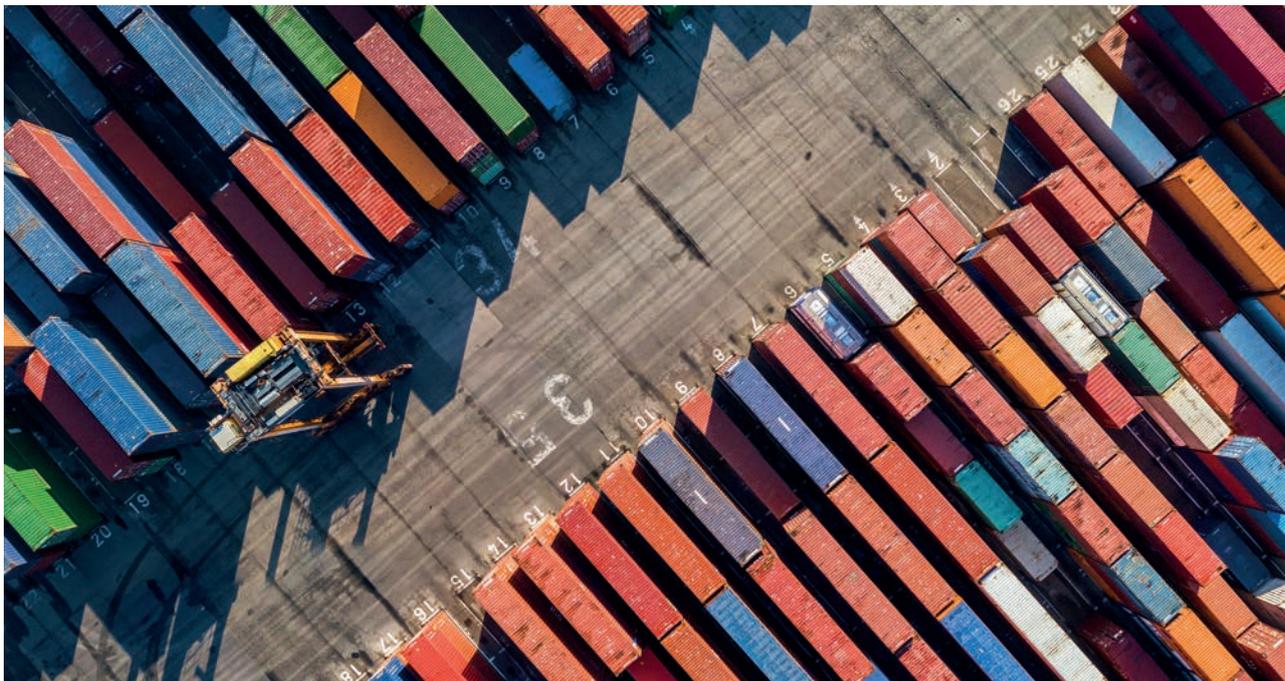
## Exports of agrifood products and their complexity

% of total



**Note:** We classify agrifood products into three groups according to the value of their PCI (high, medium and low). Groups are defined based on percentile 33 (41.9) and percentile 66 (56.0) of the distribution and PCI. Agrifood exports correspond to the TARIC codes 0101 to 2403. Data from 2018.

**Source:** CaixaBank Research, based on data from DataComex and «The Atlas of Economic Complexity» (MIT).



### What is the complexity of the products exported by the different autonomous communities?

The map and tables on the next page show the complexity index for the agrifood exports (AECI) for each autonomous community (AC).<sup>8</sup>

One initial observation is that **the ACs that export more complex agrifood products are not those that export the most**. According to the 2018 data, Asturias and Aragon are the communities with the highest AECI (47.9 and 46.6, respectively) in spite of accounting, jointly, for just 4% of total agrifood exports. In the case of Asturias, its high complexity is due to the predominance of dairy products (butter, milk and cream, cheese and curd) and eggs, products with a high PCI. In Aragon this is due to the importance of pork, which makes up 37% of the region's total exports and, as we have already mentioned, also has a very high PCI (60.1). On the other hand, Murcia, Andalusia and the Valencian Community contribute, together, almost half the agrifood exports but have a relatively low AECI (34.2, 32.4 and 32.1, respectively) due to the preponderance of fruit and vegetables, whose PCI is low. Galicia, however, has the lowest AECI of all (31.0) due to its export specialisation in fishing products, which tend to be associated with a low complexity.

<sup>8</sup>The AECI of an autonomous community is calculated as the PCI of each product weighted according to the percentage of the total exports of this product out of all the AC's agrifood products.

### The products exported to the euro area, the Spanish agrifood sector's main trading partner, are less complex than those exported to more distant markets

The autonomous communities do not only differ in terms of the range of agrifood products they export but also in their destination markets. For example, Asturias, Galicia and Cantabria send around 75% of their exports to the euro area, while the Canary Islands barely send 25% to this market (due to the importance of Africa).

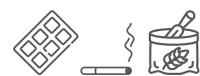


## The complexity of agrifood exports in the different autonomous communities



Source: CaixaBank Research, based on data from DataComex and «The Atlas of Economic Complexity» (MIT).

AC	ICEA <sup>1</sup>	% of agrifood exports <sup>2</sup>	% of exports to the euro area <sup>3</sup>
 <b>Asturias</b>	47.9	5.1	75.9
	0405 - Butter and other fats and oils derived from milk; dairy spreads (52.2) 1901 - Malt extract; food preparations of flour (47.2) 0401 - Milk and cream, not concentrated nor containing added sugar or other sweetening matter (48.6)		
 <b>Aragon</b>	46.6	14.6	51.1
	0203 - Meat of swine (60.1) 0201 - Meat of bovine animals (44.9) 2204 - Wine of fresh grapes (39.8)		
 <b>Catalonia</b>	43.0	14.0	51.2
	0203 - Meat of swine (60.1) 2204 - Wine of fresh grapes (39.8) 2309 - Preparations of a kind used in animal feeding (46.2)		
 <b>Castile and Leon</b>	42.7	14.1	62.5
	0203 - Meat of swine (60.1) 1905 - Bread, pastry, cakes, biscuits (43.3) 2204 - Wine of fresh grapes (39.8)		
 <b>La Rioja</b>	42.0	32.6	47.8
	2204 - Wine of fresh grapes (39.8) 2003 - Mushrooms and truffles (57.8) 2005 - Other vegetables prepared or preserved (36.4)		

AC	ICEA <sup>1</sup>	% of agrifood exports <sup>2</sup>	% of exports to the euro area <sup>3</sup>
 <b>Navarre</b>	41.3	13.4	57.1
	0710 - Vegetables (uncooked or cooked by steaming or boiling in water), frozen (40.1) 1905 - Bread, pastry, cakes, biscuits (43.3) 2005 - Other vegetables prepared or preserved (36.4)		
 <b>Castile-La Mancha</b>	41.1	35.6	60.7
	2204 - Wine of fresh grapes (39.8) 0203 - Meat of swine (60.1) 2208 - Undenatured ethyl alcohol (42.9)		
 <b>Cantabria</b>	39.3	13.1	74.2
	1806 - Chocolate and other food preparations containing cocoa (49.7) 2402 - Cigars, cheroots, cigarillos and cigarettes (35.9) 1901 - Malt extract; food preparations of flour (47.2)		
 <b>Madrid</b>	38.4	5.6	60.5
	2103 - Sauces and preparations for sauces (41.2) 2106 - Food preparations not elsewhere specified or included (51.2) 1905 - Bread, pastry, cakes, biscuits (43.3)		
 <b>Basque Country</b>	36.5	3.9	52.5
	2204 - Wine of fresh grapes (39.8) 0303 - Fish, frozen (24.7) 1806 - Chocolate and other food preparations containing cocoa (49.7)		
 <b>Balearic Islands</b>	35.4	5.8	49.9
	1302 - Vegetable saps and extracts (33.1) 0802 - Other nuts, fresh or dried (22.7) 0406 - Cheese and curd (47.8)		
 <b>Extremadura</b>	35.0	49.3	68.9
	2002 - Tomatoes, prepared or preserved (33.2) 2204 - Wine of fresh grapes (39.8) 0809 - Apricots, cherries, peaches, etc. (26.8)		
 <b>Canary islands</b>	35.0	11.9	25.4
	2402 - Cigars, cheroots, cigarillos and cigarettes (35.9) 2208 - Undenatured ethyl alcohol (42.9) 0702 - Tomatoes, fresh or chilled (25)		
 <b>Murcia</b>	34.2	46.6	51.0
	0705 - Lettuce ( <i>Lactuca sativa</i> ) and chicory (33.5) 0805 - Citrus fruit, fresh or dried (30.5) 0704 - Cabbages, cauliflowers, kohlrabi, kale, etc. (32.3)		
 <b>Andalusia</b>	32.4	35.0	59.7
	1509 - Olive oil and its fractions (35.3) 0709 - Other vegetables, fresh or chilled (28.4) 0810 - Other fruit, fresh (26.3)		
 <b>Valencian Community</b>	32.1	19.9	65.4
	0805 - Citrus fruit, fresh or dried (30.5) 2204 - Wine of fresh grapes (39.8) 0810 - Other fruit, fresh (26.3)		
 <b>Galicia</b>	31.0	13.6	74.7
	1604 - Prepared or preserved fish (26.1) 0307 - Molluscs (26.8) 0303 - Fish, frozen (24.7)		

