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***Research article***

**Top exporters and regional export specialization**

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**Supplementary**

**Appendix**

**Table A.1.** Contribution of the top exporter to RCA, 2018.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Province | Number | RCA all firms | | RCA without top1 | | Granular impact on RCA | | |
|  | HS2 sectors | Sectors | Share exports | Sectors | Share exports | N. firms | Share sectors | Share exports |
| Álava | 87 | 16 | 87.3 | 7 | 74.4 | 9 | 10.3 | 12.9 |
| Albacete | 81 | 23 | 80.2 | 13 | 68.1 | 10 | 12.3 | 12.1 |
| Alicante | 94 | 39 | 83.8 | 27 | 77.5 | 12 | 12.8 | 6.3 |
| Almería | 81 | 12 | 91.4 | 4 | 74.9 | 8 | 9.9 | 16.5 |
| Ávila | 51 | 16 | 92 | 3 | 15.9 | 13 | 25.5 | 76.1 |
| Badajoz | 73 | 23 | 81.2 | 14 | 71.8 | 9 | 12.3 | 9.4 |
| Baleares | 85 | 15 | 76.6 | 4 | 8.7 | 11 | 12.9 | 67.9 |
| Barcelona | 95 | 39 | 70.5 | 29 | 64.4 | 10 | 10.5 | 6.1 |
| Burgos | 82 | 23 | 75.8 | 6 | 11.7 | 17 | 20.7 | 64.1 |
| Cáceres | 69 | 21 | 87.7 | 9 | 66.1 | 12 | 17.4 | 21.6 |
| Cádiz | 91 | 11 | 80.1 | 6 | 57.7 | 5 | 5.5 | 22.4 |
| Castellón | 91 | 14 | 71.4 | 6 | 57.1 | 8 | 8.8 | 14.3 |
| Ciudad Real | 69 | 13 | 75.1 | 6 | 46.9 | 7 | 10.1 | 28.2 |
| Córdoba | 82 | 15 | 77.8 | 7 | 73.2 | 8 | 9.8 | 4.6 |
| A Coruna | 92 | 23 | 68.8 | 14 | 58.6 | 9 | 9.8 | 10.2 |
| Cuenca | 64 | 14 | 79 | 9 | 75.1 | 5 | 7.8 | 3.9 |
| Girona | 91 | 29 | 70.2 | 17 | 52.7 | 12 | 13.2 | 17.5 |
| Granada | 82 | 19 | 77.1 | 7 | 50.8 | 12 | 14.6 | 26.3 |
| Guadalajara | 77 | 21 | 84.5 | 7 | 28.7 | 14 | 18.2 | 55.8 |
| Guipúzcoa | 87 | 18 | 80.8 | 8 | 61.2 | 10 | 11.5 | 19.6 |
| Huelva | 68 | 11 | 96.4 | 4 | 59.8 | 7 | 10.3 | 36.6 |
| Huesca | 74 | 22 | 79.8 | 10 | 65.5 | 12 | 16.2 | 14.3 |
| Jaén | 73 | 15 | 87.3 | 4 | 21.3 | 11 | 15.1 | 66.0 |
| León | 77 | 19 | 94.1 | 5 | 44.6 | 14 | 18.2 | 49.5 |
| Lleida | 88 | 24 | 79 | 12 | 72.5 | 12 | 13.6 | 6.5 |
| La Rioja | 79 | 25 | 81.6 | 11 | 56.1 | 14 | 17.7 | 25.5 |
| Lugo | 64 | 13 | 87.3 | 7 | 36.3 | 6 | 9.4 | 51.0 |
| Madrid | 95 | 23 | 56.4 | 10 | 29.3 | 13 | 13.7 | 27.1 |
| Málaga | 89 | 22 | 67.8 | 9 | 53.7 | 13 | 14.6 | 14.1 |
| Murcia | 94 | 23 | 86.4 | 13 | 71.8 | 10 | 10.6 | 14.6 |
| Navarra | 91 | 18 | 62.9 | 9 | 58.3 | 9 | 9.9 | 4.6 |
| Orense | 77 | 21 | 87.9 | 8 | 43.9 | 13 | 16.9 | 44.0 |
| Asturias | 86 | 20 | 76.4 | 10 | 51.2 | 10 | 11.6 | 25.2 |
| Palencia | 63 | 5 | 95.1 | 2 | 8.7 | 3 | 4.8 | 86.4 |
| Las Palmas | 82 | 12 | 74.2 | 7 | 69.2 | 5 | 6.1 | 5.0 |
| Pontevedra | 94 | 15 | 81.6 | 7 | 74.4 | 8 | 8.5 | 7.2 |
| Salamanca | 70 | 23 | 85.1 | 12 | 56.5 | 11 | 15.7 | 28.6 |
| Tenerife | 73 | 9 | 86.8 | 3 | 25.7 | 6 | 8.2 | 61.1 |
| Cantabria | 84 | 19 | 68.5 | 10 | 45.1 | 9 | 10.7 | 23.4 |
| Segovia | 63 | 20 | 79.6 | 13 | 64.4 | 7 | 11.1 | 15.2 |
| Sevilla | 92 | 16 | 79.6 | 7 | 68.2 | 9 | 9.8 | 11.4 |
| Soria | 52 | 18 | 94.2 | 4 | 38.3 | 14 | 26.9 | 55.9 |
| Tarragona | 92 | 26 | 76.8 | 8 | 38.4 | 18 | 19.6 | 38.4 |
| Teruel | 58 | 17 | 82.8 | 8 | 50.6 | 9 | 15.5 | 32.2 |
| Toledo | 83 | 35 | 74 | 17 | 48.9 | 18 | 21.7 | 25.1 |
| Valencia | 95 | 30 | 72.2 | 15 | 66.7 | 15 | 15.8 | 5.5 |
| Valladolid | 82 | 8 | 89.9 | 4 | 55.3 | 4 | 4.9 | 34.6 |
| Vizcaya | 90 | 20 | 76.5 | 7 | 30.4 | 13 | 14.4 | 46.1 |
| Zamora | 54 | 18 | 94.3 | 6 | 73.1 | 12 | 22.2 | 21.2 |
| Zaragoza | 90 | 21 | 65.6 | 5 | 44.6 | 16 | 17.8 | 21.0 |
| Average | 80 | 19 | 80.2 | 9 | 52.4 | 10 | 13.3 | 27.9 |
| Maximum | 95 | 39 | 96.4 | 29 | 77.5 | 18 | 26.9 | 86.4 |
| Minimum | 51 | 5 | 56.4 | 2 | 8.7 | 3 | 4.8 | 3.9 |

