



Research article

Cyclical vulnerability and resilience in advertising firms: A regional financial perspective

Brenda Vázquez-La Hoz, Jessica Fernández-Vázquez, Aida Galiano and Juan Manuel Martín-Álvarez*

Departments of Quantitative Methods for Economics and Business and Marketing and Market Research, Faculty of Economics and Business, Universidad Internacional de La Rioja, Logroño, Spain

* **Correspondence:** Email: juanmanuel.martin@unir.net.

Supplementary

Appendix

Table A1. Effect of expansions on revenues.

Province	GDP+ ⇒ Revenue +	GDP+ ⇒ Revenue -	Unem- ⇒ Revenue +	Unem- ⇒ Revenue -
A Coruña	0.713 (0.544)	6.592*** (0.000)	0.337 (0.799)	0.965 (0.408)
Alava	1.192 (0.311)	2.738** (0.042)	2.481* (0.084)	1.065 (0.363)
Albacete	2.042 (0.106)	0.882 (0.450)	1.106 (0.346)	1.446 (0.236)
Alicante	1.022 (0.382)	0.868 (0.457)	1.860 (0.134)	1.126 (0.337)
Almería	0.064 (0.979)	2.449* (0.062)	1.133 (0.335)	0.737 (0.530)
Asturias	1.270 (0.283)	1.134 (0.334)	0.871 (0.456)	0.203 (0.894)
Avila	2.421* (0.068)	0.111 (0.895)	1.556 (0.203)	0.799 (0.496)
Badajoz	1.229 (0.298)	0.987 (0.398)	1.438 (0.230)	0.491 (0.689)
Baleares	2.957** (0.031)	3.152 (0.110)	5.254*** (0.001)	2.491 (0.110)
Barcelona	1.960 (0.118)	2.389* (0.067)	4.062*** (0.007)	2.066 (0.102)
Burgos	0.010 (0.999)	0.993 (0.371)	1.380 (0.252)	0.129 (0.879)

Cáceres	1.823 (0.142)	0.526 (0.591)	0.299 (0.826)	0.625 (0.599)
Cádiz	2.468* (0.060)	1.633 (0.196)	1.092 (0.351)	0.079 (0.972)
Cantabria	4.555*** (0.003)	0.894 (0.443)	2.400* (0.091)	0.184 (0.832)
Castellón	0.791 (0.499)	3.292** (0.020)	0.152 (0.929)	0.734 (0.532)
Ciudad Real	1.108 (0.345)	2.062 (0.103)	1.480 (0.218)	3.133** (0.025)
Córdoba	3.742** (0.011)	2.622 (0.110)	1.018 (0.384)	0.748 (0.524)
Cuenca	2.409* (0.091)	0.146 (0.864)	3.540** (0.015)	0.167 (0.847)
Girona	0.232 (0.874)	0.283 (0.837)	0.679 (0.565)	0.148 (0.863)
Granada	4.023*** (0.007)	0.512 (0.674)	1.956 (0.119)	0.272 (0.846)
Guadalajara	0.269 (0.848)	0.770 (0.511)	0.276 (0.843)	0.747 (0.524)
Guipuzcoa	1.343 (0.258)	3.541** (0.014)	0.657 (0.579)	2.489* (0.059)
Huelva	1.682 (0.169)	2.239* (0.082)	0.432 (0.730)	0.268 (0.765)
Huesca	0.101 (0.960)	0.710 (0.546)	0.012 (0.988)	1.085 (0.355)
Jaen	1.280 (0.280)	2.131* (0.095)	0.829 (0.478)	1.882 (0.153)
La Rioja	2.104* (0.098)	4.059 (0.110)	0.148 (0.931)	0.169 (0.918)
Las Palmas de Gran Canaria	5.363*** (0.001)	2.275 (0.110)	6.550*** (0.000)	1.719 (0.161)
León	1.240 (0.294)	0.910 (0.403)	1.504 (0.212)	0.790 (0.454)
Lleida	1.450 (0.227)	0.813 (0.487)	2.351* (0.071)	1.715 (0.162)
Lugo	0.265 (0.851)	0.280 (0.840)	1.992 (0.113)	1.909 (0.126)
Madrid	0.948 (0.416)	3.225** (0.022)	0.937 (0.422)	4.333*** (0.005)
Málaga	1.435 (0.230)	3.528** (0.014)	0.118 (0.949)	1.093 (0.351)
Murcia	1.154 (0.326)	1.561 (0.197)	2.875** (0.035)	1.491 (0.215)
Navarra	0.025 (0.995)	2.226* (0.083)	0.294 (0.829)	1.266 (0.284)
Ourense	3.364** (0.018)	0.278 (0.841)	0.993 (0.371)	2.950* (0.053)
Palencia	0.543 (0.581)	0.488 (0.614)	0.641 (0.589)	2.005 (0.113)
Pontevedra	0.026 (0.994)	0.544 (0.652)	2.145* (0.092)	3.153 (0.110)
Salamanca	0.525 (0.665)	1.831 (0.140)	0.928 (0.427)	0.803 (0.492)
Santa Cruz de Tenerife	9.972*** (0.000)	1.753 (0.154)	0.489 (0.690)	0.303 (0.824)
Segovia	1.677 (0.188)	0.813 (0.444)	1.288 (0.277)	1.770 (0.172)
Sevilla	0.140 (0.936)	0.251 (0.860)	0.515 (0.598)	1.519 (0.219)
Soria	0.266 (0.850)	0.158 (0.854)	0.166 (0.848)	0.073 (0.929)
Tarragona	2.213* (0.085)	0.090 (0.965)	0.180 (0.910)	0.231 (0.875)
Teruel	0.884 (0.416)	0.635 (0.532)	0.746 (0.477)	2.005 (0.141)
Toledo	1.886 (0.130)	1.677 (0.170)	0.873 (0.455)	0.684 (0.562)
Valencia	2.435* (0.063)	5.643 (0.110)	0.416 (0.741)	1.171 (0.319)
Valladolid	3.807*** (0.010)	5.656 (0.110)	0.687 (0.560)	0.557 (0.643)
Vizcaya	0.252 (0.860)	0.314 (0.815)	0.113 (0.952)	2.631** (0.048)
Zamora	1.163 (0.323)	1.183 (0.315)	1.814 (0.144)	0.950 (0.416)
Zaragoza	0.985 (0.399)	13.516*** (0.000)	0.467 (0.705)	1.048 (0.370)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A2. Effect of recessions on revenues.