Notes: the 4-digit TARIC code is given before the name of each product and, after its name, its PCI in brackets.

(1) The AECI is the agrifood export complexity index, with values from 0 to 100. (2) Agrifood exports out of the community's total exports (%).

(3) Exports to the euro area out of the total agrifood exports.

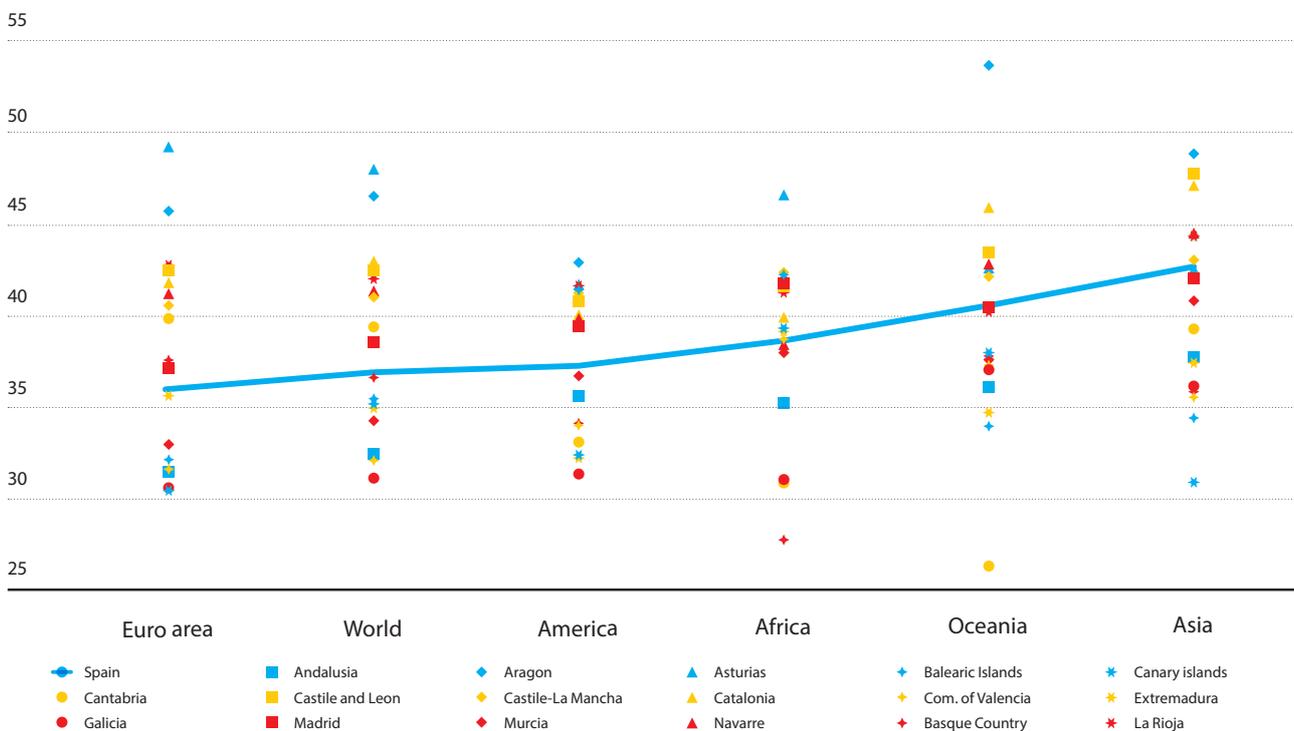
The three products that contribute the most to each autonomous community's complexity are given.



The destination market is important because a **positive relationship can be seen between the complexity of the agrifood products exported and the distance to their final destination**. The euro area receives less complex products while exports to Oceania and Asia tend to be more complex. For instance, the exports from Aragon, Catalonia and Castile & Leon to Oceania and Asia are particularly significant (exports of pork), as well as the exports by Asturias to Africa (dairy products and infant preparations).

## Spain exports more complex agrifood products to more distant locations

Agrifood export complexity index by destination



**Note:** The agrifood export complexity index is calculated based on each product's PCI and its each destination's agrifood exports. The index has values between 0 and 100. Agrifood exports correspond to the TARIC codes 0101 to 2403. Data from 2018.

**Source:** CaixaBank Research, based on data from DataComex and «The Atlas of Economic Complexity» (MIT).

In short, we have seen that there are significant differences in the type of agrifood product exported by the different autonomous communities. In many cases, these differences are the result of each region specialising in producing goods in which they have a clear competitive advantage due to their geographic location or climate, factors that should certainly be maximised. Although they should also look into the future. In this respect, it is vital to **design a strategy that consolidates the agrifood sector's competitiveness in an increasingly globalised world**. This means that other types of factors should also be taken into account, such as the complexity of the products exported. Ultimately, several studies have shown that a country's economic complexity is an important variable in predicting its economic growth over the medium term. Neither are the benefits of producing more complex goods limited to an industry's competitiveness; they generate positive spillovers for the domestic labour market<sup>9</sup> and, in general, improve the economy's productivity.

<sup>9</sup> Specifically, more complex business sectors have better labour conditions. See Canals, C and Montoriol, J. (2018). «La complejidad de las exportaciones y la calidad del empleo». Papeles de Economía Española, (158), 116.

## Supply structure

# Spain's agrifood industry: business structure and productivity

Agrifood is the main sector for Spanish industry. The sector has strong roots in Spain, generates stable employment and is very open to other markets. It also tends to have a highly fragmented business structure dominated by small firms and a few large companies that are less productive than their European counterparts. Increasing company size and boosting the productivity of larger firms through investment in R&D and adopting new technologies would help to improve the competitiveness of a key industry for the economy and society as a whole.

The agrifood industry<sup>1</sup> makes a considerable contribution to economic activity, as shown by the key data on the sector: it contributes 2.9% towards the whole economy's gross value added (GVA) and for the economy as a whole and 20.3% of the manufacturing industry's GVA, making it the top ranking industrial sector for the Spanish economy. Spain ranks fourth among the countries that contribute the most to producing food and beverages at the European level (10.5% of the EU food and beverage industry's GVA), after Germany, France and the United Kingdom, above countries such as Italy and the Netherlands.<sup>2</sup>

Moreover, employment in Spain's agrifood industry has grown non-stop in the past six years, adding another 80,000 people since Q2 2013 and totalling 519,600 employees in Q2 2019, accounting for around 19% of manufacturing employment. With agrifood exports valued at more than EUR 31 billion, it helps to improve Spain's trade balance thanks to a positive trade balance equivalent to 0.6% of GDP (cumulative data over 12 months up to June 2019).

① The agrifood industry is a subsector of the manufacturing industry and is made up of the food industry (NACE 10), the manufacture of beverages (NACE 11) and the tobacco industry (NACE 12). In addition to food fit for human consumption, it also includes the production of animal feed and the production of a number of intermediate products that are not directly food or food products (such as hides).

② Eurostat data (national accounts) corresponding to 2017, latest year available.

