



THE ECONOMIC IMPACT OF THE CROP PROTECTION INDUSTRY

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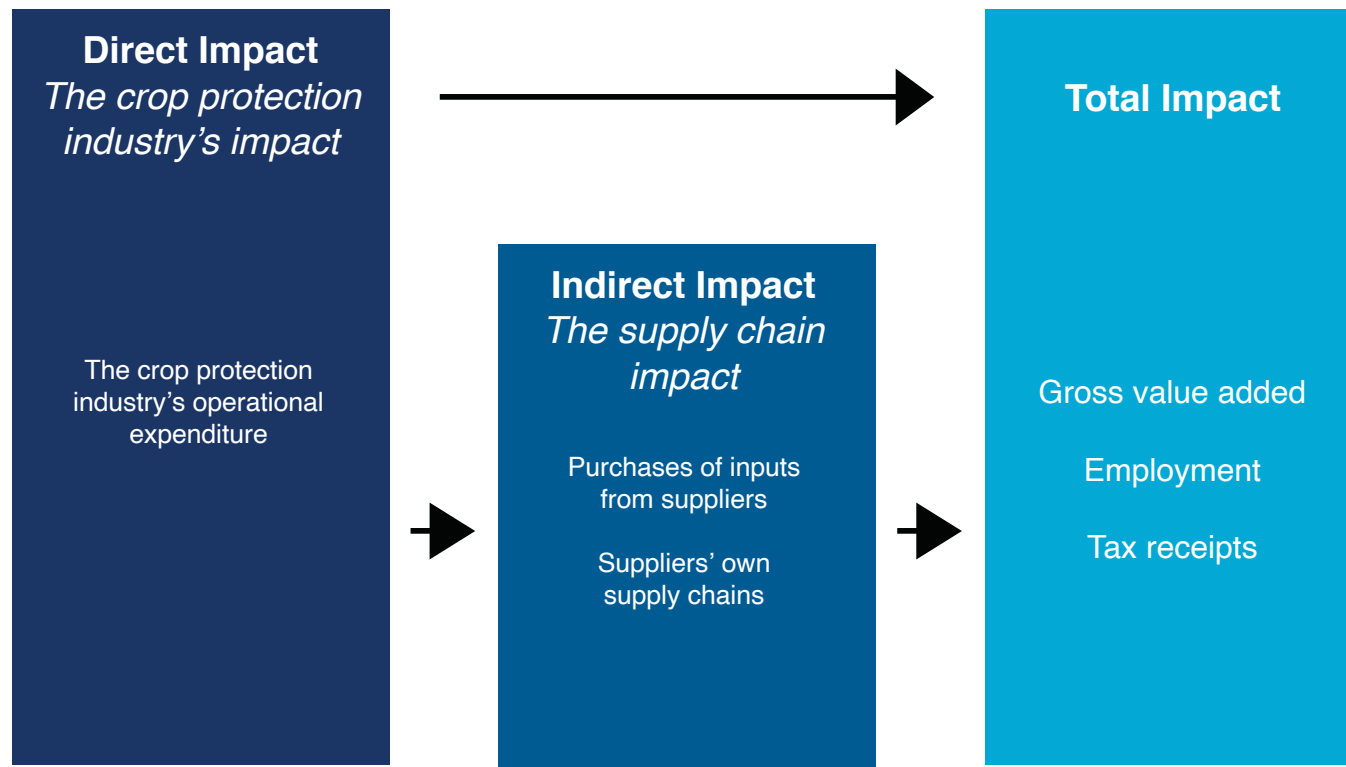
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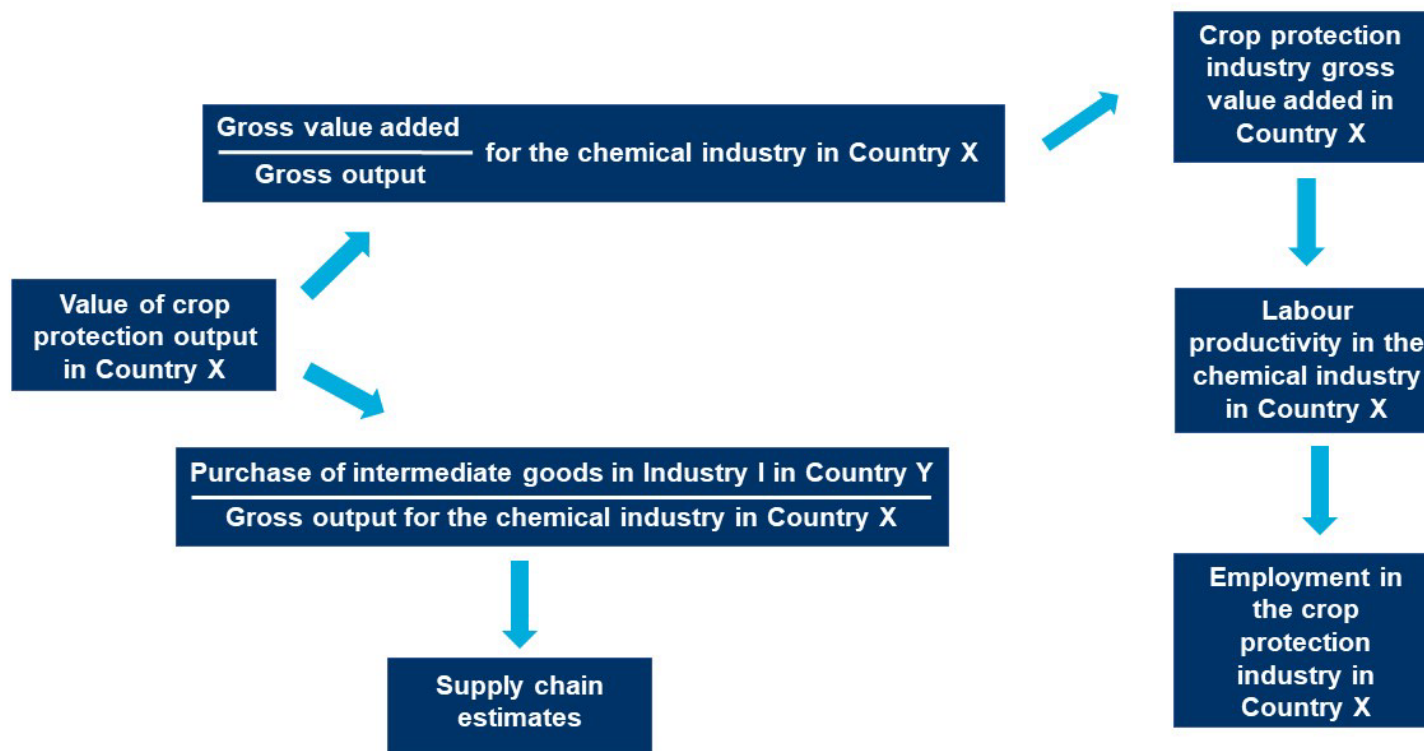
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METHODOLOGY

OVERVIEW OF THIS IMPACT STUDY



SCHEMATIC OF CALCULATIONS



WE USE A GLOBAL INPUT-OUTPUT MODEL

- As European supply chains cross national boundaries multiple times, we use a global input-output table to map the impact to the industry's procurement.
- Use the OECD Inter-Country Input-Output Tables.
- Will produce more accurate results than using national statistical authorities input-output tables.

WHAT METRICS WILL WE USE?

Gross value added (GVA) contribution to GDP

- Most simply thought of as the value of output sold less the value of inputs used up in that output's production process.

Employment

- Measured on a headcount basis for comparison with national statistics in each country.

Tax receipts

- Taxes include corporation, labour, product, and production taxes.

WHAT DATA HAVE WE USED TO MEASURE THE SIZE OF THE CROP PROTECTION INDUSTRY?