Province	GDP- \Rightarrow Revenue -	GDP- \Rightarrow Revenue +	Unem+ \Rightarrow Revenue +	Unem+ \Rightarrow Revenue -
A Coruña	2.782** (0.039)	0.554 (0.646)	4.845 (0.110)	6.478*** (0.000)
Alava	0.730 (0.534)	3.666** (0.012)	0.764 (0.514)	2.638** (0.048)
Albacete	0.651 (0.583)	1.190 (0.312)	0.458 (0.712)	1.231 (0.292)
Alicante	1.100 (0.348)	1.578 (0.193)	2.092* (0.099)	0.129 (0.943)
Almería	2.088* (0.100)	0.607 (0.610)	3.869 (0.110)	3.868*** (0.009)
Asturias	0.410 (0.746)	2.461* (0.061)	0.568 (0.636)	1.487 (0.216)
Avila	1.722 (0.182)	0.696 (0.500)	2.661* (0.073)	1.813 (0.167)
Badajoz	0.274 (0.844)	0.423 (0.736)	2.318* (0.099)	0.877 (0.452)
Baleares	3.362** (0.018)	6.996 (0.110)	1.392 (0.243)	4.195*** (0.006)
Barcelona	3.452** (0.016)	9.247 (0.110)	1.132 (0.334)	2.797** (0.039)
Burgos	0.204 (0.893)	0.033 (0.992)	0.483 (0.694)	0.491 (0.689)
Cáceres	0.576 (0.562)	0.148 (0.862)	0.946 (0.418)	1.293 (0.276)
Cádiz	0.257 (0.856)	4.534*** (0.004)	0.406 (0.749)	0.491 (0.689)
Cantabria	0.700 (0.552)	1.568 (0.195)	2.352* (0.070)	1.976 (0.115)
Castellón	0.564 (0.639)	1.763 (0.152)	3.837 (0.110)	8.707*** (0.000)
Ciudad Real	0.220 (0.882)	0.721 (0.539)	1.069 (0.361)	3.628** (0.013)
Córdoba	0.356 (0.785)	0.637 (0.591)	3.958 (0.110)	2.848** (0.036)
Cuenca	0.341 (0.796)	0.222 (0.801)	1.308 (0.271)	0.333 (0.717)
Girona	0.144 (0.933)	4.072*** (0.007)	0.355 (0.785)	0.538 (0.584)
Granada	0.986 (0.398)	2.893** (0.034)	1.534 (0.204)	1.090 (0.352)
Guadalajara	0.827 (0.479)	0.427 (0.734)	3.997 (0.110)	2.897** (0.034)
Guipuzcoa	1.265 (0.284)	2.517* (0.056)	0.880 (0.451)	5.172*** (0.001)
Huelva	1.152 (0.327)	0.342 (0.795)	0.515 (0.672)	1.303 (0.272)
Huesca	0.929 (0.426)	0.332 (0.802)	1.411 (0.238)	1.972 (0.117)
Jaen	3.416** (0.017)	1.486 (0.217)	5.631 (0.110)	8.935*** (0.000)
La Rioja	0.785 (0.502)	0.020 (0.996)	2.763 (0.110)	2.962** (0.031)
Las Palmas de Gran Canaria	1.359 (0.253)	6.066*** (0.000)	3.731** (0.011)	1.220 (0.301)
León	2.102* (0.098)	2.592 (0.110)	0.966 (0.408)	0.254 (0.858)
Lleida	0.358 (0.784)	1.322 (0.266)	0.717 (0.542)	0.922 (0.429)
Lugo	0.324 (0.808)	0.675 (0.568)	0.093 (0.911)	0.438 (0.726)
Madrid	6.302*** (0.000)	6.781 (0.110)	2.429 (0.110)	3.531** (0.014)
Málaga	0.926 (0.427)	0.180 (0.910)	1.389 (0.244)	3.808*** (0.010)
Murcia	0.851 (0.466)	0.714 (0.544)	1.737 (0.157)	2.667** (0.046)
Navarra	2.016 (0.110)	0.884 (0.449)	0.493 (0.687)	1.672 (0.171)
Ourense	3.406** (0.017)	1.531 (0.205)	0.574 (0.632)	3.197** (0.023)
Palencia	2.465* (0.062)	1.174 (0.320)	1.059 (0.348)	1.405 (0.247)
Pontevedra	1.128 (0.336)	2.093* (0.099)	0.249 (0.862)	0.113 (0.952)
Salamanca	1.191 (0.312)	1.369 (0.251)	0.165 (0.920)	1.173 (0.319)
Santa Cruz de Tenerife	0.541 (0.654)	0.228 (0.877)	3.752** (0.010)	0.909 (0.436)
Segovia	0.636 (0.530)	0.572 (0.634)	2.794** (0.040)	0.837 (0.434)

Sevilla	4.419*** (0.004)	4.293 (0.110)	0.247 (0.864)	2.577* (0.052)
Soria	0.100 (0.905)	0.188 (0.829)	0.259 (0.855)	0.529 (0.591)
Tarragona	0.216 (0.885)	0.906 (0.437)	1.343 (0.258)	0.467 (0.705)
Teruel	0.356 (0.701)	0.152 (0.859)	0.145 (0.933)	0.157 (0.855)
Toledo	1.380 (0.247)	0.283 (0.838)	1.633 (0.180)	0.479 (0.697)
Valencia	5.015*** (0.002)	2.413 (0.110)	3.045 (0.110)	6.604*** (0.000)
Valladolid	2.664** (0.046)	1.028 (0.379)	1.353 (0.255)	8.122*** (0.000)
Vizcaya	2.550* (0.054)	0.534 (0.659)	1.394 (0.243)	2.398* (0.066)
Zamora	1.745 (0.157)	1.442 (0.230)	0.455 (0.714)	0.963 (0.410)
Zaragoza	3.427** (0.016)	0.036 (0.991)	0.436 (0.727)	5.663*** (0.001)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A3. Effect of expansions on EBITDA.