**Agrifood is the leading industrial sector in the Spanish economy. Spain is also the fourth largest contributor to food and beverage production in the European Union**



## Key figures for Spain's agrifood industry

**The leading industrial branch in terms of value added and employment**



**20.3%** of the manufacturing industry's GVA

**2.9%** of the total GVA of the Spanish economy, **7.3%** including indirect effects

**519,600** employees, **18.8%** of manufacturing jobs

**Dominated by small firms**





With a total of **31,393** companies, **96.5%** are SMEs with fewer than **50** employees

**Very open to foreign markets**





**EUR 31,097** million in exports

Positive balance of trade (**0.6%** of GDP)

**Ranks fourth among EU countries in terms of GVA**





Contribution of the Spanish industry to the EU total:

**10.5%** of the gross value added

**10.9%** of employment

**10.7%** of companies

Note: GVA stands for gross value added. GVA data from Eurostat (national accounts 2017), number of companies from DIRCE (2018), employment according to LFS (Q2 2019), foreign trade according to DataComex (cumulative over 12 months up to June 2019).

Source: CaixaBank Research, based on data from the National Statistics Institute and Eurostat.

The industry also **generates wealth, not only through its activity per se** but it also indirectly benefits the rest of the economy thanks to its interrelation and knock-on effect on other sectors. These indirect effects occur due to the economic activity induced by purchases made in the agrifood industry from its suppliers. In order to meet this demand, in turn the suppliers increase their purchases from their own suppliers, which also generates value added. To calculate this indirect (or knock-on) effect in the Spanish economy, the input-output tables are used which are estimated by the National Statistics Institute (the latest data being for 2015). We can therefore see that, for each EUR 100 of value added originating directly from the agrifood industry, the whole of the economy generates an additional EUR 153 indirectly, the highest «multiplier» among all branches of industry. Logically, the products of agriculture, livestock farming and hunting are the main suppliers for the industry, followed by wholesale trade services and energy providers. However, other sectors which are apparently less closely related to the agrifood industry also benefit, such as legal and accounting services and chemical products. **The direct and indirect contribution made by the agrifood industry is therefore equivalent to 7.3% of the GVA of the whole economy.**

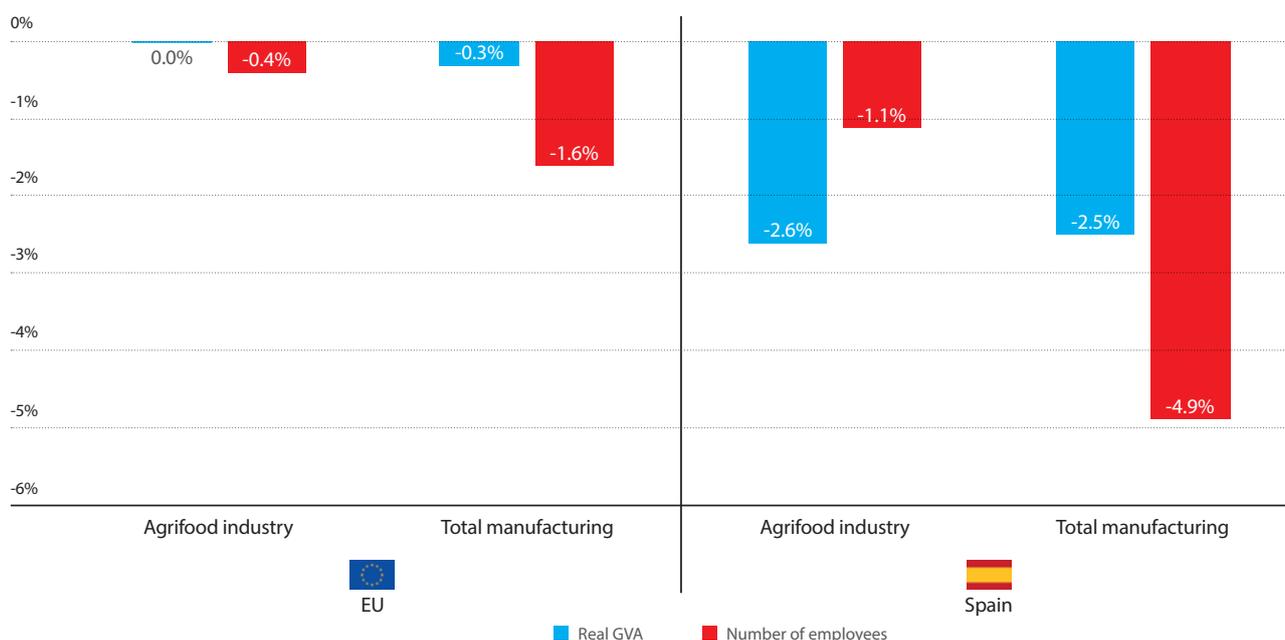
**The contribution made by the agrifood industry to the Spanish economy is very big, especially when the indirect effects are also taken into account: for every EUR 100 of value added originating directly from the agrifood industry, the economy generates an additional EUR 153 indirectly**

The agrifood sector is **firmly established within the region**, as it is usually located close to the farms that supply its raw materials, which is then transformed into processed food products. **The sector therefore employs local labour, contributing to the development of rural areas and social cohesion.**

Also important is the fact that the sector **generates relatively stable employment throughout the economic cycle**, especially when compared with other sectors. If we look at the trend in employment and GVA in real terms during the most recent recessionary period (between 2007 and 2014) in relation to the total manufacturing sector, we can see that the annual decrease in real GVA was similar for both whereas job losses were considerably fewer in the agrifood industry. This phenomenon is also observed at European level, although the decline in employment was less pronounced in this case.

### Employment in the agrifood industry is more stable

Annualised change in real GVA and employment between 2007 and 2014 (%)



Source: CaixaBank Research, based on data from Eurostat.

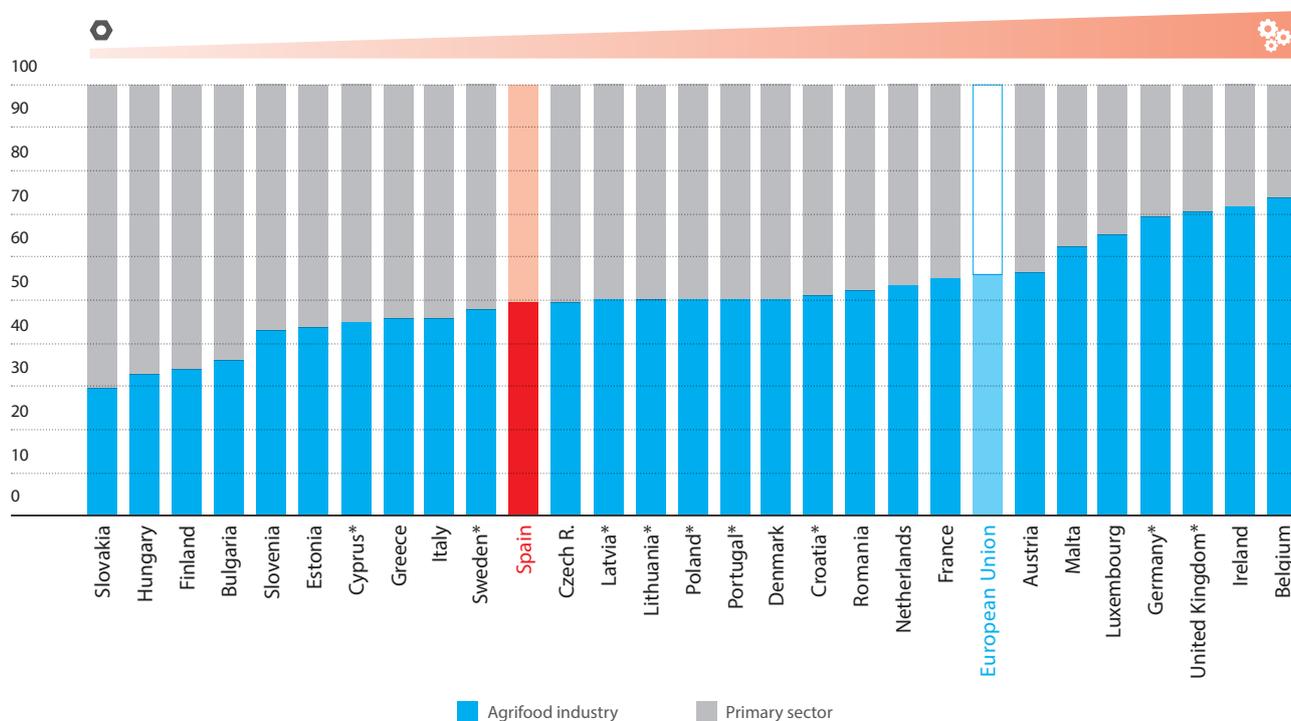


**The agrifood sector is firmly rooted in the region, employs local labour (contributing to the development of rural areas and social cohesion) and generates more stable employment throughout the economic cycle**