CLASSIFICATIONS AGREED WITH THE ECPA

PRODCOM – Crop protection products

INSECTICIDES

HERBICIDES

Herbicides based on phenoxy-phytohormone products

Herbicides based on triazines

Herbicides based on amides

Herbicides based on carbamates

Herbicides based on dinitroanilines derivatives

Herbicides based on urea; uracil and sulphonylurea

Herbicides p.r.s. or as preparations/articles

ANTI-SPROUTING / GROWTH REGULATORS

Anti-sprouting products

Plant-growth regulators

FUNGICIDES

Inorganic fungicides, bactericides and seed treatments

Fungicides, bactericides and seed treatments based on dithiocarbamates

Fungicides, bactericides and seed treatments based on benzimidazoles

Fungicides, bactericides and seed treatment based on triazoles or diazoles

Fungicides, bactericides and seed treatments based on diazines or morpholines

Other fungicides, bactericides and seeds treatments

OTHER PRODUCTS

Goods of heading 3808

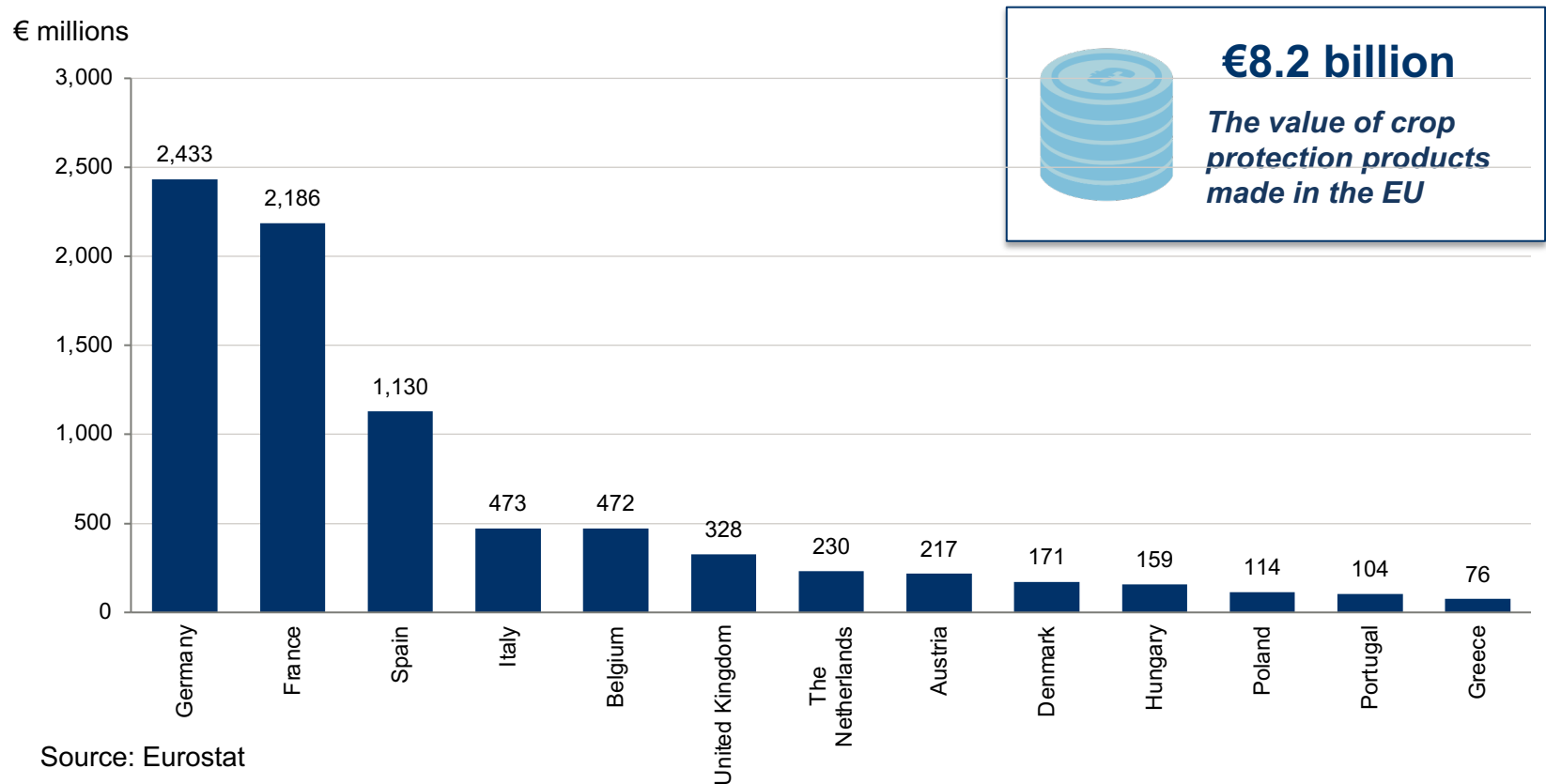
Rodenticides and other plant protection products (including molluscicides)

THE PRODCOM DATA WE USED

- The data we have used is from Eurostat's PRODCOM database which relates to the **value of manufacturers' production** in each country. It is at factory gate price, so ignores any subsequent distributors' or retailers' margins. It also ignores whether the production is destined for the domestic or export markets.
- It does not include imports.
- It relates to 2017.

THE CROP PROTECTION INDUSTRY'S PRODUCTION

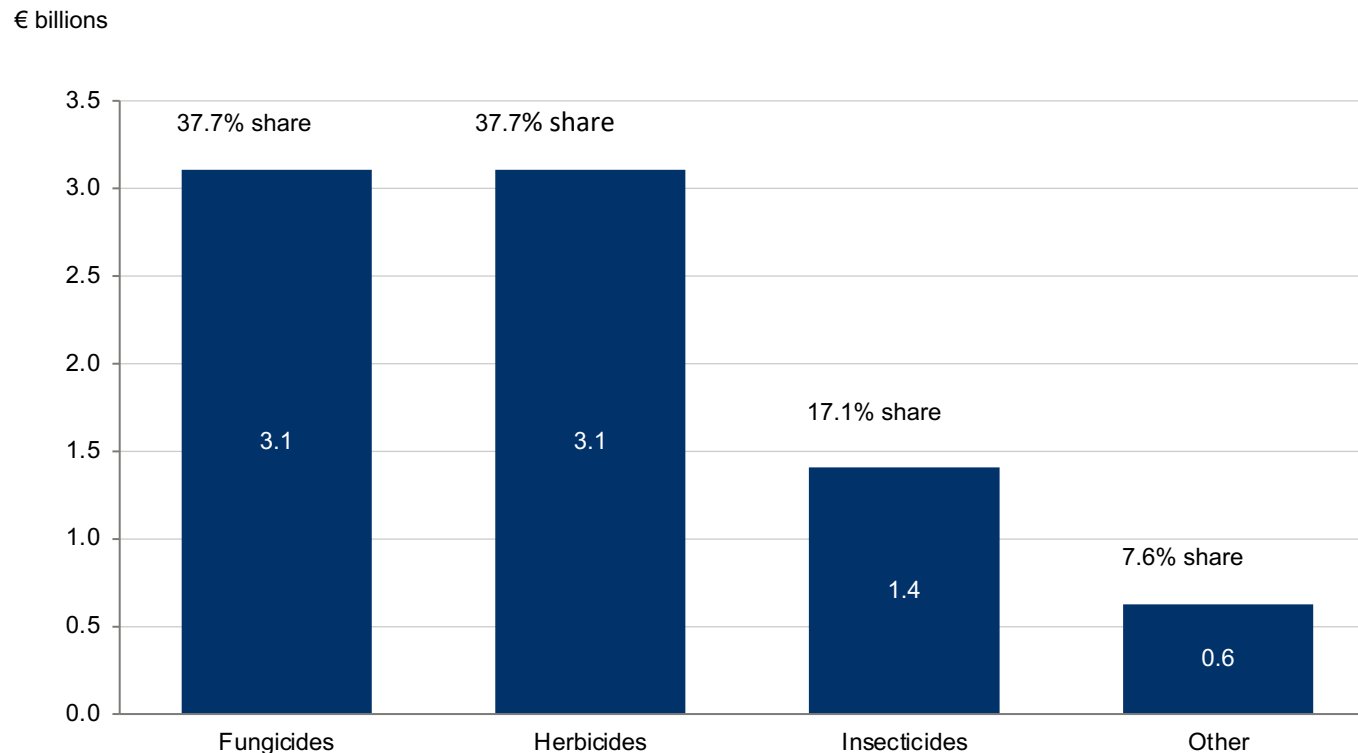
The value of crop protection production, 2017, by country