Note: Own elaboration using Comtrade and Spanish AEAT-Customs data.

**Table A.2.** Contribution of the top exporter to RCA, 1998.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Province | Number | RCA all firms | | RCA without top1 | | Granular impact on RCA | | |
|  | HS2 sectors | Sectors | Share exports | Sectors | Share exports | N. firms | Share sectors | Share exports |
| Álava | 81 | 11 | 75.3 | 5 | 16.5 | 6 | 7.4 | 58.8 |
| Albacete | 71 | 22 | 79.3 | 12 | 67.6 | 10 | 14.1 | 11.7 |
| Alicante | 92 | 24 | 85.7 | 18 | 80.5 | 6 | 6.5 | 5.2 |
| Almería | 66 | 5 | 94.7 | 4 | 94.4 | 1 | 1.5 | 0.3 |
| Ávila | 50 | 10 | 95.1 | 1 | 85.8 | 9 | 18.0 | 9.3 |
| Badajoz | 77 | 23 | 70.6 | 14 | 66.2 | 9 | 11.7 | 4.4 |
| Baleares | 70 | 13 | 79.6 | 8 | 65 | 5 | 7.1 | 14.6 |
| Barcelona | 95 | 36 | 61.4 | 23 | 50.6 | 13 | 13.7 | 10.8 |
| Burgos | 78 | 22 | 85.6 | 8 | 46.7 | 14 | 17.9 | 38.9 |
| Cáceres | 59 | 17 | 85.3 | 10 | 68.7 | 7 | 11.9 | 16.6 |
| Cádiz | 85 | 13 | 79 | 7 | 19.8 | 6 | 7.1 | 59.2 |
| Castellón | 81 | 10 | 88.5 | 5 | 81.7 | 5 | 6.2 | 6.8 |
| Ciudad Real | 59 | 11 | 84 | 6 | 48.5 | 5 | 8.5 | 35.5 |
| Córdoba | 69 | 13 | 88.6 | 10 | 87 | 3 | 4.3 | 1.6 |
| A Coruna | 85 | 23 | 82.6 | 10 | 46.6 | 13 | 15.3 | 36.0 |
| Cuenca | 39 | 8 | 97.5 | 5 | 28.7 | 3 | 7.7 | 68.8 |
| Girona | 84 | 29 | 61 | 14 | 46.8 | 15 | 17.9 | 14.2 |
| Granada | 66 | 16 | 89.9 | 4 | 68.8 | 12 | 18.2 | 21.1 |
| Guadalajara | 50 | 15 | 84.7 | 5 | 39.4 | 10 | 20.0 | 45.3 |
| Guipúzcoa | 86 | 21 | 86 | 9 | 57.8 | 12 | 14.0 | 28.2 |
| Huelva | 67 | 11 | 87.8 | 5 | 60.5 | 6 | 9.0 | 27.3 |
| Huesca | 60 | 18 | 79.3 | 6 | 40.5 | 12 | 20.0 | 38.8 |
| Jaén | 56 | 14 | 82.1 | 3 | 42.4 | 11 | 19.6 | 39.7 |
| León | 55 | 17 | 86.3 | 5 | 43.6 | 12 | 21.8 | 42.7 |
| Lleida | 73 | 24 | 82.9 | 10 | 65.8 | 14 | 19.2 | 17.1 |
| La Rioja | 78 | 20 | 79.4 | 10 | 61.8 | 10 | 12.8 | 17.6 |
| Lugo | 52 | 11 | 94.9 | 5 | 43 | 6 | 11.5 | 51.9 |
| Madrid | 95 | 19 | 62.6 | 9 | 37.3 | 10 | 10.5 | 25.3 |