Province	GDP+ \Rightarrow EBITDA +	GDP+ \Rightarrow EBITDA -	Unem- \Rightarrow EBITDA +	Unem- \Rightarrow EBITDA -
A Coruña	1.402 (0.240)	1.852 (0.135)	1.718 (0.161)	0.418 (0.740)
Alava	3.629** (0.012)	2.623 (0.110)	1.616 (0.199)	1.373 (0.254)
Albacete	1.554 (0.199)	1.093 (0.351)	0.610 (0.608)	1.937 (0.122)
Alicante	0.504 (0.680)	2.003 (0.111)	0.563 (0.640)	0.142 (0.935)
Almería	0.379 (0.685)	1.071 (0.360)	0.192 (0.902)	0.459 (0.711)
Asturias	0.415 (0.742)	1.105 (0.331)	0.956 (0.413)	0.585 (0.625)
Avila	0.354 (0.786)	0.334 (0.801)	0.090 (0.914)	1.442 (0.239)
Badajoz	0.522 (0.667)	0.931 (0.425)	0.270 (0.847)	0.197 (0.899)
Baleares	1.102 (0.347)	0.399 (0.754)	2.874** (0.035)	0.305 (0.822)
Barcelona	1.745 (0.155)	0.141 (0.936)	1.847 (0.136)	1.502 (0.212)
Burgos	0.145 (0.933)	0.880 (0.415)	0.483 (0.695)	0.177 (0.838)
Cáceres	2.063 (0.128)	0.733 (0.481)	1.257 (0.288)	0.758 (0.469)
Cádiz	1.568 (0.195)	2.821** (0.038)	1.319 (0.266)	5.633*** (0.001)
Cantabria	0.270 (0.847)	0.210 (0.890)	0.200 (0.896)	0.051 (0.950)
Castellón	0.454 (0.714)	0.755 (0.520)	0.458 (0.712)	0.716 (0.542)
Ciudad Real	0.044 (0.988)	5.323*** (0.001)	1.484 (0.217)	4.009*** (0.007)
Córdoba	1.318 (0.268)	1.717 (0.161)	2.319* (0.074)	0.208 (0.891)
Cuenca	1.072 (0.361)	0.553 (0.646)	2.804** (0.040)	0.939 (0.422)
Girona	2.014 (0.110)	0.396 (0.756)	0.911 (0.435)	0.484 (0.693)
Granada	1.134 (0.334)	2.178* (0.089)	1.247 (0.291)	0.515 (0.672)
Guadalajara	0.932 (0.425)	0.069 (0.934)	2.902** (0.034)	2.470 (0.110)
Guipuzcoa	2.336* (0.072)	2.380 (0.110)	0.712 (0.544)	1.984 (0.114)
Huelva	0.237 (0.870)	1.155 (0.326)	0.697 (0.554)	0.206 (0.814)
Huesca	0.085 (0.968)	1.615 (0.184)	0.102 (0.959)	1.157 (0.325)
Jaen	0.512 (0.674)	0.351 (0.704)	0.197 (0.898)	0.601 (0.549)
La Rioja	0.684 (0.562)	0.389 (0.761)	0.111 (0.895)	1.170 (0.311)

Las Palmas de Gran Canaria	0.316 (0.814)	1.005 (0.389)	2.402* (0.066)	0.620 (0.602)
León	1.592 (0.190)	1.367 (0.255)	0.601 (0.614)	0.389 (0.761)
Lleida	1.364 (0.252)	0.796 (0.496)	0.640 (0.589)	0.053 (0.984)
Lugo	0.563 (0.639)	0.979 (0.402)	2.089* (0.100)	1.690 (0.167)
Madrid	1.293 (0.275)	0.945 (0.418)	3.560** (0.014)	3.272 (0.110)
Málaga	2.521* (0.056)	1.261 (0.286)	0.290 (0.748)	0.934 (0.423)
Murcia	0.733 (0.532)	0.325 (0.807)	0.769 (0.511)	0.184 (0.908)
Navarra	1.040 (0.373)	0.698 (0.553)	0.277 (0.842)	1.394 (0.243)
Ourense	1.671 (0.172)	1.651 (0.176)	1.159 (0.325)	1.077 (0.341)
Palencia	0.333 (0.801)	1.291 (0.276)	0.080 (0.971)	1.378 (0.249)
Pontevedra	0.094 (0.964)	1.030 (0.378)	0.309 (0.819)	1.314 (0.268)
Salamanca	0.120 (0.948)	0.888 (0.447)	0.102 (0.959)	0.301 (0.825)
Santa Cruz de Tenerife	4.615*** (0.003)	1.078 (0.357)	1.236 (0.295)	0.615 (0.606)
Segovia	0.276 (0.759)	1.519 (0.220)	0.310 (0.818)	3.401** (0.034)
Sevilla	1.383 (0.246)	0.236 (0.871)	3.237** (0.039)	0.972 (0.405)
Soria	0.752 (0.524)	1.105 (0.335)	0.909 (0.406)	1.792 (0.171)
Tarragona	0.578 (0.629)	0.311 (0.817)	1.036 (0.376)	0.519 (0.669)
Teruel	7.055*** (0.000)	0.334 (0.717)	0.417 (0.660)	1.083 (0.343)
Toledo	2.201* (0.086)	2.149 (0.110)	0.901 (0.440)	4.405*** (0.004)
Valencia	1.854 (0.135)	3.074** (0.026)	2.096* (0.098)	0.019 (0.996)
Valladolid	0.026 (0.994)	1.069 (0.361)	0.175 (0.913)	1.360 (0.253)
Vizcaya	1.855 (0.135)	1.464 (0.222)	0.898 (0.441)	1.505 (0.211)
Zamora	4.009** (0.019)	2.833 (0.110)	1.667 (0.173)	2.237* (0.083)
Zaragoza	0.159 (0.924)	1.476 (0.219)	0.025 (0.995)	1.346 (0.258)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A4. Effect of recessions on EBITDA.