Other countries: Ireland (€40m), Bulgaria (€36m), Slovenia (€28m), Romania (€22m), Czech Republic (€12m), Sweden (€5m), Croatia (€3m), Finland (€3m), Latvia (€2m), Estonia (€1m), Lithuania (€0.2m)

CROP PROTECTION PRODUCTION BY TYPE

The value of crop protection production, 2017, by group



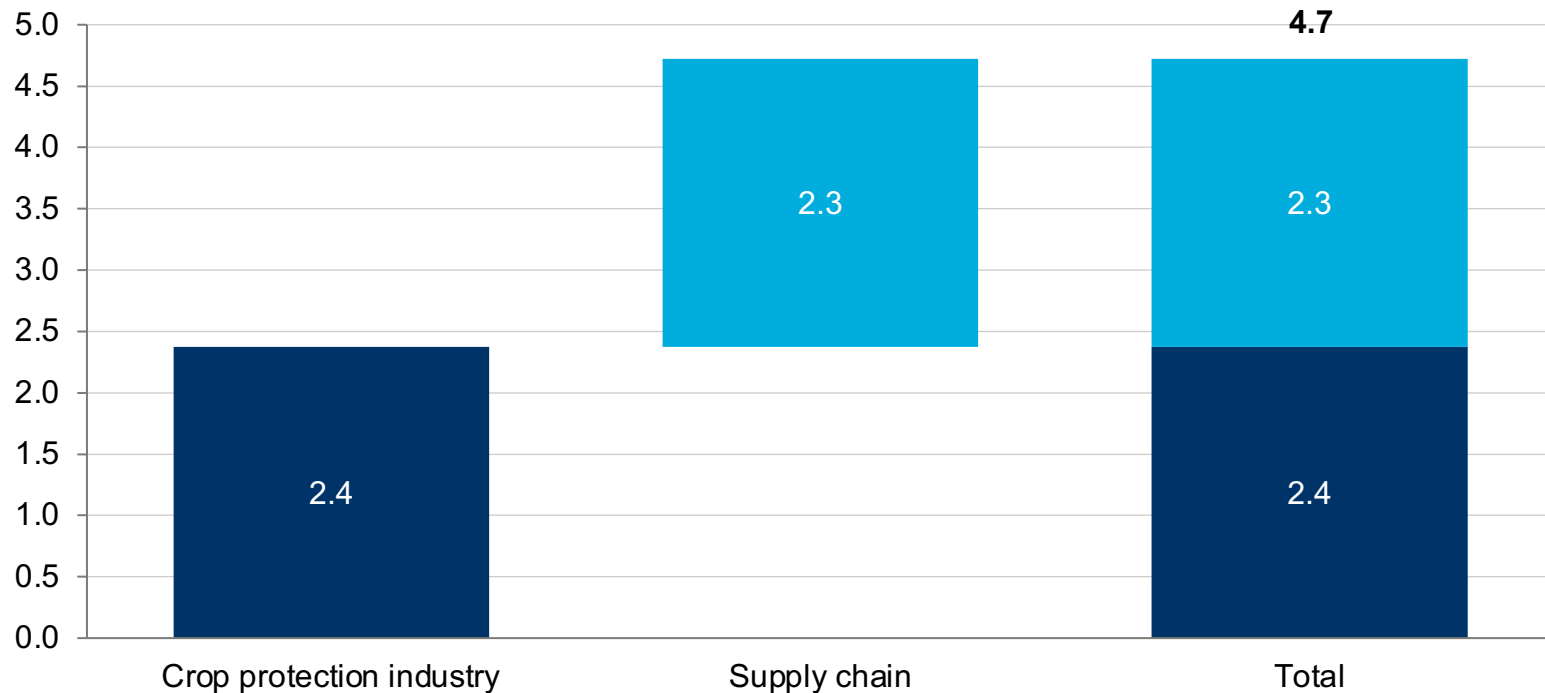
Source: Eurostat

RESULTS FOR THE EU28 IN AGGREGATE

IMPACT ON GROSS VALUE ADDED

The crop protection industry's gross value added contribution to GDP in the EU28, 2017

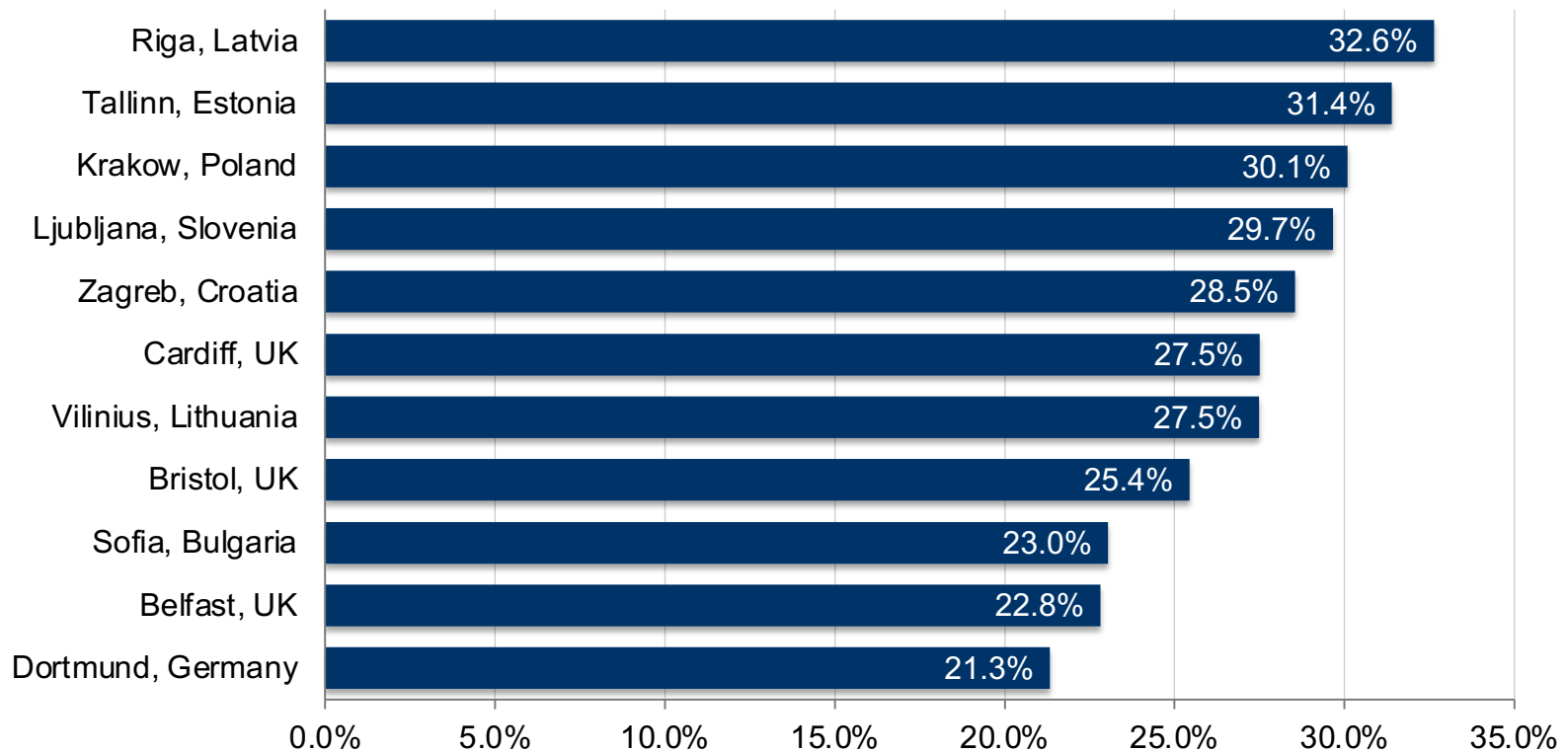
€ billions



Source: Oxford Economics

IS THAT LARGE?