| Málaga | 82 | 20 | 74.6 | 10 | 69.1 | 10 | 12.2 | 5.5 |
| Murcia | 84 | 21 | 85.7 | 13 | 72.9 | 8 | 9.5 | 12.8 |
| Navarra | 83 | 11 | 73.4 | 7 | 68.6 | 4 | 4.8 | 4.8 |
| Orense | 74 | 15 | 79.7 | 7 | 68.6 | 8 | 10.8 | 11.1 |
| Asturias | 76 | 17 | 76.1 | 6 | 46.7 | 11 | 14.5 | 29.4 |
| Palencia | 43 | 4 | 97.7 | 0 | 0 | 4 | 9.3 | 97.7 |
| Las Palmas | 62 | 11 | 90.5 | 4 | 84.6 | 7 | 11.3 | 5.9 |
| Pontevedra | 84 | 15 | 88.3 | 6 | 81.9 | 9 | 10.7 | 6.4 |
| Salamanca | 70 | 25 | 93.1 | 10 | 43.2 | 15 | 21.4 | 49.9 |
| Tenerife | 67 | 7 | 89 | 5 | 88.2 | 2 | 3.0 | 0.8 |
| Cantabria | 69 | 21 | 87.7 | 6 | 26.7 | 15 | 21.7 | 61.0 |
| Segovia | 43 | 20 | 81 | 8 | 35.8 | 12 | 27.9 | 45.2 |
| Sevilla | 90 | 17 | 76.3 | 9 | 52.3 | 8 | 8.9 | 24.0 |
| Soria | 34 | 13 | 89.2 | 4 | 19.6 | 9 | 26.5 | 69.6 |
| Tarragona | 87 | 26 | 74.5 | 14 | 59.4 | 12 | 13.8 | 15.1 |
| Teruel | 33 | 12 | 86.1 | 3 | 15.5 | 9 | 27.3 | 70.6 |
| Toledo | 77 | 21 | 84.3 | 12 | 47.9 | 9 | 11.7 | 36.4 |
| Valencia | 93 | 26 | 69.3 | 17 | 38.5 | 9 | 9.7 | 30.8 |
| Valladolid | 72 | 6 | 94.1 | 3 | 61.2 | 3 | 4.2 | 32.9 |
| Vizcaya | 82 | 18 | 54.8 | 7 | 27.5 | 11 | 13.4 | 27.3 |
| Zamora | 43 | 17 | 91.9 | 6 | 49.3 | 11 | 25.6 | 42.6 |
| Zaragoza | 86 | 7 | 69.8 | 2 | 67 | 5 | 5.8 | 2.8 |
| Average | 70 | 17 | 82 | 8 | 54 | 9 | 13.1 | 28.6 |
| Maximum | 95 | 36 | 97.7 | 23 | 94.4 | 15 | 27.9 | 97.7 |
| Minimum | 33 | 4 | 54.8 | 0 | 0 | 1 | 1.5 | 0.3 |

Note: Own elaboration using Comtrade and Spanish AEAT-Customs data.



**Figure A.1.** Distribution of total exports and main export (2-digit HS) sector by province in 2018. Source: Own elaboration.



**Figure A.2.** Percentage of total exports (blue color scale) and number of affected sectors in each province (in parentheses) due to the loss of comparative advantage if the top exporter is eliminated in a particular sector. Year 1998. Note: Own elaboration using AEAT-Customs data.

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