Province	GDP- \Rightarrow EBITDA -	GDP- \Rightarrow EBITDA +	Unem+ \Rightarrow EBITDA +	Unem+ \Rightarrow EBITDA -
A Coruña	2.892** (0.034)	4.534 (0.110)	0.376 (0.770)	2.330* (0.072)
Alava	0.311 (0.818)	2.693** (0.045)	0.280 (0.840)	2.008 (0.111)
Albacete	1.374 (0.249)	0.646 (0.585)	0.571 (0.634)	1.948 (0.120)
Alicante	0.336 (0.799)	2.303* (0.075)	0.378 (0.769)	0.278 (0.842)
Almería	0.978 (0.402)	0.556 (0.644)	0.259 (0.855)	0.678 (0.566)
Asturias	0.725 (0.537)	0.673 (0.568)	0.720 (0.540)	0.763 (0.515)
Avila	0.607 (0.546)	1.041 (0.376)	2.968* (0.054)	0.431 (0.650)
Badajoz	0.173 (0.915)	0.638 (0.590)	0.329 (0.804)	1.169 (0.320)
Baleares	0.445 (0.721)	4.318*** (0.005)	0.669 (0.571)	0.238 (0.870)
Barcelona	1.495 (0.214)	11.442*** (0.000)	2.120* (0.095)	0.571 (0.634)
Burgos	1.055 (0.367)	0.794 (0.497)	0.254 (0.858)	0.383 (0.765)
Cáceres	0.342 (0.711)	0.090 (0.914)	0.737 (0.530)	0.629 (0.596)

Cádiz	4.879*** (0.002)	6.262 (0.110)	0.665 (0.573)	2.114* (0.096)
Cantabria	0.152 (0.928)	1.930 (0.123)	1.156 (0.325)	0.971 (0.405)
Castellón	0.395 (0.756)	0.772 (0.510)	0.976 (0.403)	2.019 (0.109)
Ciudad Real	4.885*** (0.002)	0.812 (0.444)	1.450 (0.227)	5.599*** (0.001)
Córdoba	0.072 (0.931)	1.285 (0.277)	0.403 (0.751)	1.134 (0.334)
Cuenca	0.550 (0.649)	1.371 (0.251)	0.842 (0.471)	0.715 (0.543)
Girona	0.387 (0.762)	1.732 (0.158)	1.398 (0.241)	0.107 (0.898)
Granada	0.546 (0.651)	1.055 (0.367)	0.546 (0.651)	0.142 (0.935)
Guadalajara	0.664 (0.515)	0.396 (0.756)	3.346** (0.019)	0.122 (0.885)
Guipuzcoa	1.124 (0.338)	3.514** (0.015)	1.704 (0.164)	2.759** (0.041)
Huelva	0.912 (0.434)	1.680 (0.170)	0.728 (0.535)	1.967 (0.117)
Huesca	1.905 (0.149)	0.102 (0.903)	0.618 (0.603)	1.265 (0.285)
Jaen	0.642 (0.588)	0.194 (0.901)	0.316 (0.814)	1.964 (0.141)
La Rioja	1.325 (0.265)	0.288 (0.834)	0.225 (0.879)	0.679 (0.565)
Las Palmas de Gran Canaria	0.378 (0.769)	2.066 (0.103)	0.646 (0.585)	1.022 (0.382)
León	3.740** (0.011)	1.859 (0.135)	1.395 (0.243)	0.118 (0.950)
Lleida	0.156 (0.926)	2.784** (0.040)	0.318 (0.812)	1.237 (0.295)
Lugo	0.545 (0.652)	0.556 (0.644)	0.388 (0.679)	1.241 (0.293)
Madrid	0.067 (0.977)	0.729 (0.535)	2.508* (0.057)	1.767 (0.151)
Málaga	1.516 (0.208)	0.623 (0.600)	1.012 (0.386)	1.388 (0.244)
Murcia	0.327 (0.806)	0.167 (0.919)	0.999 (0.392)	0.053 (0.984)
Navarra	0.941 (0.420)	0.563 (0.640)	0.309 (0.819)	0.379 (0.768)
Ourense	1.843 (0.138)	3.153** (0.024)	0.889 (0.446)	3.776** (0.010)
Palencia	3.038** (0.029)	0.259 (0.855)	0.072 (0.975)	0.884 (0.414)
Pontevedra	1.860 (0.134)	1.264 (0.285)	0.452 (0.716)	0.909 (0.436)
Salamanca	0.797 (0.496)	0.457 (0.713)	0.305 (0.822)	0.425 (0.735)
Santa Cruz de Tenerife	0.369 (0.775)	1.032 (0.377)	2.128* (0.094)	1.274 (0.282)
Segovia	2.289* (0.078)	0.472 (0.702)	3.865 (0.110)	3.860*** (0.010)
Sevilla	0.947 (0.417)	6.940*** (0.000)	1.790 (0.147)	1.605 (0.186)
Soria	0.420 (0.658)	2.163* (0.096)	4.261 (0.110)	2.213* (0.091)
Tarragona	0.145 (0.933)	0.280 (0.840)	0.483 (0.694)	0.608 (0.610)
Teruel	0.057 (0.945)	0.090 (0.914)	0.160 (0.923)	0.615 (0.607)
Toledo	1.837 (0.138)	0.219 (0.883)	2.034 (0.107)	1.736 (0.158)
Valencia	1.123 (0.338)	3.797*** (0.010)	1.216 (0.302)	4.357*** (0.004)
Valladolid	2.882** (0.035)	1.202 (0.307)	0.276 (0.843)	1.484 (0.217)
Vizcaya	3.894*** (0.009)	3.273 (0.110)	0.683 (0.563)	1.094 (0.350)
Zamora	1.989 (0.115)	2.643** (0.049)	0.480 (0.697)	0.662 (0.576)
Zaragoza	0.610 (0.608)	0.085 (0.968)	0.065 (0.978)	0.993 (0.395)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A5. Effect of expansions on solvency.