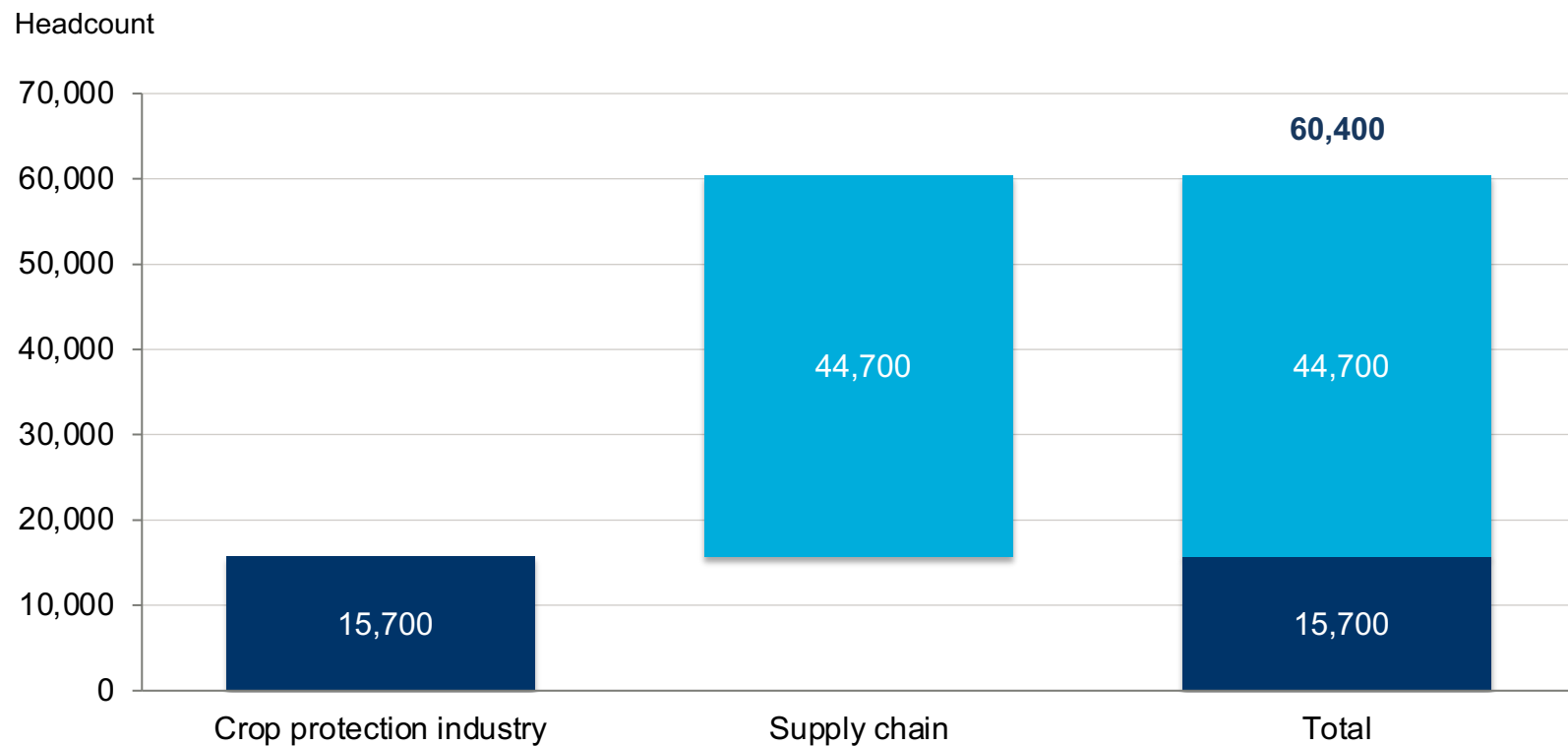
Gross value added supported by Europe's crop protection industry relative to that produced in selective cities



Source: Oxford Economics

IMPACT ON EMPLOYMENT IN THE EU28

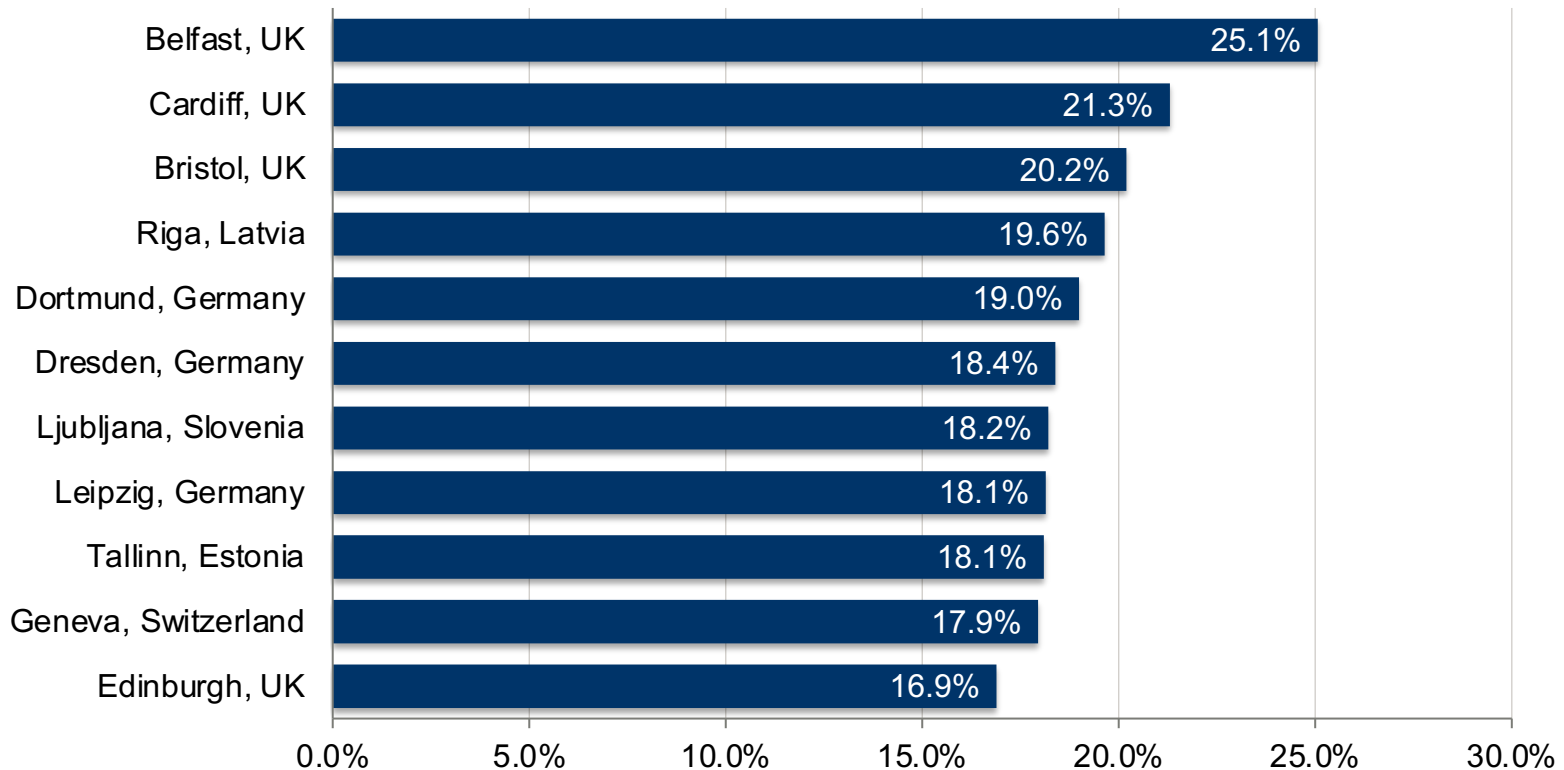
The employment supported by the crop protection industry in the EU28, 2017



Source: Oxford Economics

HOW DOES THAT COMPARE?