On analysing the composition of the agrifood sector, made up of the primary sector and the agrifood industry, we can see that the industrial component has been gaining weight, going from 37.2% in 2000 to 49.2% in 2017. In fact, Spain is one of the EU countries in which the industrial component has increased its share the most, indicating the notable growth and development of the agrifood industry over the past two decades. However, the relative weight of the industry in the agrifood sector as a whole remains below the EU average (56%) and below that of more industrialised economies such as Belgium, Ireland, the United Kingdom and Germany. In this respect, it would be advisable for the industry in Spain to focus more heavily on the transformation of agricultural products before they are sold on the domestic market or exported to increase the value added and differentiation of Spanish products on international markets.

## Which European countries have the most industrialised agrifood sector?

Composition of the agrifood sector in GVA terms (%)



Note: (\*) Data from 2016, data from 2017 for the rest of the countries.  
Source: CaixaBank Research, based on data from Eurostat (national accounts).

**A business strategy oriented towards the transformation of agricultural products would provide more added value and more differentiation in international markets**

On the other hand, the **agrifood industry has a highly fragmented business structure**. Of the 31,393 firms that make up the sector, almost 80% are microenterprises with fewer than 10 employees, while companies with more than 250 employees do not reach 1% of the total. However, large companies contribute 42% of the agrifood industry's GVA and employ 32% of its workers. **Company size matters because it is directly related to the productivity of firms.**<sup>3</sup>

<sup>3</sup> Apparent labour productivity calculated as the quotient of gross value added and the number of employees. Data from 2016, latest year available.

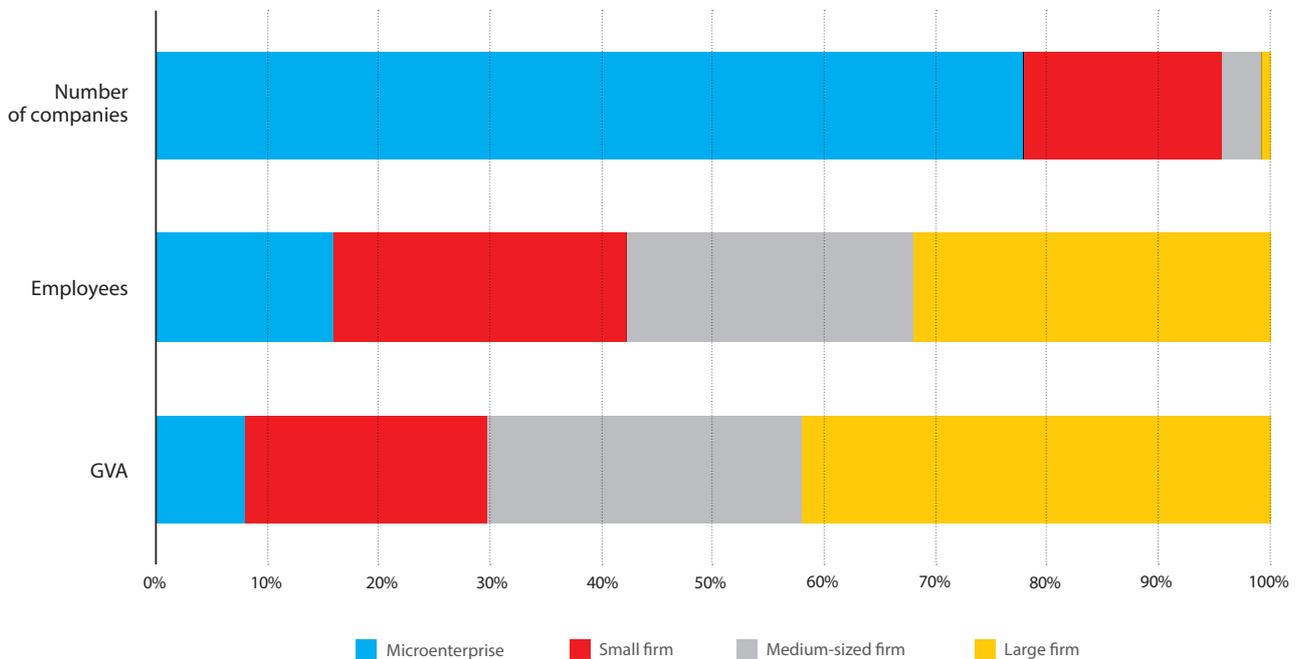


Eurostat data on productivity by sector of activity and company size reveal the following features:

1. Food companies<sup>4</sup> are less productive than the manufacturing sector as a whole (-18.5%).
2. Large food companies are 2.4 times more productive than microenterprises and 1.6 times more productive than medium-sized firms. This pattern of productivity growth with company size is also seen in the manufacturing sector and the EU as a whole.
3. The productivity of Spain's food industry is similar to that of the EU as a whole. However, there are significant differences depending on company size. On the one hand, **Spanish SMEs (up to 250 employees) are more productive than their European counterparts**, a significant fact since, for the manufacturing sector as a whole, Spanish SMEs are less productive than European ones. On the other hand, large food companies are less productive in Spain than in the EU as a whole, a fact also observed in the manufacturing industry.

<sup>4</sup> The analysis of productivity by company size is carried out for the food industry (78% of the agrifood industry).

