# Review #1

This paper uses firm-level panel data on a sample of Spanish SMEs to investigate whether exporting helps to mitigate job losses in periods of recession characterized by a slump in domestic demand. The Spanish economy is an interesting case of study since this country was one of the most hit by the Great Recession in the euro area. The data used in the paper are taken from the Spanish Survey on Business Strategies (ESEE) and cover a period (2000-2014) that includes both the boom phase (until 2008) and the later slump period. The authors find that for SMEs the export participation helps compensate the decrease in the number of workers generated by the domestic crisis, and it increases the survival rates. Moreover, they also find that SMEs survival is negatively affected by financial constraints, production costs and falls in demand. Finally, they also find support to the "venting out" hypothesis, since SMEs use export strategy as a means to overcome periods of downturn in their domestic sales.

The paper is well written, which makes it easy to read and to follow. It is also very well motivated. The aim and the contribution of the paper is clear from the beginning. Moreover, the empirical research is solid. Finally, the it deals an interesting and relevant topic with policy implication. I think that this combination of features makes this work a very attractive addition to the literature.

I simply suggest that the authors take into account the following minor comments and some typographical errors:

-The introduction is too large (9 pages). I suggest that the authors remove the entire graphic discussion from the introduction (rewriting it) and include that discussion in a new section.
-Page 2, line 1 "exporting helps to mitigate" instead of "exporting helps mitigate".
-On page 6, you point out that financial constraints have a negative effect on several aspects but you cite only two papers. You can include additional references of their impact on trade or in other aspects like foreign direct investment (see, for example, Gil-Pareja et al., 2013 or Buch et al, 2014).

-Page 8, line 2 "this share was still so high" instead of "this share was still that high"
-Section 3 has two headings. I suggest removing these headings and slightly rewriting the text to differentiate the two parts.
-I would take the results from Table 5 into an Appendix. On page 16, you comment the results of Table 4, after the discussion of Table 5.
-The second sentence in the second paragraph of page 15 should be rewritten
-Page 15, second paragraph, line 5, the conjunction "or" is not in the right place.
-You should use the same format for all the references in the list.
- Finally, some references in the list are incomplete (Bentolila et al., (2009), Máñez-Castillejo et al., (2020) and Taylor et al. (2011)).

References

Buch, C. M., Kesternich, I., Lipponer, A., and Schnitzer, M. (2014). Financial constraints and foreign direct investment: firm-level evidence. Review of World Economics, 150(2):393-420.
Gil-Pareja, S., Llorca-Vivero, R., and Paniagua, J. (2013). The effect of the great recession on foreign direct investment: global empirical evidence with a gravity approach. Applied Economics Letters,20(13):1244-1248.

## Review #2

This paper aims to investigate the role played by exporting in employment during downturn periods by using econometric methods and a sample of SMEs Spanish manufacturing firms. The results indicate that job destruction seems to be countered by exporting, similarly with firm survival. Detailed analysis is provided to explain survival probability, including exporting, and separating the total employment effects by permanent versus temporary workers. It also indicated that the fall of domestic demand is responsible for SMEs participation in exporting.

This paper deals with an important topic, with important recent developments in the literature. However, it still has no merit publication and a major review need to be done. I detail my criticism below.

I find the Introduction needs to be more focused and narrowed (covers 9/24 pages). It must be rewritten to justify what makes the paper different from previous papers in the literature. It is not clear whether the paper contributes to understanding the role of SMEs or the interest is restricted to the study of the Spanish economy. For a general journal, I will give more weight to the SMEs and introduce the general literature first, and then fit the literature on Spain.

Avoid putting Figures in the introduction: it is well known that the GR affected GDP/unemployment differently across Euro countries. I don't find them especially appealing to motivate the paper. Describing in the introduction the database used in the empirical analysis is neither a good idea. Perhaps, connecting better the domestic slump with the export growth could be enough. Since the paper is about SMEs, why not put the focus on them: why they might be of interest? Are SMEs quite important for exports in Spain compared with other countries?

I miss a deeper theory/literature review. For example, discuss theoretical underpinnings of the claims that during downturns some firms adjust differently. What do economic fundamentals change during recessions that make some firms more resilient? Are market frictions playing any role? I miss the literature on the cleansing effect.

Most cited papers refer to the relationship between exports and employment /unemployment at a macro-level, ignoring the richer literature that uses firm-level data. But, more importantly, as already emphasized, little is said about this relationship during recessions.

Database section must contain the descriptive statistics, including sampling, and Tables 1, 2, and 3 from the Introduction. It is not clear what percentage of the sample is neglected due to the lack of information and what percentage is due to selecting SMEs. Selecting SMEs needs to be better justified when compared with large firms. Having a greater variance in the comparison could shed light on more general results.

The econometric model uses the lagged dependent variable on the right-hand side combined with firm-level fixed effects. This generates an endogeneity problem that is dealt with by a non-standard methodology (e.g., GMM-SYSTEM estimator). This choice must be better justified.

I can see another endogeneity issue in the model. The index for Recessive demand, even lagged one period, might be affected by an omitted variable (i.e., the productivity) that simultaneously determines employment and, coincidentally, exporting. I don't want to be very strict on this issue, but claiming causality in this framework is incorrect. Moreover, when different endogenous regressors coincide, the analysis becomes even more obscure. Sometimes to isolate the problem, it is better to avoid using a dynamic model and, instead, estimate the model in differences with the export dummy and focus on instrumenting for the variables of interest. Notice that in a Melitz type of model exporting is a function of productivity and when productivity improves both, the likelihood of exporting and the size of the firm (i.e., sales or employment) rise.

The paper focused instead on a minor problem under my view: the firm selection problem. It is assumed that firms that survive tend to be those exporting and are larger and this might make annual samples not comparable due to endogenous entry and exit. To this extent, it would be good to provide evidence that indicates that the sample carefully tracks market entry and exit each year during the sample period. On the survey webpage, there are years where there is no entry in the sample. This is in my view a major problem. To avoid that noise joining different periods (three or four) would solve the problem.

Moreover, the Probit model used to implement the Heckman correction is also tricky. Since the model is estimated in the second step using firm-level fixed effects, the Probit first stage cannot be estimated with the same type of fixed effects due to the so-called incidental parameter problem. Some justification needs to be provided.

As I said previously, selection into exporting seems to be the key problem to solve. And to solve this issue, more theory is needed. For example, the Almunia et al (2021) paper indicates that firms with lower capacity unused will be those more flexible to reduce prices by adjusting labor and to gain competitiveness in the export market. Why not test this simple hypothesis with firm-level data?