Province	GDP+ \Rightarrow Solvency +	GDP- \Rightarrow Solvency +	Unem- \Rightarrow Solvency +	Unem- \Rightarrow Solvency -
A Coruña	2.073 (0.102)	2.420* (0.064)	0.184 (0.908)	0.220 (0.883)
Alava	0.437 (0.727)	1.600 (0.187)	0.778 (0.460)	0.393 (0.675)
Albacete	0.870 (0.456)	3.842*** (0.009)	0.234 (0.791)	0.278 (0.757)
Alicante	0.271 (0.846)	1.008 (0.388)	0.453 (0.715)	0.806 (0.491)
Almería	0.773 (0.462)	0.095 (0.909)	0.260 (0.854)	1.086 (0.354)
Asturias	0.387 (0.679)	1.665 (0.172)	0.494 (0.686)	0.958 (0.411)
Avila	0.913 (0.404)	0.827 (0.439)	3.237** (0.042)	2.755 (0.110)
Badajoz	3.338** (0.019)	0.780 (0.505)	0.369 (0.692)	1.127 (0.324)
Baleares	0.080 (0.971)	0.516 (0.671)	1.260 (0.286)	0.228 (0.796)
Barcelona	0.460 (0.710)	1.879 (0.131)	1.363 (0.252)	0.225 (0.879)
Burgos	2.085 (0.125)	0.862 (0.460)	0.760 (0.468)	0.808 (0.489)
Cáceres	1.016 (0.385)	3.794** (0.010)	1.753 (0.155)	0.480 (0.696)
Cádiz	0.541 (0.654)	0.291 (0.832)	3.201** (0.022)	0.358 (0.783)
Cantabria	0.204 (0.894)	0.105 (0.957)	0.435 (0.647)	0.395 (0.674)
Castellón	0.605 (0.612)	0.607 (0.610)	0.188 (0.905)	1.343 (0.259)
Ciudad Real	0.804 (0.492)	0.720 (0.540)	0.405 (0.667)	0.883 (0.449)
Córdoba	0.242 (0.785)	0.503 (0.680)	3.271** (0.020)	3.895 (0.110)
Cuenca	2.460* (0.062)	0.488 (0.691)	0.872 (0.455)	0.693 (0.501)
Girona	0.508 (0.676)	0.241 (0.868)	1.004 (0.390)	1.318 (0.268)
Granada	0.832 (0.476)	0.453 (0.715)	0.376 (0.771)	6.156*** (0.002)
Guadalajara	0.433 (0.649)	0.589 (0.555)	0.145 (0.933)	0.507 (0.677)
Guipuzcoa	1.126 (0.337)	0.979 (0.402)	1.974 (0.116)	1.717 (0.161)
Huelva	0.258 (0.773)	3.350** (0.019)	0.301 (0.740)	0.248 (0.780)
Huesca	0.392 (0.759)	0.129 (0.943)	0.605 (0.612)	0.243 (0.866)
Jaen	0.177 (0.837)	0.619 (0.603)	4.105** (0.017)	1.901 (0.150)
La Rioja	1.038 (0.375)	0.831 (0.477)	0.580 (0.628)	0.471 (0.702)
Las Palmas de Gran Canaria	0.075 (0.974)	0.495 (0.686)	0.537 (0.657)	0.130 (0.942)
León	1.412 (0.238)	0.575 (0.632)	0.183 (0.908)	0.198 (0.898)
Lleida	0.044 (0.957)	0.591 (0.554)	1.106 (0.331)	0.503 (0.605)
Lugo	1.086 (0.354)	0.845 (0.470)	0.469 (0.704)	0.152 (0.928)
Madrid	0.359 (0.783)	0.173 (0.914)	0.262 (0.853)	0.282 (0.838)
Málaga	0.733 (0.532)	1.348 (0.257)	0.108 (0.898)	2.564* (0.053)
Murcia	1.669 (0.172)	0.233 (0.873)	0.915 (0.433)	0.314 (0.815)
Navarra	0.352 (0.703)	0.631 (0.532)	0.280 (0.840)	0.437 (0.727)
Ourense	0.336 (0.799)	0.212 (0.888)	0.115 (0.892)	3.587** (0.013)
Palencia	0.590 (0.555)	0.082 (0.921)	2.611* (0.051)	3.175 (0.110)
Pontevedra	1.083 (0.355)	0.783 (0.503)	2.997* (0.050)	2.379 (0.110)
Salamanca	0.207 (0.813)	4.088** (0.017)	0.697 (0.499)	1.309 (0.271)
Santa Cruz de Tenerife	1.443 (0.228)	0.547 (0.650)	1.036 (0.376)	2.365* (0.069)

Segovia	2.076 (0.103)	0.206 (0.814)	0.588 (0.623)	1.147 (0.318)
Sevilla	1.227 (0.298)	0.586 (0.624)	2.449* (0.086)	2.556 (0.110)
Soria	0.286 (0.836)	0.491 (0.689)	0.122 (0.886)	0.577 (0.631)
Tarragona	0.210 (0.889)	0.653 (0.581)	0.497 (0.608)	0.545 (0.580)
Teruel	0.288 (0.834)	1.671 (0.179)	1.303 (0.279)	2.219* (0.092)
Toledo	0.290 (0.749)	0.529 (0.589)	0.185 (0.831)	0.360 (0.697)
Valencia	1.339 (0.260)	0.453 (0.715)	4.189*** (0.006)	0.247 (0.864)
Valladolid	1.100 (0.348)	1.292 (0.275)	3.308** (0.037)	0.517 (0.596)
Vizcaya	0.125 (0.946)	0.957 (0.412)	0.304 (0.823)	0.333 (0.801)
Zamora	0.677 (0.509)	7.007*** (0.001)	2.386* (0.068)	1.921 (0.125)
Zaragoza	0.606 (0.611)	0.960 (0.411)	0.268 (0.849)	1.879 (0.131)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A6. Effect of recessions on solvency.