Total employment supported by Europe's crop protection industry relative to selected cities' employment levels

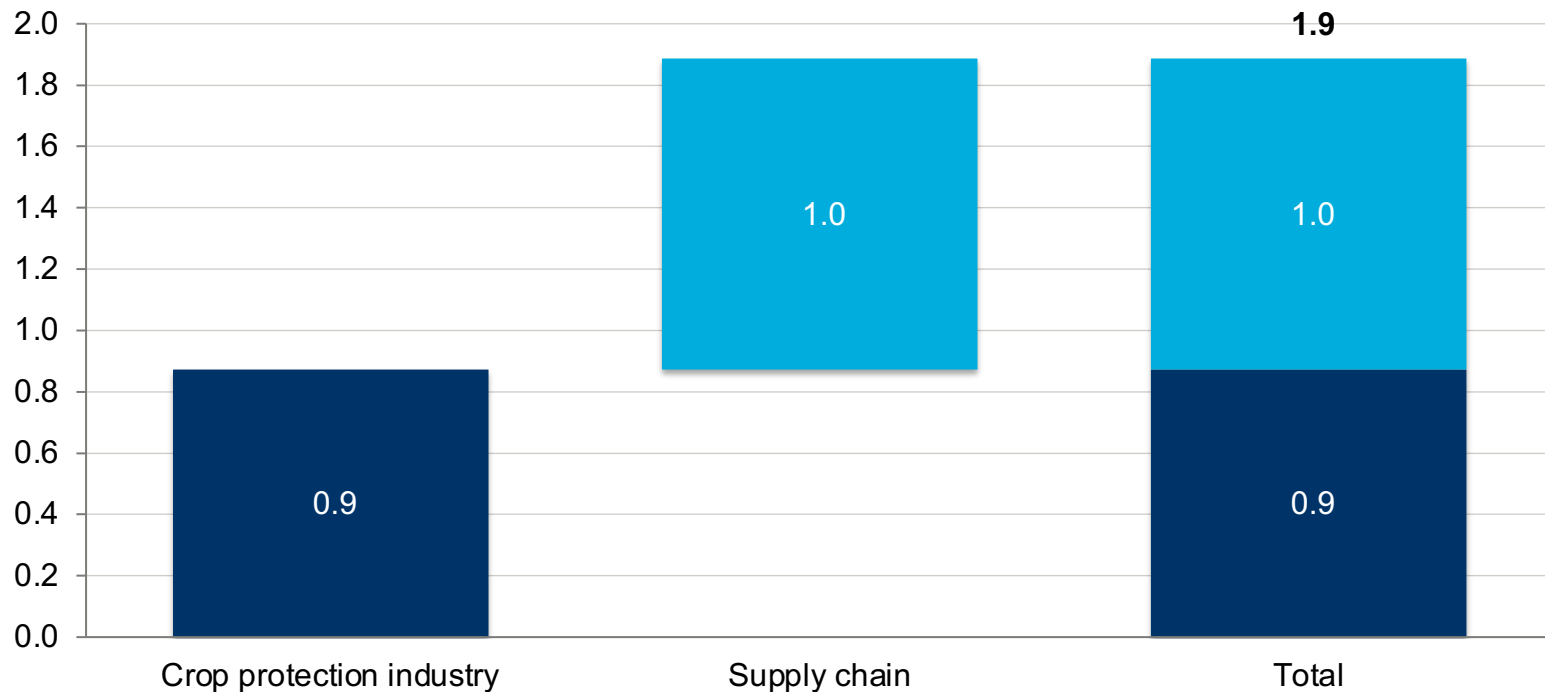


Source: Oxford Economics

THE VALUE OF TAX RECEIPTS STIMULATED

The crop protection industry's tax contribution in the EU28, 2017

€ billions



Source: Oxford Economics

RESULTS BY COUNTRY

WHERE DOES THE INDUSTRY STIMULATE GVA?

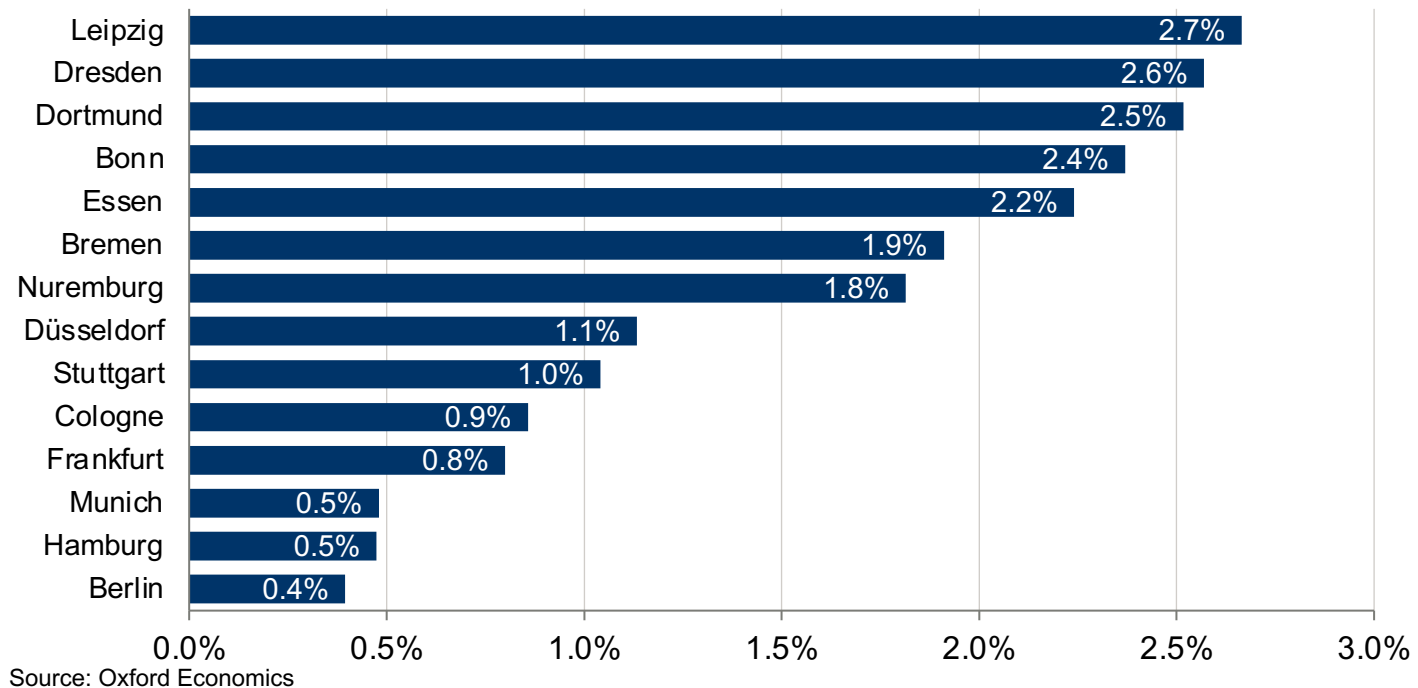


WHERE DOES THE INDUSTRY STIMULATE JOBS?



HOW BIG IS THE IMPACT ON GERMAN GVA?