## Small firms dominate the agrifood industry but large companies employ more people and contribute more value added

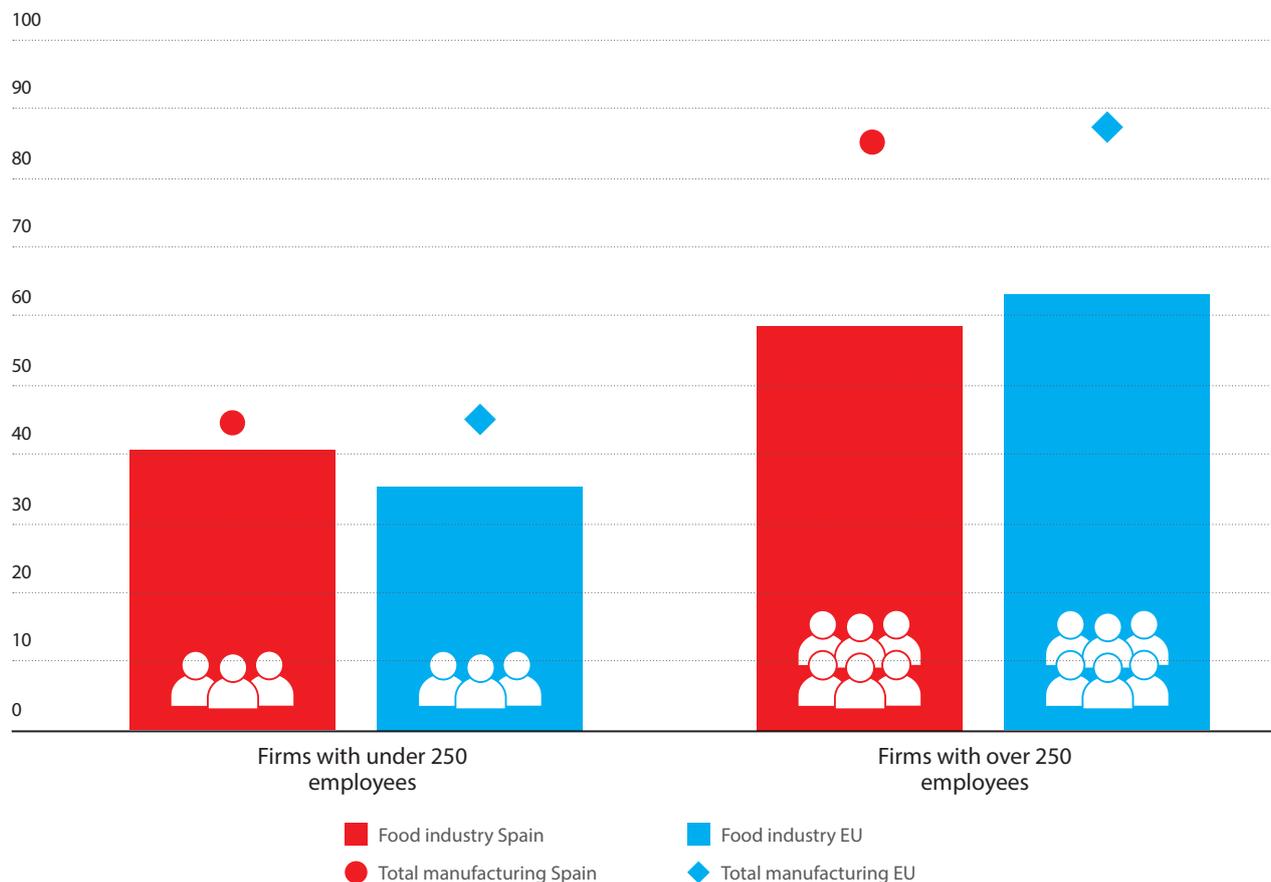


**Note:** Company size is defined based on the number of salaried employees: micro (fewer than 10), small (10 to 49), medium-sized (50 to 249) and large (over 250).

**Source:** CaixaBank Research, based on data from the National Statistics Institute (industry survey, 2017).

## Productivity of companies by their size in Spain and the EU

Gross value added per employee (thousand euros)



Source: CaixaBank Research, based on data from Eurostat (Small Business Statistics, 2016).

**The agrifood industry is made up of several highly heterogeneous subsectors** in terms of the number of companies, value added, employment and productivity. The meat industry and the manufacture of beverages lead the field in terms of value added while the manufacture of bakery products and pasta stands out for its large number of companies and employees. In fact, the highly labour-intensive nature of this subsector is reflected in its low labour productivity (32% below the agrifood industry average). At the other end of the scale is the tobacco industry, the beverage industry and the manufacture of animal feed products as the subsectors with the highest productivity.



## Subsectors of the agrifood industry

	Number of companies	% of GVA	Productivity*
<b>AGRIFOOD INDUSTRY</b>	<b>31,393</b>	<b>100.0%</b>	<b>51,709</b>
<b>MANUFACTURE OF BEVERAGES</b>	<b>5,594</b>	<b>20.6%</b>	<b>83,833</b>
<b>TOBACCO INDUSTRY</b>	<b>51</b>	<b>1.5%</b>	<b>170,540</b>
<b>FOOD INDUSTRY</b>	<b>25,748</b>	<b>78.0%</b>	<b>46,411</b>
<b>Meat products</b>	<b>3,882</b> companies	<b>25.2%</b> of GVA	<b>EUR 42,670</b> per worker
<b>Fishing products and shellfish</b>	<b>659</b> companies	<b>5.0%</b> of GVA	<b>EUR 39,996</b> per worker
<b>Fruit and vegetables</b>	<b>1,500</b> companies	<b>10.8%</b> of GVA	<b>EUR 48,788</b> per worker
<b>Dairy products</b>	<b>1,769</b> companies	<b>10.3%</b> of GVA	<b>EUR 63,364</b> per worker
<b>Animal feed</b>	<b>804</b> companies	<b>6.3%</b> of GVA	<b>EUR 78,833</b> per worker
<b>Milled products, starches and starch products</b>	<b>439</b> companies	<b>2.7%</b> of GVA	<b>EUR 65,693</b> per worker
<b>Vegetable and animal oils and fats</b>	<b>1,727</b> companies	<b>5.0%</b> of GVA	<b>EUR 63,153</b> per worker
<b>Bread and pasta</b>	<b>11,788</b> companies	<b>16.8%</b> of GVA	<b>EUR 31,585</b> per worker
<b>Other food products</b>	<b>3,180</b> companies	<b>18.0%</b> of GVA	<b>EUR 55,317</b> per worker

Note: (\*) Labour productivity is calculated as the gross value added divided among the number of employees in each subsector.

Source: CaixaBank Research, based on data from the National Statistics Institute (DIRCE 2018 and industry survey 2017).

Given this situation, **the sector needs to implement a strategy to boost the growth of SMEs and help larger firms improve their productivity** in order to close the productivity gap with its European counterparts.

Innovation, digitisation and the adoption of new technologies are emerging as key factors for the future of the agrifood industry,<sup>5</sup> especially as the sector is facing increasing challenges related to the efficient management of energy and natural resources, as well as adapting to consumers' new dietary preferences.

<sup>5</sup> In this respect, the data on R&D investment in the sector are not very encouraging. According to the National Statistics Institute's survey on company innovation, the innovative intensity of the agrifood industry is 0.57 compared with 0.89 for all companies and 1.23 for industry.

## Financial inclusion

# The role played by rural branches in financial inclusion

Financial inclusion guarantees people access to an appropriate level of financial services. The considerable decline in the number of bank branches in Spain in recent years has increased the risk of financial exclusion for some customers in rural areas. These customers tend to prefer a physical bank branch and specialised offers, especially in the business segment. Within this context, the role played by rural bank branches is twofold: they allow the banking sector to specialise offers in economic sectors critical to large parts of the region, such as agriculture, whilst also maintaining a commitment to financial inclusion.

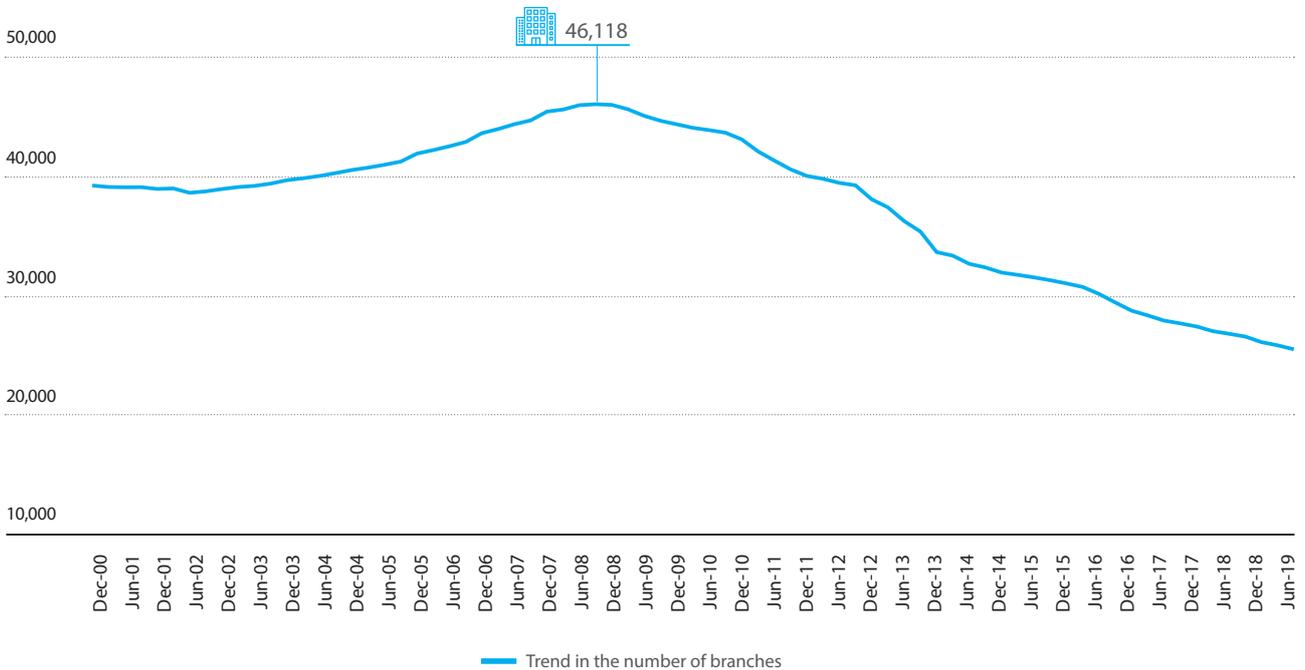
Since the end of 2008, the number of bank branches in Spain has fallen by 45% to 25,565 by mid-2019, an average annual decrease of 6%. This trend has been most pronounced in the most urbanised autonomous communities (ACs) with an initially denser network of branches, such as Catalonia, Madrid and the Valencian Community.