Province	GDP- \Rightarrow Solvency -	GDP- \Rightarrow Solvency +	Unem+ \Rightarrow Solvency +	Unem+ \Rightarrow Solvency -
A Coruña	0.253 (0.859)	0.230 (0.876)	0.090 (0.966)	0.453 (0.715)
Alava	0.664 (0.574)	0.887 (0.447)	1.129 (0.336)	0.523 (0.666)
Albacete	0.176 (0.913)	0.120 (0.949)	1.227 (0.293)	0.192 (0.825)
Alicante	0.941 (0.420)	0.399 (0.754)	0.957 (0.412)	1.166 (0.321)
Almería	0.671 (0.570)	0.316 (0.814)	0.282 (0.754)	0.093 (0.964)
Asturias	0.771 (0.510)	0.691 (0.557)	0.318 (0.812)	0.798 (0.495)
Avila	0.265 (0.767)	0.007 (0.993)	0.638 (0.530)	0.832 (0.437)
Badajoz	1.227 (0.299)	0.433 (0.729)	3.017** (0.029)	1.097 (0.334)
Baleares	0.799 (0.494)	0.406 (0.749)	0.715 (0.543)	0.384 (0.765)
Barcelona	0.198 (0.898)	0.295 (0.829)	0.619 (0.603)	0.298 (0.827)
Burgos	0.164 (0.921)	0.396 (0.673)	1.217 (0.302)	0.652 (0.582)
Cáceres	0.141 (0.869)	0.249 (0.862)	0.525 (0.665)	0.454 (0.715)
Cádiz	2.615** (0.050)	0.691 (0.558)	2.476* (0.060)	0.513 (0.673)
Cantabria	0.428 (0.733)	0.565 (0.638)	0.520 (0.669)	0.957 (0.412)
Castellón	0.734 (0.531)	0.278 (0.842)	0.228 (0.877)	0.095 (0.963)
Ciudad Real	3.967*** (0.008)	3.042 (0.110)	0.423 (0.736)	0.614 (0.606)
Córdoba	1.387 (0.245)	1.658 (0.191)	0.147 (0.932)	0.904 (0.438)
Cuenca	0.486 (0.692)	1.086 (0.355)	1.630 (0.182)	0.152 (0.928)
Girona	3.829*** (0.009)	0.148 (0.931)	0.506 (0.678)	0.235 (0.790)
Granada	1.265 (0.285)	0.682 (0.563)	0.795 (0.497)	0.613 (0.607)
Guadalajara	0.608 (0.545)	0.079 (0.924)	2.090 (0.124)	1.865 (0.156)
Guipuzcoa	0.932 (0.424)	0.362 (0.780)	1.043 (0.372)	0.856 (0.463)
Huelva	0.460 (0.711)	0.110 (0.954)	2.347* (0.071)	0.147 (0.932)
Huesca	0.388 (0.762)	2.455* (0.062)	0.948 (0.417)	0.161 (0.922)
Jaen	0.254 (0.858)	2.931** (0.033)	0.413 (0.662)	0.156 (0.926)
La Rioja	0.464 (0.708)	0.477 (0.698)	1.114 (0.342)	1.269 (0.284)

Las Palmas de Gran Canaria	0.150 (0.930)	0.633 (0.594)	0.023 (0.995)	0.243 (0.867)
León	0.083 (0.969)	0.150 (0.930)	0.394 (0.757)	0.768 (0.512)
Lleida	0.273 (0.845)	0.453 (0.715)	1.320 (0.266)	2.270* (0.079)
Lugo	0.054 (0.984)	0.164 (0.921)	0.367 (0.777)	0.183 (0.908)
Madrid	0.184 (0.907)	0.178 (0.911)	0.379 (0.768)	0.197 (0.899)
Málaga	2.878** (0.035)	0.064 (0.979)	1.376 (0.248)	1.073 (0.359)
Murcia	0.431 (0.731)	0.878 (0.452)	1.218 (0.302)	1.367 (0.251)
Navarra	1.711 (0.163)	0.229 (0.876)	1.306 (0.271)	1.133 (0.334)
Ourense	0.722 (0.539)	0.188 (0.904)	0.148 (0.931)	1.727 (0.160)
Palencia	3.305** (0.021)	3.140 (0.110)	0.495 (0.610)	2.705* (0.068)
Pontevedra	2.144* (0.092)	1.441 (0.229)	1.758 (0.153)	0.362 (0.781)
Salamanca	0.554 (0.575)	0.503 (0.605)	0.816 (0.443)	3.481** (0.031)
Santa Cruz de Tenerife	3.953*** (0.008)	0.204 (0.893)	2.124* (0.095)	1.436 (0.230)
Segovia	2.013 (0.111)	1.428 (0.234)	1.428 (0.234)	0.967 (0.381)
Sevilla	5.268*** (0.001)	0.864 (0.459)	1.117 (0.341)	1.518 (0.208)
Soria	0.278 (0.841)	0.273 (0.762)	0.553 (0.647)	0.790 (0.502)
Tarragona	0.482 (0.695)	0.274 (0.845)	0.419 (0.657)	0.695 (0.499)
Teruel	0.209 (0.890)	0.315 (0.814)	0.246 (0.864)	0.375 (0.771)
Toledo	0.376 (0.687)	0.676 (0.509)	1.164 (0.322)	0.966 (0.408)
Valencia	0.271 (0.846)	0.897 (0.442)	1.603 (0.186)	1.403 (0.240)
Valladolid	1.470 (0.221)	3.671** (0.012)	0.999 (0.392)	1.539 (0.202)
Vizcaya	0.397 (0.755)	0.303 (0.823)	0.353 (0.787)	0.173 (0.914)
Zamora	3.745** (0.011)	3.279 (0.110)	1.521 (0.208)	0.705 (0.549)
Zaragoza	4.844*** (0.002)	0.341 (0.795)	1.755 (0.154)	2.187* (0.087)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A7. Effect of expansions on equity.