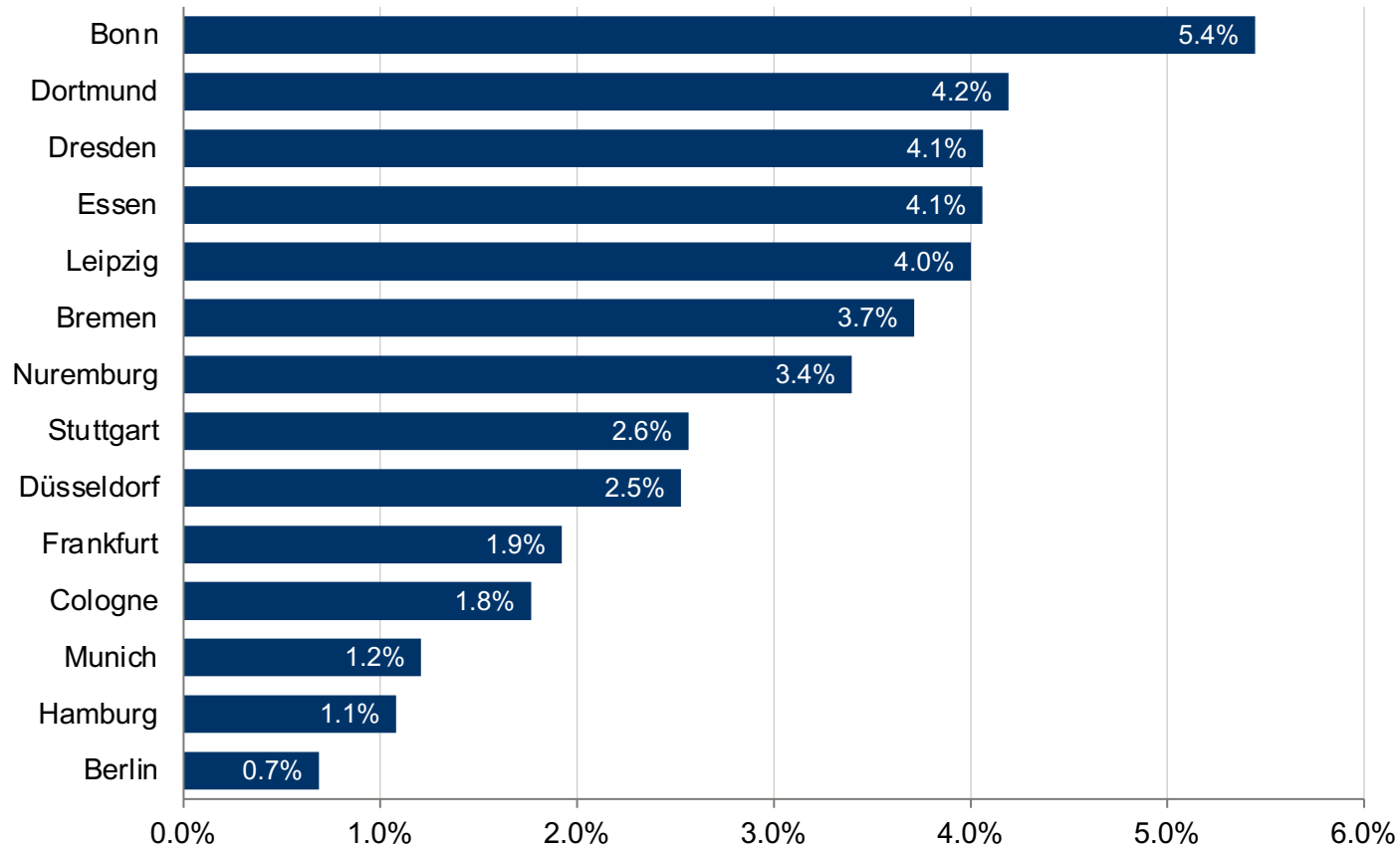
The GVA supported in Germany by the crop protection industry as a share of selected cities' GVA, 2017



“the economic activity supported by the German crop protection industry is equivalent in size to 2.5% of Dortmund's economy”

HOW BIG IS THE IMPACT ON JOBS IN GERMANY?

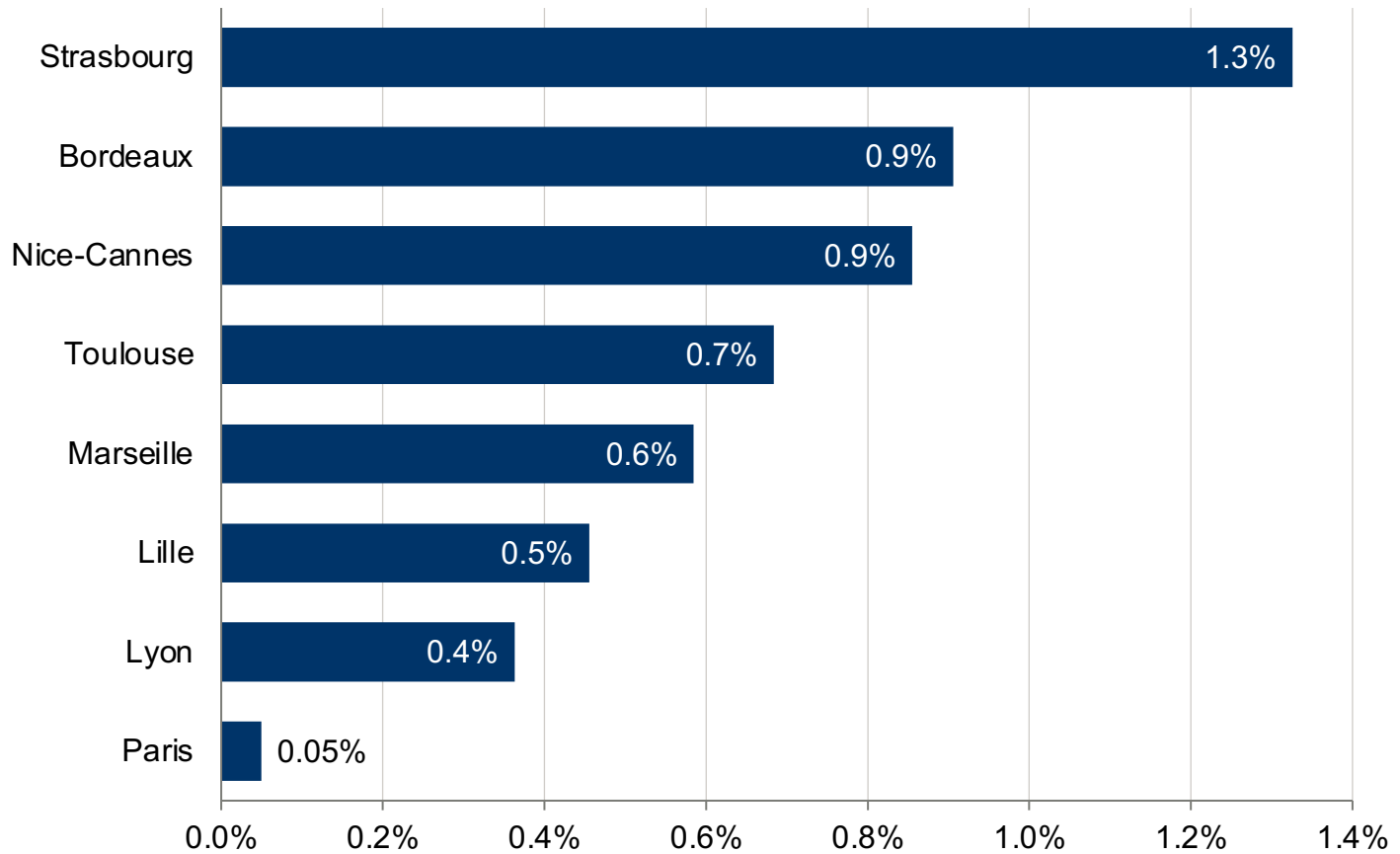
The jobs stimulated in Germany by crop protection industry as a share of selected German cities employment



Source: Oxford Economics

HOW BIG IS THE IMPACT ON FRENCH GVA?

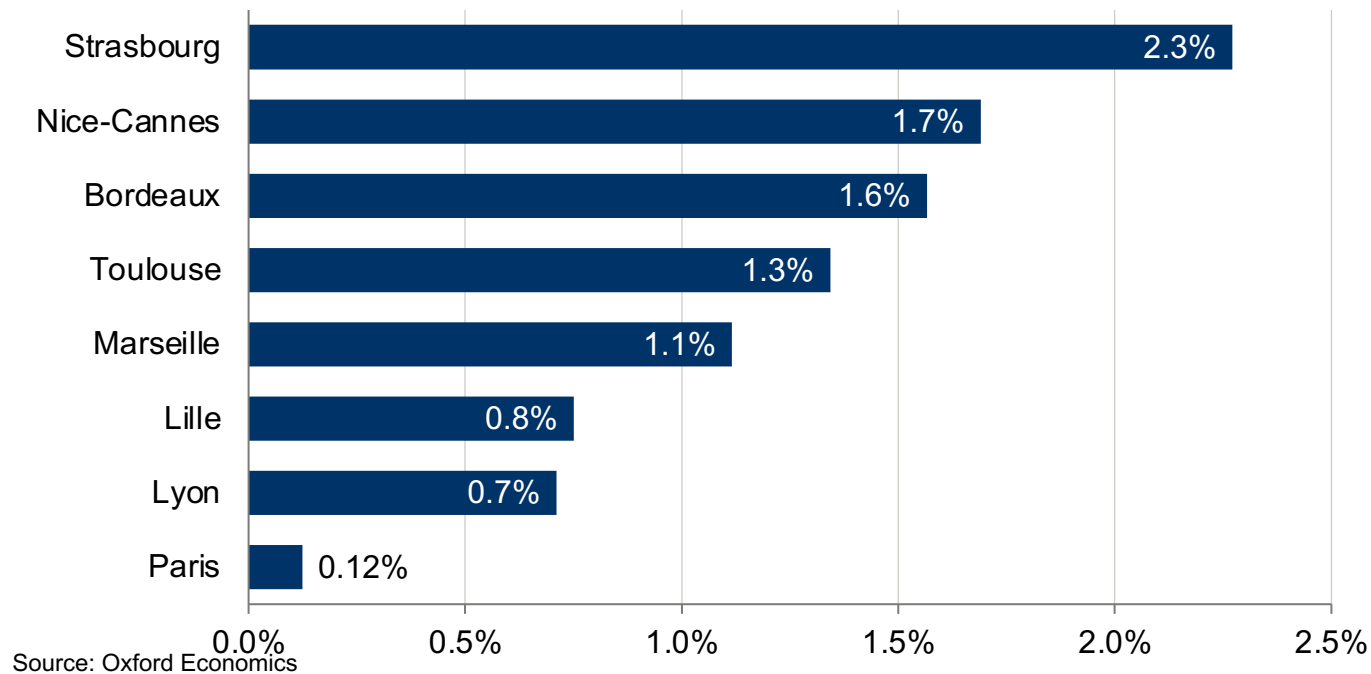
The GVA supported in France by the crop protection industry as a share of selected cities' GVA, 2017



Source: Oxford Economics

HOW BIG IS THE IMPACT ON JOBS IN FRANCE?