The autonomous communities where the reduction has been the smallest are generally those with the highest proportion of their population in rural areas and small municipalities, such as Extremadura and Castile-La Mancha. The trend in the number of branches in municipalities with fewer than 10,000 inhabitants confirms this pattern, with a 26% decrease between 2008 and the end of 2017, clearly smaller than the 43% decrease in the rest of the municipalities.





## The number of branches in Spain has fallen considerably over the past decade



Source: CaixaBank Research, based on data from the Bank of Spain.

### Why has the number of bank branches in rural areas fallen?

The trend observed of disappearing bank branches is due both to reasons external to the financial sector and to changes related to it, with different effects for rural and urban areas.

Demographics is a key external factor, specifically the **progressive decline in the rural population**. In the last 10 years, the number of inhabitants of small municipalities has fallen by 4%. This reduction has been much larger (over 10%) in some predominantly rural provinces in Galicia, Castile & Leon, Castile-La Mancha and Aragon. The phenomenon of depopulation that has been occurring in these areas for decades has been aggravated by two other phenomena: the ageing of the rural population (the average age of people living in small municipalities is around 48 compared with the Spanish average of 43) and increased urbanisation (more and more people are living in large towns and cities). This decline in population means that some branches no longer achieve the critical mass of clients required to guarantee minimum profitability.

**The decrease in the rural population, newer generations more accustomed to digital banking and the consolidation of the banking sector itself are some of the factors behind the reduction in the number of branches**

The **increase in the relative weight of generations accustomed to digital banking** is another factor affecting the number of branches. As certain financial services (transfers, payments, etc.) can be carried out online, the need to go to a branch decreases. This is especially true in urban areas, where people tend to use digital services more readily. The use of digital banking increased from 19% in 2008 to almost 50% in 2018, a significant change that reveals the rapid progress made by digital channels in just a few years; a trend that is likely to accelerate.

Among the factors linked to the financial sector itself, the main reason for closing branches in the past ten years has been the consolidation of the banking industry. As a result of the financial crisis, the sector has shrunk from 42 banks in 2008 to 11 at present.<sup>1</sup> This has led to a significant adjustment in the sector's installed capacity, in terms of the number of branches and employees, to eliminate duplication in the case of bank mergers. Such duplication has been more frequent in urban areas, where the number of rivals is greater.

Moreover, in today's highly complex environment, with negative interest rates, weak growth in the loan portfolio, greater demands regarding capital levels and a necessary but costly digital transformation, the sector has also needed to focus on improving its efficiency and profitability.

However, despite this situation, Spain is still the country with the most branches per capita in the euro area, with nearly six branches per 10,000 inhabitants, almost two more than the euro area average.

<sup>1</sup> Banks with assets exceeding EUR 20 billion in 2018.

## Demographics and changes in the financial sector itself have led to a progressive increase in the number of towns in Spain without a bank branch, all of them small, with fewer than 10,000 inhabitants

Currently, as the following table shows, 50% of Spanish municipalities have no bank branch, an increase of 4 pp since 2009. The vast majority are very small municipalities with fewer than 500 inhabitants.

### Municipalities without a bank branch: most are very small

Municipalities without a bank branch	Dec 09	May 17	Var.	% in 2017 of all municipalities
Municipalities > 100,000 inhab.	0	0	0	
Municipalities > 10,000 inhab.	0	0	0	
Municipalities 5,000-10,000 inhab.	0	4	4	0.7 %
Municipalities 4,000-5,000 inhab.	3	5	2	2.7%
Municipalities 3,000-4,000 inhab.	6	8	2	2.7%
Municipalities 2,000-3,000 inhab.	18	34	16	7.1%
Municipalities 1,000-2,000 inhab.	98	156	58	17.2%
Municipalities 500-1,000 inhab.	314	413	99	40.6%
Municipalities 0-500 inhab.	3,199	3,424	225	86.9%
All municipalities	3,638	4,044	406	49.8%
<b>TOTAL SPANISH MUNICIPALITIES</b>	<b>8,112</b>	<b>8,125</b>	<b>13</b>	

Source: CaixaBank Research, based on data from CECA and AEB.

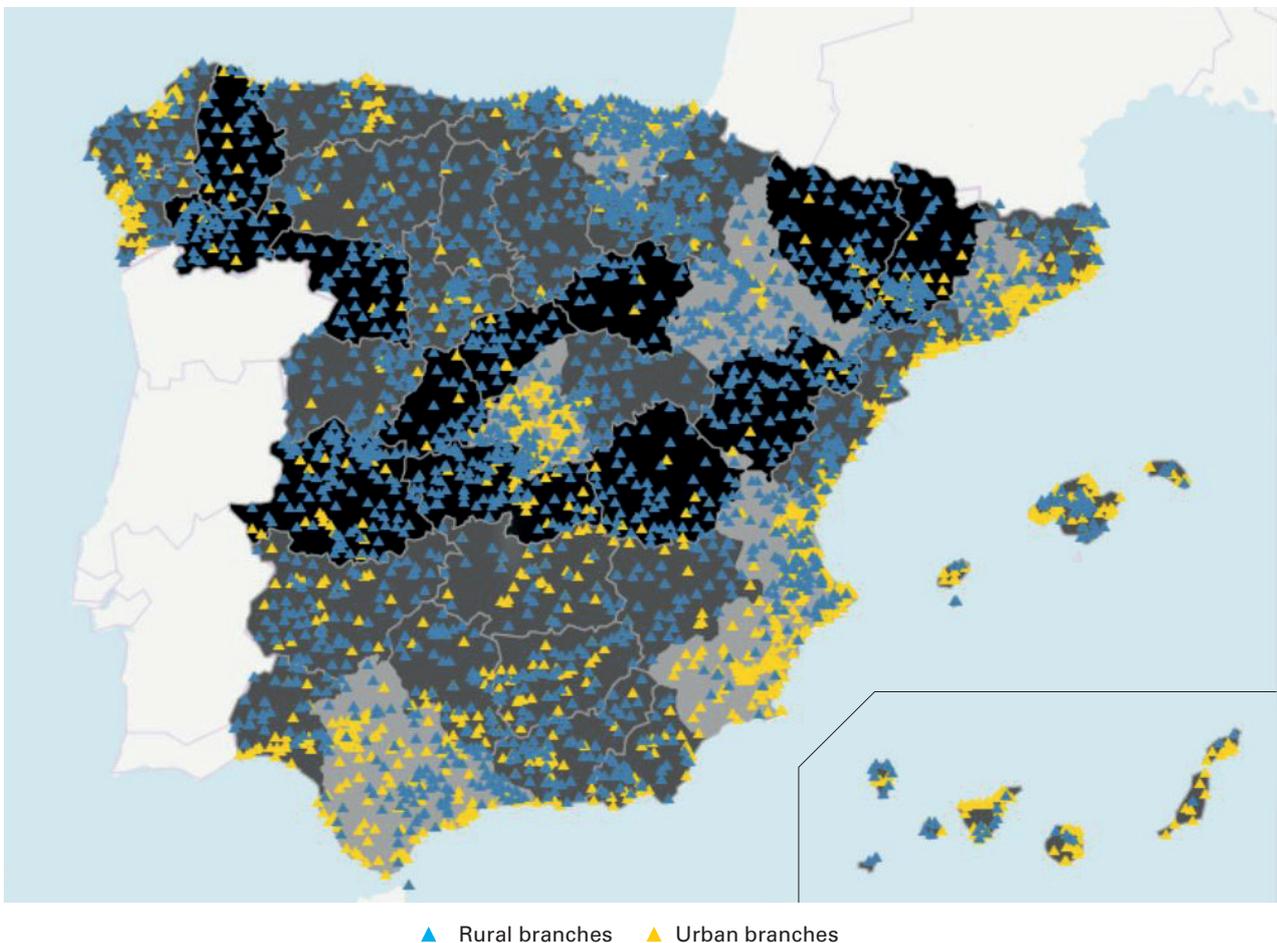


Municipalities without a branch affect 2.7% of the population (around 1.3 million people), a figure that demonstrates the still high level of physical financial inclusion in Spain. This can be seen in the following maps, which show the strong presence and spread of rural branches (blue dots). These are naturally particularly dominant in the more rural provinces (highlighted in black and dark grey).