Province	GDP+ \Rightarrow Equity+	GDP- \Rightarrow Equity +	Unem- \Rightarrow Equity +	Unem- \Rightarrow Equity -
A Coruña	0.512 (0.674)	2.746** (0.041)	0.315 (0.814)	0.546 (0.651)
Alava	1.676 (0.170)	0.646 (0.585)	2.104 (0.122)	0.315 (0.730)
Albacete	0.670 (0.570)	0.876 (0.453)	0.967 (0.408)	0.834 (0.475)
Alicante	0.162 (0.922)	0.382 (0.766)	1.540 (0.202)	0.393 (0.758)
Almería	1.610 (0.200)	0.676 (0.509)	3.343** (0.019)	2.925 (0.110)
Asturias	3.349** (0.018)	0.702 (0.551)	1.968 (0.117)	1.793 (0.146)
Avila	0.041 (0.989)	2.113 (0.103)	0.810 (0.448)	12.466*** (0.000)
Badajoz	0.933 (0.424)	0.564 (0.639)	0.581 (0.559)	0.424 (0.736)
Baleares	0.997 (0.393)	0.237 (0.870)	0.491 (0.688)	0.292 (0.747)
Barcelona	0.920 (0.430)	0.565 (0.638)	1.501 (0.212)	1.240 (0.293)
Burgos	0.722 (0.539)	1.512 (0.210)	0.705 (0.549)	0.362 (0.696)
Cáceres	0.183 (0.833)	0.376 (0.687)	1.513 (0.211)	0.658 (0.578)
Cádiz	2.803** (0.039)	1.379 (0.252)	0.510 (0.675)	0.831 (0.477)

Cantabria	0.387 (0.762)	1.455 (0.225)	0.367 (0.693)	0.201 (0.818)
Castellón	0.660 (0.577)	0.467 (0.705)	0.531 (0.588)	0.430 (0.732)
Ciudad Real	1.508 (0.211)	1.562 (0.197)	0.672 (0.569)	0.020 (0.996)
Córdoba	2.174* (0.089)	0.452 (0.716)	1.913 (0.126)	2.498* (0.058)
Cuenca	0.680 (0.508)	0.289 (0.750)	2.251 (0.107)	0.070 (0.932)
Girona	1.097 (0.349)	0.701 (0.552)	0.415 (0.742)	0.352 (0.788)
Granada	0.477 (0.699)	0.127 (0.944)	0.319 (0.811)	0.465 (0.707)
Guadalajara	2.320* (0.074)	0.394 (0.758)	1.044 (0.372)	1.464 (0.223)
Guipuzcoa	2.220* (0.084)	0.637 (0.591)	1.468 (0.221)	0.137 (0.938)
Huelva	0.706 (0.549)	4.492*** (0.004)	1.089 (0.337)	0.530 (0.589)
Huesca	0.674 (0.568)	1.789 (0.148)	0.522 (0.667)	0.585 (0.558)
Jaen	0.476 (0.622)	1.017 (0.362)	3.217** (0.041)	2.967 (0.110)
La Rioja	0.575 (0.632)	1.064 (0.363)	0.818 (0.484)	1.521 (0.207)
Las Palmas de Gran Canaria	5.184*** (0.001)	0.724 (0.538)	2.843** (0.036)	1.184 (0.314)
León	0.941 (0.391)	3.667** (0.012)	0.325 (0.723)	0.477 (0.621)
Lleida	3.297** (0.020)	2.153 (0.110)	0.342 (0.710)	0.129 (0.879)
Lugo	1.846 (0.137)	0.568 (0.636)	0.924 (0.429)	0.072 (0.975)
Madrid	1.136 (0.333)	0.438 (0.726)	1.546 (0.200)	1.630 (0.180)
Málaga	3.720** (0.011)	3.217 (0.110)	0.674 (0.568)	2.739** (0.042)
Murcia	1.345 (0.258)	1.014 (0.385)	0.575 (0.632)	0.221 (0.882)
Navarra	4.856*** (0.002)	0.759 (0.468)	0.900 (0.440)	0.124 (0.946)
Ourense	0.624 (0.600)	2.043 (0.107)	0.842 (0.471)	1.466 (0.223)
Palencia	0.761 (0.517)	1.715 (0.182)	0.884 (0.450)	1.607 (0.203)
Pontevedra	1.366 (0.251)	2.192* (0.087)	1.180 (0.316)	1.131 (0.335)
Salamanca	3.030** (0.029)	0.421 (0.738)	0.563 (0.639)	0.449 (0.638)
Santa Cruz de Tenerife	2.037 (0.107)	0.542 (0.653)	1.046 (0.371)	0.216 (0.885)
Segovia	0.997 (0.370)	2.240* (0.083)	0.686 (0.504)	0.271 (0.846)
Sevilla	0.294 (0.830)	0.410 (0.746)	0.579 (0.629)	0.588 (0.623)
Soria	0.566 (0.639)	1.907 (0.135)	0.129 (0.880)	1.986 (0.123)
Tarragona	0.863 (0.459)	0.357 (0.784)	0.440 (0.725)	1.155 (0.326)
Teruel	6.232*** (0.001)	0.626 (0.537)	1.013 (0.393)	2.217 (0.116)
Toledo	0.716 (0.542)	1.050 (0.370)	0.986 (0.399)	0.381 (0.767)
Valencia	0.592 (0.620)	1.486 (0.216)	0.154 (0.927)	0.286 (0.836)
Valladolid	1.819 (0.142)	0.439 (0.725)	0.475 (0.700)	2.159 (0.116)
Vizcaya	2.347* (0.071)	0.753 (0.520)	1.061 (0.364)	1.269 (0.283)
Zamora	2.199 (0.112)	0.077 (0.926)	1.008 (0.389)	0.300 (0.826)
Zaragoza	1.632 (0.180)	1.642 (0.178)	0.461 (0.710)	1.526 (0.206)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table A8. Effect of recessions on equity.