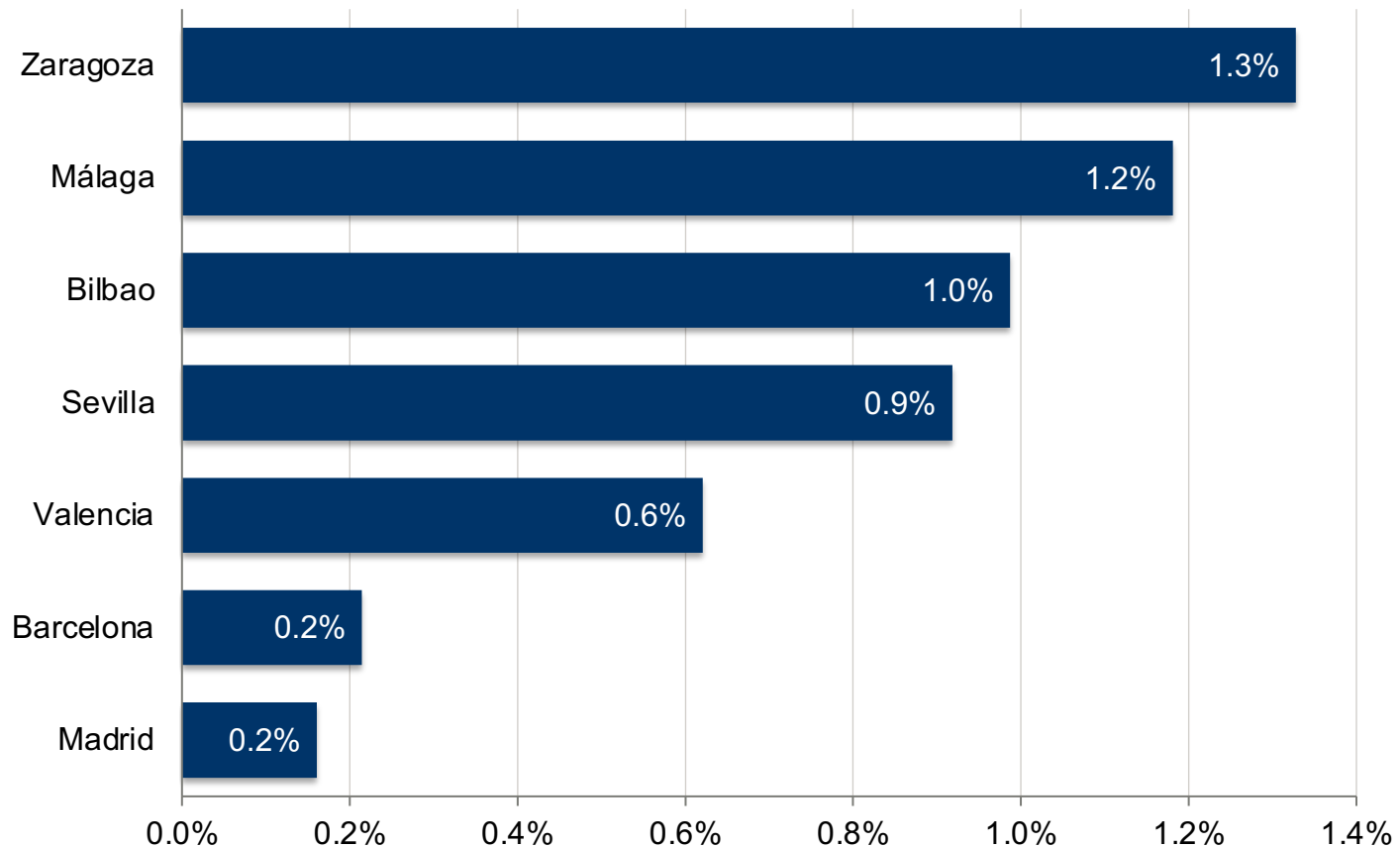
The jobs stimulated in France by crop protection industry as a share of selected French cities' employment



“the employment supported by the French crop protection industry is equivalent to 2.3% of the total employment in Strasbourg”

HOW BIG IS THE IMPACT ON SPANISH GVA?

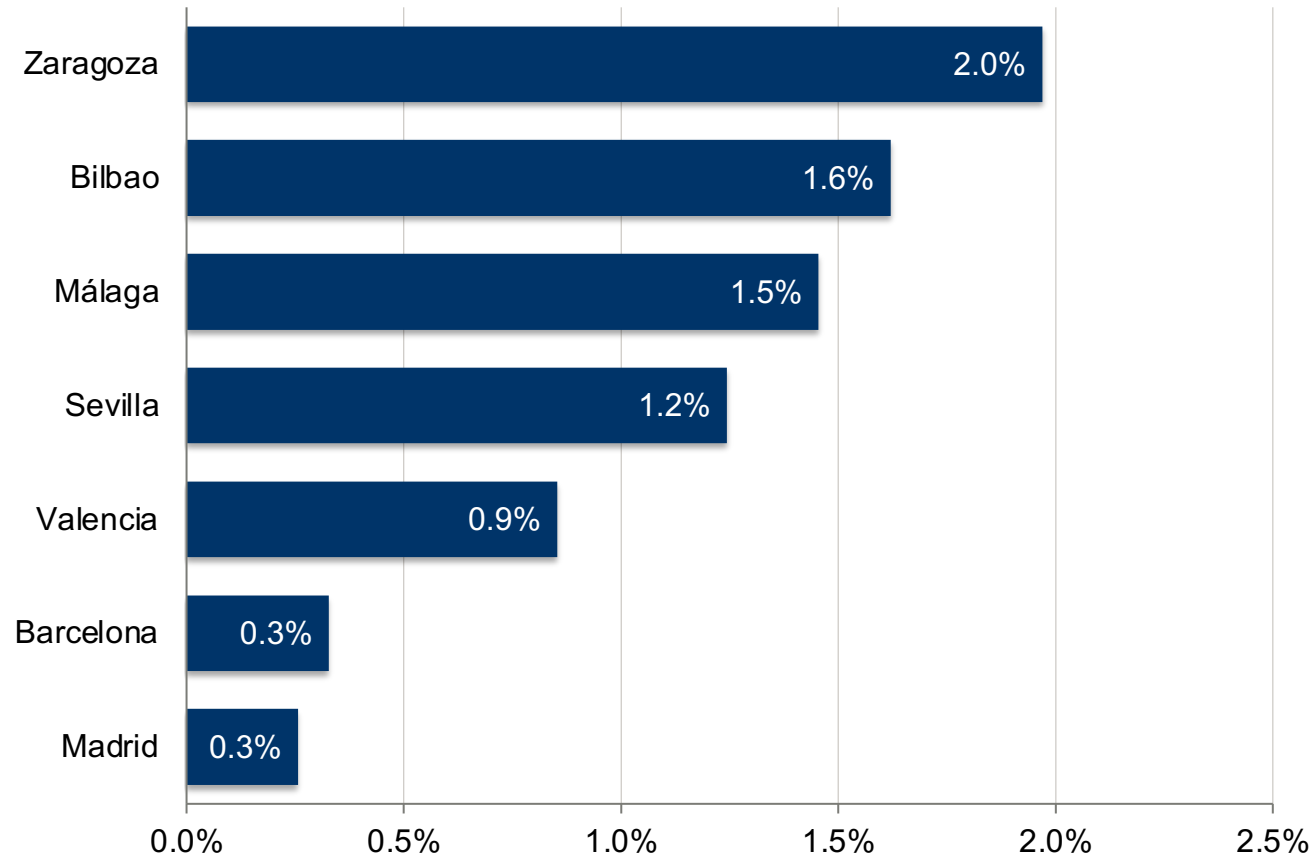
The GVA supported in Spain by the crop protection industry as a share of selected cities' GVA, 2017



Source: Oxford Economics

HOW BIG IS THE IMPACT ON JOBS IN SPAIN?

