

Supplementary Material

1. Cost of production

The production cost is calculated from the data published annually by the Farm Accountancy Network of Catalonia, which reports the general and specific costs for different crops expressed in euros per hectare. (XCAC, 2018). The data is calculated according to the European Accountancy Network and the value is used to set direct payments and to evaluate the sector within the various states and regions of the European Community. Regarding the products analyzed during the year 2018, the specific costs at regional level are present for onion and tomato cultivation, while for the other products we refer to the specific cost for the other types of horticultural crops. To estimate the provincial unit cost, the specific cost of cultivation was divided by the yield per hectare of the different products considered for the analysis. Table S4 shows the production costs that were used for the present study.

Table S1. Cost of production calculated at provincial level for the nine horticultural products selected for the present research

Product	Provinces	Cost of production per product(Euro/kg)
Watermelon	Barcelona	0,19 €
Watermelon	Girona	0,17 €
Watermelon	Lleida	0,26 €
Watermelon	Tarragona	0,19 €
Pepper	Barcelona	0,25 €
Pepper	Girona	0,22 €
Pepper	Lleida	0,30 €
Pepper	Tarragona	0,28 €
Green beans	Barcelona	0,44 €
Green beans	Girona	0,30 €
Green beans	Lleida	0,60 €
Green beans	Tarragona	0,47 €
Cabbage	Barcelona	0,24 €
Cabbage	Girona	0,26 €
Cabbage	Lleida	0,22 €
Cabbage	Tarragona	0,23 €
Lettuce	Barcelona	0,24 €
Lettuce	Girona	0,23 €
Lettuce	Lleida	0,23 €
Lettuce	Tarragona	0,23 €
Pumpkin	Barcelona	0,15 €
Pumpkin	Girona	0,21 €

Pumpkin	Lleida	0,22 €
Pumpkin	Tarragona	0,19 €
Zucchini	Barcelona	0,13 €
Zucchini	Girona	0,20 €
Zucchini	Lleida	0,22 €
Zucchini	Tarragona	0,24 €
Cucumber	Barcelona	0,19 €
Cucumber	Girona	0,20 €
Cucumber	Lleida	0,21 €
Cucumber	Tarragona	0,19 €
Tomato	Barcelona	0,18 €
Tomato	Girona	0,15 €
Tomato	Lleida	0,19 €
Tomato	Tarragona	0,19 €
Artichoke	Barcelona	0,50 €
Artichoke	Girona	0,55 €
Artichoke	Lleida	0,51 €
Artichoke	Tarragona	0,38 €
Cauliflower	Barcelona	0,30 €
Cauliflower	Girona	0,25 €
Cauliflower	Lleida	0,28 €
Cauliflower	Tarragona	0,28 €
Onion	Barcelona	0,18 €
Onion	Girona	0,15 €
Onion	Lleida	0,14 €
Onion	Tarragona	0,19 €

2. Percentile analysis in the time series

Number of products and the percentage of the agricultural production selected in the time series of 1 year (Table S2), 3 years (Table S3), 6 years (Table S4), and finally 9 years (Table S5).

Table S2. Comparison between the number of products and share of total horticultural production in the time series of 1 years (2020)

Percentile	Number of products	% of the total agricultural production
		2020
30th	26	98%
40th	22	95%
50th	18	90%
60th	15	85%
70th	13	81%

80th	8	67%
90th	4	49%

Table S3 Comparison between the number of products and share of total horticultural production in the time series of 3 years (2020-2018, 2017-2015, 2014-2012).

Percentile	Number of products	% of the total agricultural production		
		2020	2019	2018
30th	23	96%	97%	96%
40th	19	91%	92%	92%
50th	17	88%	89%	89%
60th	14	83%	84%	84%
70th	11	77%	78%	78%
80th	6	59%	60%	60%
90th	3	44%	44%	44%

Table S4. Comparison between the number of products and share of total horticultural production in the time series of 6 years (2020-2015).

Percentile	Number of products	% of the total agricultural production					
		2020	2019	2018	2017	2016	2015
30th	22	94%	95%	97%	98%	98%	98%
40th	19	91%	92%	92%	93%	94%	94%
50th	16	87%	88%	88%	87%	89%	89%
60th	13	81%	83%	82%	81%	83%	83%
70th	11	76%	78%	77%	76%	78%	77%
80th	6	59%	60%	60%	59%	63%	61%
90th	3	44%	44%	44%	47%	47%	48%

Table S5. Comparison between the number of products and share of total horticultural production in the time series of 9 years (2020-2012)

Percentile	Number of products	% of the total agricultural production								
		2020	2019	2018	2017	2016	2015	2014	2013	2012
30th	22	94%	95%	97%	98%	98%	98%	98%	98%	98%
40th	19	91%	92%	92%	93%	94%	94%	94%	93%	94%
50th	15	85%	86%	85%	87%	87%	87%	86%	85%	84%
60th	12	78%	79%	78%	78%	80%	80%	78%	77%	77%
70th	11	76%	75%	77%	76%	76%	77%	76%	78%	77%
80th	4	59%	60%	60%	59%	63%	61%	64%	63%	61%
90th	3	44%	44%	44%	47%	47%	48%	45%	44%	44%

References

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