The maps also show that the geographical distribution of branches is relatively complementary among banks originating from savings banks (first map) and those that have always been banks since they were founded (second map). In general, the first group of banks tends to have a stronger presence in less urban and more rural provinces, unlike banks that have never been savings banks, which tend to focus more on large urban areas.

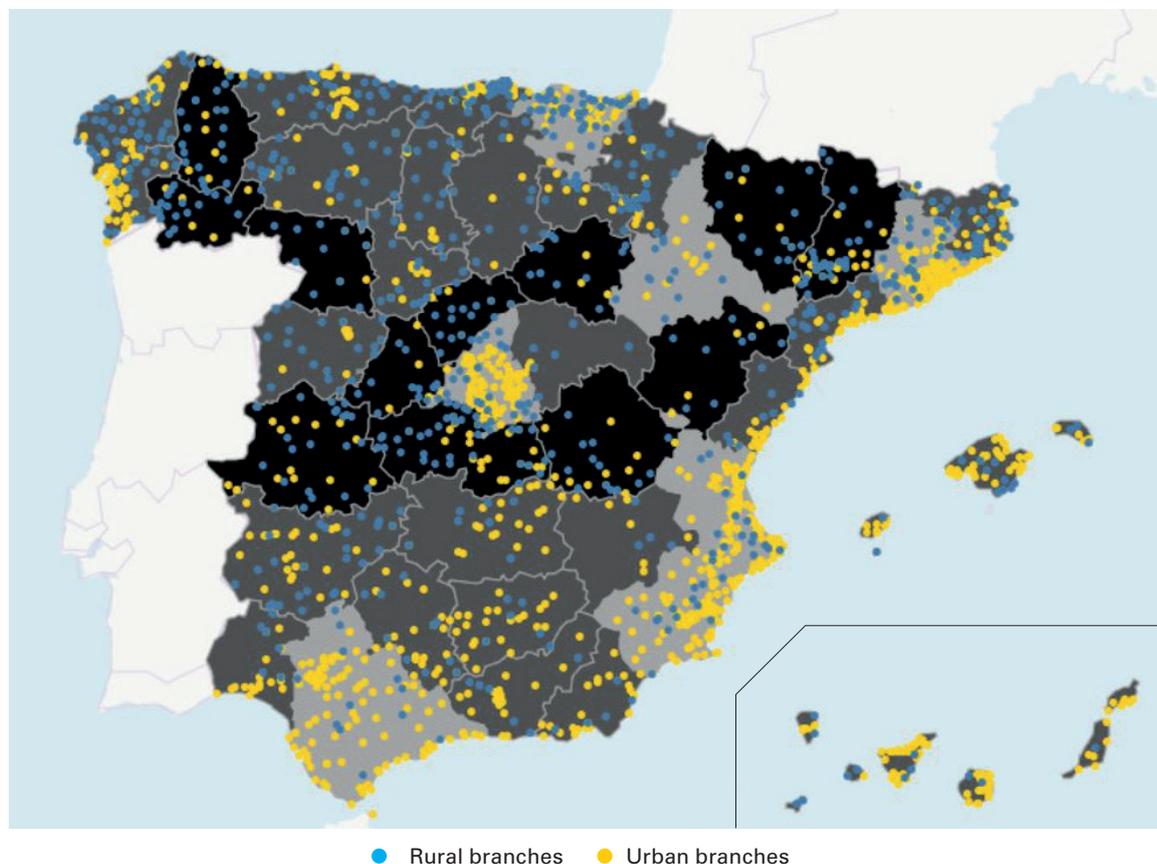
Despite the notable presence of rural branches and the complementary nature of different bank branches, the gradual reduction in the number of branches observed in recent years underlines, to a certain extent, the risk of physical exclusion facing a part of the more rural population. 1.3 million inhabitants live in a municipality where there is only one bank (more than 1,000 municipalities).

## Rural and urban branches of banks originating from a savings bank



**Note:** Blue triangles indicate rural branches and yellow triangles indicate urban branches of former savings banks. Provinces are classified into three categories according to their degree of urban development (black: rural; dark grey: intermediate; light grey: urban).

## Rural and urban branches of banks originating from a bank



**Note:** Blue dots indicate rural branches and yellow dots urban branches of banks that were also originally banks. Provinces are classified into three categories according to their degree of urban development (black: rural; dark grey: intermediate; light grey: urban).  
**Source:** CaixaBank Research, based on data from SNL and Eurostat.

### Why is it important to have bank branches in rural areas and why is the risk of financial exclusion a concern?

To answer these questions, it is necessary to understand both the nature of the customers living in such areas and the reasons why banks opt to maintain a rural presence, both of which are closely linked.

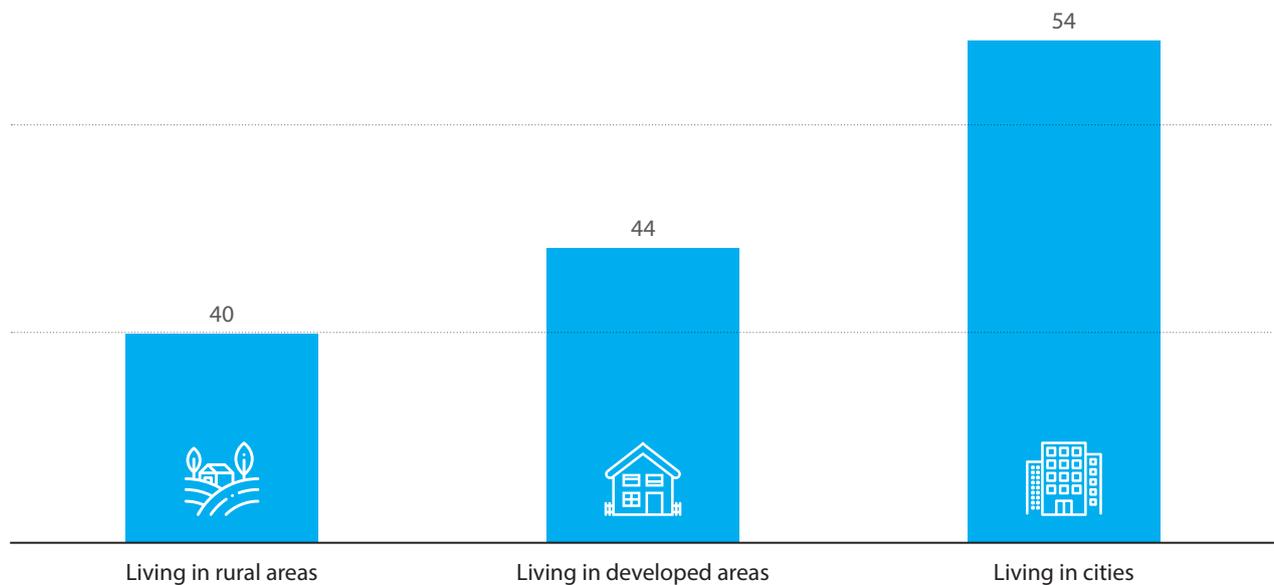
From the customers' point of view, rural bank branches are fundamental for two reasons: the preference for a physical branch and the need for specialised supply.

Regarding the first reason, private customers (both rural and urban) value «branch proximity» as a key factor when choosing their main bank (approx. 40%). Physical proximity has lost importance in recent years but still clearly outranks all other factors, such as quality of service and economic conditions. Although we do not have data according to the type of municipality, it is likely that this preference for the physical channel is even greater in rural areas, partly because, as the chart below indicates, this is a less digitised group and therefore uses a branch more to meet their needs, such as having cash.



## People living in rural areas use online banking less

% of individuals who used online banking in 2018



Source: CaixaBank Research, based on data from Eurostat.