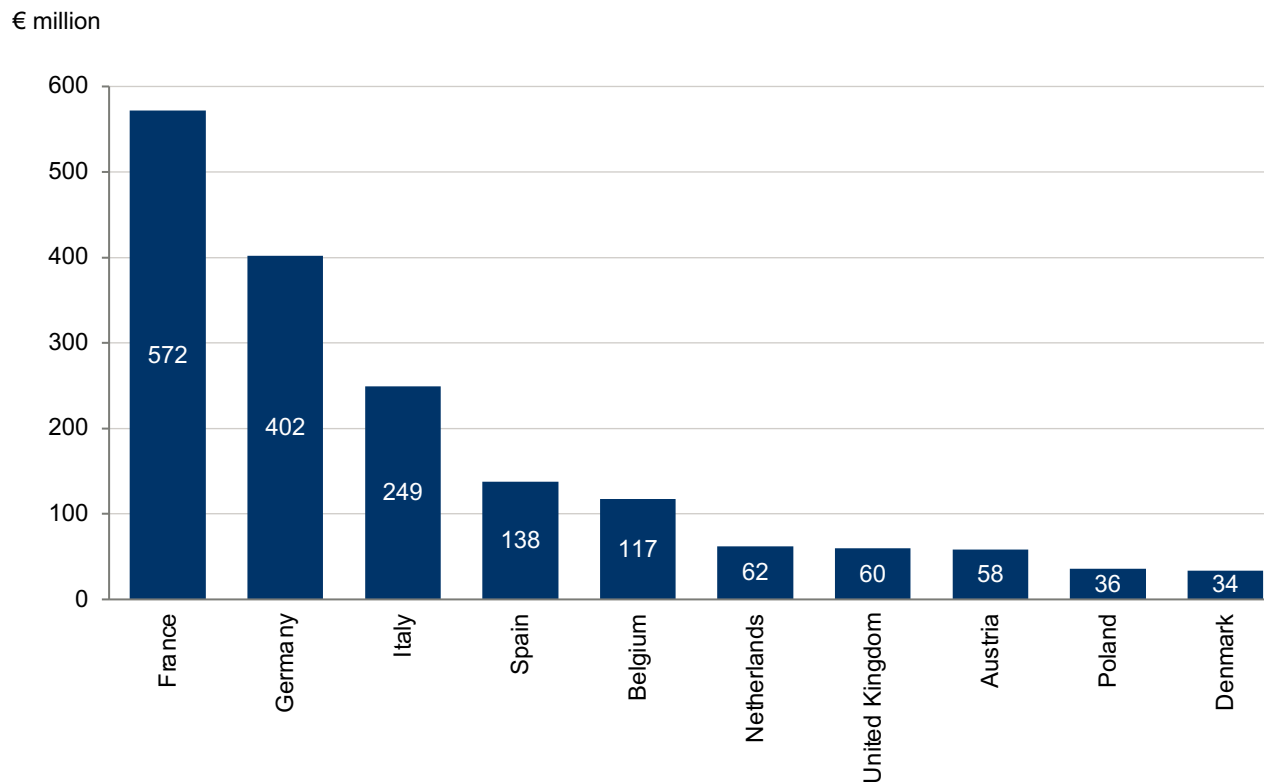
The jobs stimulated in Spain by crop protection industry as a share of selected Spanish cities' employment



Source: Oxford Economics

TAX RECEIPTS STIMULATED AROUND THE EU

The ten largest amount of tax receipts stimulated by crop protection industry, 2017



Source: Oxford Economics

WHAT COULD THE TAX BE SPENT ON?

Number of teachers' salaries that could be paid for by the tax revenues supported by crop protection industry's, 2017

Country	Tax receipts supported	Role	Number of teachers' salaries payable
France	€572mn	Primary teachers (starting salary)	21,900
Italy	€249mn	Primary teachers (starting salary)	9,860
Germany	€402mn	Primary teachers (starting salary)	8,030
Spain	€138mn	Primary teachers (starting salary)	4,000
Poland	€36mn	Teachers (starting salary)	2,580
Hungary	€24mn	Primary teachers (starting salary)	1,900
Netherlands	€62mn	Primary teachers (starting salary)	1,800
Austria	€58mn	Teachers (starting salary)	1,620
UK	€60mn	Teachers (average salary)	1,540
Greece	€21mn	Teachers (starting salary)	1,220
Czech Republic	€15mn	Teachers (starting salary)	890
Sweden	€28mn	Primary teachers (starting salary)	860
Denmark	€34mn	Teachers (starting salary)	850
Portugal	€19mn	Teachers (starting salary)	650
Slovakia	€5mn	Teachers (starting salary)	410
Slovenia	€9mn	Teachers (starting salary)	360
Ireland	€9mn	Teachers (starting salary)	290
Latvia	€2mn	Teachers (starting salary)	130
Lithuania	€2mn	Teachers (starting salary)	120
Finland	€3mn	Teachers (starting salary)	90
Estonia	€3mn	Teachers (starting salary)	50
Luxembourg	€2mn	Teachers (starting salary)	30

Source: OECD Education at a Glance

“The total tax revenues supported by the Italian crop protection industry are enough to finance the starting salaries of 9,860 primary school teachers across Italy.”

THANK YOU

RESULTS APPENDIX

SUMMARY OF THE RESULTS BY COUNTRY

Country	Gross value added			Employment			Tax receipts		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
	(€ million)			(People on a headcount basis)			(€ million)		
1 Germany	830	547	1,377	5,200	8,300	13,400	224	178	402
2 France	616	356	972	3,100	5,200	8,200	322	250	572
3 Spain	254	354	608	2,000	6,600	8,600	53	85	138
4 Italy	102	256	358	800	4,300	5,100	78	171	249
5 Belgium	136	93	229	600	1,200	1,700	50	68	117
6 United Kingdom	97	184	281	400	3,000	3,400	24	36	60
7 The Netherlands	50	74	124	200	900	1,200	25	37	62
8 Austria	46	78	125	300	1,100	1,400	25	33	58
9 Denmark	67	31	98	200	400	600	18	16	34
10 Hungary	40	34	74	500	1,500	2,000	12	12	24
11 Poland	31	81	113	800	3,500	4,300	10	26	36
12 Portugal	21	50	71	300	1,700	2,000	3	16	19
13 Greece	36	23	60	500	800	1,300	7	14	21
14 Ireland	12	18	30	50	140	190	4	4	9
15 Bulgaria	11	11	22	400	1,100	1,600	4	6	9
16 Slovenia	8	8	16	90	220	320	2	6	9
17 Romania	7	30	38	300	2,000	2,300	3	6	9
18 Czech Republic	3	32	35	100	1,000	1,100	1	14	15
19 Sweden	2	37	38	20	430	440	6	22	28
20 Croatia	1	6	7	20	280	300	0	2	2
21 Finland	1	16	17	0	210	220	0	3	3
22 Latvia	1	2	3	20	90	110	0	1	2
23 Estonia	0	2	2	10	70	70	0	1	1
24 Lithuania	0	4	4	0	150	150	0	2	2
25 Luxembourg	0	5	5	0	40	40	0	2	2
26 Slovakia	0	13	13	0	390	390	0	5	5
27 Malta	0	1	1	0	10	10	0	0	0
28 Cyprus	0	1	1	0	30	30	0	0	0
Total	2,373	2,347	4,720	15,700	44,700	60,400	872	1,015	1,887



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