Province	GDP- \Rightarrow Equity -	GDP- \Rightarrow Equity +	Unem+ \Rightarrow Equity +	Unem+ \Rightarrow Equity -
A Coruña	0.306 (0.821)	0.558 (0.643)	0.405 (0.749)	1.109 (0.344)
Alava	0.261 (0.854)	0.957 (0.412)	3.698** (0.011)	0.428 (0.733)
Albacete	0.194 (0.901)	0.580 (0.629)	0.309 (0.734)	1.334 (0.264)
Alicante	0.352 (0.787)	0.299 (0.826)	0.062 (0.980)	0.490 (0.690)
Almería	0.609 (0.544)	0.446 (0.720)	2.616* (0.073)	1.236 (0.291)
Asturias	0.945 (0.418)	3.688** (0.011)	2.130* (0.094)	1.229 (0.297)
Avila	0.144 (0.866)	1.091 (0.339)	0.134 (0.874)	0.953 (0.389)
Badajoz	1.316 (0.268)	0.557 (0.644)	0.526 (0.591)	0.470 (0.703)
Baleares	0.061 (0.980)	0.494 (0.687)	0.738 (0.529)	0.417 (0.741)
Barcelona	0.285 (0.836)	0.038 (0.990)	1.394 (0.242)	0.493 (0.687)
Burgos	0.544 (0.652)	0.552 (0.647)	0.795 (0.497)	0.561 (0.641)
Cáceres	0.131 (0.877)	0.048 (0.953)	1.336 (0.262)	0.991 (0.397)
Cádiz	0.637 (0.591)	3.325** (0.019)	0.269 (0.764)	1.714 (0.162)
Cantabria	1.194 (0.311)	0.362 (0.780)	0.500 (0.683)	1.348 (0.257)
Castellón	0.902 (0.439)	0.800 (0.494)	0.728 (0.535)	0.777 (0.506)
Ciudad Real	0.546 (0.651)	0.270 (0.847)	1.326 (0.265)	0.184 (0.832)
Córdoba	0.082 (0.921)	2.604* (0.074)	0.313 (0.816)	1.271 (0.283)
Cuenca	0.275 (0.844)	0.343 (0.794)	0.512 (0.674)	0.130 (0.942)
Girona	2.689** (0.045)	1.078 (0.357)	0.907 (0.437)	0.697 (0.554)
Granada	1.089 (0.353)	1.741 (0.157)	0.141 (0.935)	0.531 (0.661)
Guadalajara	0.504 (0.680)	2.534* (0.056)	1.125 (0.338)	0.431 (0.731)
Guipuzcoa	0.349 (0.790)	6.830*** (0.000)	1.980 (0.115)	0.814 (0.486)
Huelva	0.669 (0.572)	0.620 (0.602)	1.700 (0.166)	1.058 (0.366)
Huesca	0.508 (0.677)	0.235 (0.872)	1.648 (0.177)	2.532* (0.056)
Jaen	1.928 (0.146)	1.791 (0.168)	4.306*** (0.005)	1.231 (0.297)
La Rioja	0.357 (0.784)	0.918 (0.432)	1.442 (0.229)	1.347 (0.258)
Las Palmas de Gran Canaria	1.338 (0.260)	2.568* (0.053)	2.767** (0.040)	0.734 (0.532)
León	3.547** (0.014)	1.312 (0.269)	0.689 (0.559)	2.540* (0.055)
Lleida	2.398* (0.067)	3.819 (0.110)	0.736 (0.531)	0.651 (0.582)
Lugo	1.848 (0.137)	0.497 (0.684)	1.244 (0.292)	0.506 (0.678)
Madrid	0.811 (0.488)	4.215*** (0.005)	1.811 (0.143)	0.385 (0.764)
Málaga	4.420*** (0.004)	0.240 (0.868)	3.014 (0.110)	3.537** (0.014)
Murcia	0.522 (0.667)	0.186 (0.906)	0.829 (0.478)	0.209 (0.890)
Navarra	0.900 (0.440)	4.029*** (0.007)	1.696 (0.184)	0.138 (0.871)
Ourense	0.602 (0.614)	3.764** (0.011)	0.694 (0.556)	2.060 (0.104)
Palencia	1.110 (0.331)	1.160 (0.326)	0.414 (0.743)	0.341 (0.796)
Pontevedra	0.990 (0.396)	1.003 (0.390)	1.255 (0.288)	1.123 (0.338)
Salamanca	0.163 (0.850)	0.502 (0.681)	2.253* (0.081)	0.691 (0.558)
Santa Cruz de Tenerife	0.240 (0.868)	0.932 (0.425)	2.421* (0.064)	0.740 (0.528)
Segovia	1.633 (0.181)	0.822 (0.482)	1.332 (0.264)	0.926 (0.428)

Sevilla	0.344 (0.793)	4.164*** (0.006)	0.904 (0.438)	0.243 (0.866)
Soria	3.066* (0.052)	0.058 (0.944)	1.439 (0.237)	1.181 (0.322)
Tarragona	1.793 (0.146)	0.018 (0.997)	0.541 (0.654)	0.884 (0.448)
Teruel	0.450 (0.639)	0.966 (0.414)	2.208* (0.096)	1.752 (0.181)
Toledo	0.108 (0.955)	0.957 (0.412)	0.942 (0.420)	1.232 (0.297)
Valencia	1.476 (0.219)	0.871 (0.455)	1.639 (0.178)	0.207 (0.892)
Valladolid	0.847 (0.468)	1.962 (0.118)	0.589 (0.622)	1.511 (0.210)
Vizcaya	0.317 (0.813)	3.422** (0.016)	0.463 (0.708)	1.450 (0.226)
Zamora	0.759 (0.518)	1.621 (0.184)	0.139 (0.937)	0.152 (0.859)
Zaragoza	0.542 (0.653)	0.952 (0.414)	1.903 (0.127)	1.165 (0.322)

Notes: Values are F-statistics with p-values in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.



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