The second reason is that **business sectors operating in rural areas, such as agriculture, typically require specialised financial services that can often best be provided from a branch**, which tends to have greater know-how and information concerning the local business model and environment in which such businesses operate. A physical presence in the area is essential to offer a value proposition focusing on specialisation in sectors such as agriculture, livestock or fishing, and on the commercial responsiveness such businesses require to meet their specific needs. For this group (SMEs and large firms), efficiency and a good knowledge of their business take precedence when choosing a bank, so having a physical presence in the area can represent a competitive advantage.

**Understanding the financial nature of rural areas** (the strong preference for a physical channel between individuals and a specialised demand on the part of businesses) helps to realise the economic impact that a **sharp reduction in financial inclusion** could have on these areas.

A large number of empirical studies have highlighted the benefits of financial inclusion on inclusive growth and economic development.<sup>2</sup> This is because the presence of financial institutions with a wide range of services encourages household saving and investment and the development of business projects (for example, insurance facilitates investment by covering part of the risk), which in turn contributes to the economic development of an entire region. Financial inclusion also tends to benefit especially poor families, promoting inclusive growth and social cohesion.

<sup>2</sup> See, for example, the Policy Research Working Paper by the World Bank: «[Financial inclusion and inclusive growth. A review of recent empirical evidence](#)», 2017.

From the point of view of the banking sector itself, there are two main reasons for maintaining a physical presence in rural areas: boosting business and a commitment to inclusion.

On the one hand, **the predominant economic sectors in these regions, such as agriculture, are critical to the regional economy and represent an attractive market segment for business.** The various financial requirements of these businesses, such as investment, payments or insurance, mean that financial institutions can develop a very close relationship with them. Such customers also traditionally show great loyalty and are increasingly adopting new technologies, which should boost their competitiveness.

An example of the appeal of this market segment is the rural savings bank. Due to tradition and proximity, rural savings banks base a large part of their business on the agricultural sector. For instance, on average, rural banks concentrate more than 40% of their branches in municipalities with fewer than 5,000 inhabitants, and their joint market penetration as the preferred bank for the business segment is only behind that of the big five banks. Although their total market share in credit is limited (approx. 4%),<sup>3</sup> in provinces such as Almeria and Valencia, and in communities such as Murcia, Navarre, the Basque Country and even Madrid, their share is significant (between 5% and 8%).

<sup>3</sup> Share of rural savings banks associated with the UNACC (National Union of Credit Cooperatives).

### Business with a very attractive segment and a commitment to inclusion are the two main reasons for maintaining a physical presence in rural areas





Despite their greater concentration in rural areas, on average their profitability (measured in terms of return on assets or ROA) is similar to that of the banks (0.41%), although this varies considerably depending on the area in which they operate (see the chart below). This suggests that their approach of specialising more in the agricultural sector is generally profitable. Their efficiency, on the other hand, is lower, especially compared with larger banks. They have smaller economies of scale (size) and less diversification (geographic, credit, etc.) than banks and, as they are not listed, are also less subject to market pressure, which could partly explain their lower efficiency. Rural savings banks also stand out financially for their prudence, as their solvency is high and they have low NPL rates, possibly because they benefit from their local know-how.

Unlike rural savings banks, banks that cover the whole country benefit from greater economies of scale, geographic diversity and better access to technology, making it easier to profit from this market segment. Having employees with specific, rural-oriented training in financial advice and equipped with mobility devices that allow any financial product to be procured is an efficient way to increase the geographical coverage of rural branches. This ensures the degree of interaction and expert advice required by the sector whilst containing the costs of the branch network.

## Main financial indicators of rural savings banks and banks

In %, data from 2018



**Note:** The circles show the simple average for each group of banks. The 75th and 25th percentiles are also shown for rural banks. The sample includes 11 rural banks, 5 medium-sized banks and 6 large banks (domestic business). The ROA is the return on assets while solvency is measured as the regulatory CET1 ratio.  
**Source:** CaixaBank Research, based on data from SNL and bank reports.

On the other hand, maintaining a commitment to financial inclusion is an end in itself: the aim is to **maintain a presence in small municipalities to support all economic sectors and contribute to the progress of society.**

However, this commitment should not prevent banks' model of financial inclusion from continuing to evolve, especially given the gradual increase in digital penetration in rural areas. Examples of such innovations are the introduction of ATMs, mobile branches and cash management agents in these municipalities.

Beyond having a branch network, a bank's commitment to rural areas is also maintained by promoting financing for social purposes, an increasingly widespread practice among banks. One example of this is the issuance of social bonds and the granting of microcredits, which serve to finance the projects of companies and individuals in areas with a higher risk of financial exclusion.

This social commitment is fundamental for a financial institution to establish itself firmly in a region, something which also helps a relationship of trust to be built up between the banks and its customers; after all, banking is fundamentally based on trust.





## Main indicators for the agrifood sector

Annual change (%), unless otherwise specified

	Average 2000-2007	Average 2008-2014	Average 2015-2018	2019	Date of latest data	Trend <sup>1</sup>
<b>Economic activity indicators</b>						
Total GDP of the economy	3.4	-1.3	2.8	2.0	Q2 2019	
GVA primary sector	0.5	1.0	2.5	-4.6	Q2 2019	
GVA agrifood industry	4.6	-3.6	4.7	-	2017	
Industrial production index: manufacturing industry	1.0	-4.2	2.4	-0.4	Jul-19	
Industrial production index: food	2.1	0.2	1.1	2.1	Jul-19	
Industrial production index: beverages	1.6	-2.0	-0.6	4.0	Jul-19	
New orders index: manufacturing industry	5.8	-2.5	4.9	0.8	Jul-19	
New orders index: food	4.3	0.7	2.8	3.3	Jul-19	
New orders index: beverages	6.6	-0.8	3.4	1.8	Jul-19	
Turnover index: manufacturing industry	5.5	-3.0	4.3	0.1	Jul-19	
Turnover index: food	4.2	0.5	2.8	3.2	Jul-19	
Turnover index: beverages	4.6	-1.3	3.1	1.9	Jul-19	
<b>Demand indicators</b>						
Retail sales index: whole economy	2.6	-3.7	1.8	3.3	Aug-19	
Retail sales index: food	1.4	-2.0	1.1	1.7	Aug-19	
Expenditure on food	6.8	-1.1	1.1	-	2018	
Share of expenditure on food (%)	16.0	16.5	16.3	-	2018	
<b>Labour market</b>						
Total registered workers, whole economy	3.5	-2.4	3.2	2.4	Sept-19	
Registered workers, primary sector	-1.4	-0.6	0.7	0.1	Sept-19	
Registered workers, agrifood industry	-	-0.8	3.2	2.1	Sept-19	
Total employees, whole economy	4.1	-2.7	2.7	2.4	Q2 2019	
Employees, primary sector	-1.4	-2.0	3.3	-1.6	Q2 2019	
Employees, agrifood industry	-	-1.0	2.2	2.6	Q2 2019	
<b>Foreign sector</b>						
Agrifood exports	5.6	5.7	4.2	3.3	Jul-19	
Primary sector exports	4.2	5.3	2.0	5.1	Jul-19	
Agrifood industry exports	6.6	6.0	5.4	2.4	Jul-19	
Agrifood imports	6.6	1.5	3.9	-1.3	Jul-19	
Primary sector imports	5.3	1.6	2.9	-1.8	Jul-19	
Agrifood industry imports	7.3	1.4	4.5	-1.0	Jul-19	
Agrifood balance of trade (% of GDP)	0.1	0.4	0.9	1.0	Q2 2019	
Primary sector balance (% of GDP)	0.2	0.2	0.4	0.4	Q2 2019	
Agrifood industry balance (% of GDP)	-0.1	0.2	0.5	0.6	Q2 2019	
<b>Financing</b>						
Outstanding balance of credit to the primary sector	9,8	-6,4	5,7	4,1	Q2 2019	
NPL rate, primary sector (%)	1,3	7,4	8,2	5,9	Q2 2019	
Outstanding balance of credit to the agrifood industry	10,2	-3,8	5,5	4,0	Q2 2019	
NPL rate, agrifood industry (%)	1,6	7,1	6,4	4,2	Q2 2019	

Source: CaixaBank Research, based on data from the National Statistics Institute, DataComex, Social Security and Bank of Spain.

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