

Response to Reader 1's Comments on

"Export activity, innovation and institutions in Southern European nascent entrepreneurship"

Thank you very much for your constructive and thoughtful comments, which are much appreciated. I am happy to revise the paper as described in the responses below.

1. *The paper uses data from a survey covering the period 2003-2010 referred to southern European countries, who suffered from the debt crisis. I'm wondering whether more recent data could be used to analyse the post-recession recovering period of these countries.*

Response: You are correct that more recent data is available. GEM APS and NES indicators are available until 2018 for Greece, Italy and Spain, and until 2016 for Portugal. The full datasets are only made available to the public 3 years after data collection, so that 2015 is the last year available online. In the data for 2011-2015, the country structure is not very different: Spain 81.48%, Greece 7.69%, Portugal 6.17%, Italy 4.66%.

The individual-level regressions have been repeated for 2011-2015 and the estimation results tables have been placed in an Appendix as well as complemented with an explanation in the newly created robustness checks section (section 5). Note that some adjustments had to be made as some variables that were reported as continuous are now reported in intervals and the dummy for woman entrepreneur had to be removed for the reason explained below. Besides, the export intensity intervals differ and the industry classification is not the same (now Industry ISIC version 4, 1-digit is used). As such, it does not make sense to simply extend the sample and the regressions for 2011-2015 have been added separately.

Regarding the descriptives, for the post-recession period it can be said that 65.42% of the businesses does not export, whilst 5.15% exports more than 75% of sales. There are 57.44% of businesses with 2 owners and 25.14% with 3 owners. Only 4.47% of the surveyed entrepreneurs are women. A very recent (recent) technology is used by 13.10% (20.07%) of the businesses, whilst 36.13% of the businesses sell a new product. The same product is offered by many/few/none of other businesses for 53.57%/35.78%/10.66% of the sample. Regarding the education level of the entrepreneurs, 33.05% / 60.74% / 2.90% has primary-level / secondary-level / tertiary-level studies. To increase income / gain independence / just out of necessity is the motive for setting up a new business for 21.94% / 16.57% / 34.23% of the entrepreneurs surveyed. To have known other entrepreneurs was important in setting up a new business for 30.41% of the sample.

From the preliminary results, it can be seen that the current number of jobs, job growth and the number of owners influence positively the probability of exporting, whereas having a new product or a new technology now contribute negatively towards exporting.

2. *Due to a large number of covariates used the consequences of multicollinearity should be analysed in more depth, which affects the significance level of the coefficients. It should be interesting to include interaction terms between the covariates and test their relevance.*

Response: The individual-level regressions have been repeated adding one interaction between each pair of those variables at a time. The estimation results tables have been placed in an Appendix as well as complemented with an explanation in the newly created robustness checks section (section 5). There are several interactions that are significant when including only those two variables in the regressions: with a positive coefficient, newtech#compete, newtech#motive2, newprod#owners, newprod#motive1, newprod#motive2, compete#motive3; with a negative coefficient, newtech#newprodmt, newtech#owners, newprod#gemeduc, newprodmt#gemeduc, compete#owners, gemeduc#jobgrow, motive1#jobgrow. When the full models of the paper are considered, a few interactions survive the inclusion of the remaining variables: with a positive coefficient, newtech#compete, newtech#motive2, newprod#owners, newprod#motive1; with a negative coefficient, newtech#owners, newprod#gemeduc, compete#owners. The predominance of having a new technology or a new product in the significant interactions confirms the results of the paper regarding the importance of those characteristics for exporting.