# Referee report on "Imported inputs and Egyptian exports: Exploring the links" by M.D. Parra and I. Martinez-Zarzoso

# Thank you very much for taking the time to read our paper and for your great comments. Please find the responses below:

# <u>REFEREE 1</u>

This paper examines the link between firms' export and import status and firm characteristics for a panel of Egyptian manufacturing firms. It also investigates the determinants of export and import status and of export and import intensity. By and large, the results confirm those in the existing literature.

The paper provides a reasonably-well executed empirical exercise with a detailed literature review, but is rather weak on efforts to interpret and explain the findings. Below are some more detailed comments.

# **COMMENT 1**: Literature

- In the Melitz (2003) model firms do not select their level of productivity, they receive a productivity draw.

- There are (at least) three surveys of the existing literature in this area, i.e. Greenaway and Kneller (2007), Wagner (2007, 2012). The mere listing of related studies without accounts of methodology, type of data or country in the introduction and literature section makes it difficult for the reader to properly contextualise the present study.

# **RESPONSE:**

We thank the referee for this comment. To take it on board we are going to make an effort to place our study in the related literature and use the cited surveys for this purpose.

# COMMENT 2: Data

- A discussion on how representative the sample of firms used in the analysis (i.e. firms that are present in the survey in all three years) is of all surveyed firms is necessary for a correct interpretation of results.

# **RESPONSE**:

The sample is a representative sample according to the general methodology used by the World Bank in the World Bank Enterprise Survey. 1200-1800 interviews are conducted in larger economies. The whole sample consists on 977 firms in 2004, 996

in 2007 and 1156 in 2008. We will clarify in the revised version of the paper that in our empirical application we have 519 firms for which panel data is available, i.e. they are interviewed in all three years. Hence we have around 50 percent of the original sample.

#### **COMMENT 3**: Data

- According to the data description, information on sales, exporting and importing is available for non-survey years since firms are asked to report for two years. What about the other variables used in the analysis? If values are estimated/imputed – how is this done?

# **RESPONSE**:

Information is also available for in each survey for the three previous years for number of workers. For the other variables used we have taken the same value for the previous year.

# COMMENT 4: Data

- Table 2: o Median values would have enhanced this table. o It seems as if the scaling of the foreignowner variable is different between the top and the bottom three panels. o

#### **RESPONSE**:

We will add the median as well to the summary statistics in the revised version of the paper

**<u>COMMENT 5</u>**: What currency are the capital and investment variables in?

**RESPONSE**: All monetary variables are in Egyptian dollars.

#### **COMMENT 6**: Estimation and results

- The standard errors in all regressions should have been clustered at the firm level.

#### **RESPONSE**:

Yes, we agree with the referee and we have re-estimated the models with this option and the results stay almost unchanged with small variations in the standard error, but no changes in terms of significance levels. This is what will be presented in the new version of the paper.

#### COMMENT 7:

- In Table 3 the differences between export-only and import-only firms are not statistically significant for any of the dependent variables. The differences between export-only and two-way trade firms are not statistically significant for TFP, In capital and In investment; for sales it is not obvious. Regressions **using firm fixed effects would have highlighted this**. Thus, the results are not very revealing in terms of the rankings of trading firms.

# **RESPONSE**:

We acknowledge this fact and following your recommendation we have estimated the model with firm fixed effects (instead of random effects) and the results are slightly different, but without changing much the magnitude of the coefficients and significance level. Those results as well as tests on the difference in the coefficients of the export-only and import-only and two-way trade firms will be reported in the new version of the paper. We will also report a Hausman test.

#### COMMENT 8:

- The identification of the lagged dependent variable in Table 4 relies on some firms changing trade status. Summary statistics on the frequency of such changes would have been informative.

#### **RESPONSE**:

We will include a transition matrix reporting this changes in trade status in the new version of the paper.

#### COMMENT 9:

- Tables 4 and 5: o Presumably, column (1) refers to export only firms, column (2) to import only firms and columns (3) and (4) to two-way traders; this is not clear from the table. If this reading is correct, there is no obvious reason why the number of observations should differ between columns (3) and (4).

# **RESPONSE:**

A clarification of what is included in each column will be added in the note below the table. The number of observations differ between column (1) and (2) and between columns (3) and (4) due to the inclusion of lagged imports and initial conditions for which 22 and 19 obs are respectively missing data.

**<u>COMMENT 10</u>**: o Some measure of the goodness of fit would have enhanced these tables.

#### **RESPONSE**:

Thanks for this, we are including in the new version of the paper the Pseudo R squared.

**<u>COMMENT 11</u>**: o Are the means of TFP and ln employees in these regressions really included in lags? - Robustness analysis using an alternative measure of TFP would have enhanced the results.

**RESPONSE:** Yes, they are. We also estimated the results with alternative TFP measures but did not reported in the paper, we will could do so if required.

# COMMENT 12:

- The authors make no attempt to explain the results in an Egyptian context, they do not provide reasons for differences to the existing literature, and also the policy recommendations promised at the end of section 2 are not delivered.

#### **RESPONSE**:

In the revision of the paper we are adding comparisons with previous research and explanations of the results in the Egyptian context that will enhance the value added of the results and will use this to infer policy recommendations.

# COMMENT 13:

- Given that evidence of learning-by-exporting has most frequently been found in the context of developing countries and possible channels for this are described in detail the first two sections of the paper, an analysis of learning-by-exporting would have been desirable.

# **RESPONSE**:

There is already a paper estimating the learning by exporting for Egypt Kiendrebeogo (2014). In which some evidence is found supporting the hypothesis. This is the reason why we did not included.

#### **COMMENT 14:** Minor points:

- MENA is not defined.

**RESPONSE:** Thanks, we will define it.

#### COMMENT 15:

- The paper would have benefited from proof-reading by a native English speaker.

**RESPONSE**: The new version is going to be revised by a native speaker before an eventual resubmission.

# **References:**

- Greenaway, D., and Kneller, R. (2007). Firm heterogeneity, exporting and foreign direct investment, Economic Journal 117, F134–F161.
- Kiendrebeogo, Y. (2014). Export Activity and Productivity: New Evidence from the Egyptian Manufacturing Industry, Working Papers 6587, CERDI. URL: <u>http://halshs.archives-ouvertes.fr/docs/00/94/86/54/PDF/2012.20.pdf</u>
- Wagner, J. (2007). Exports and productivity: a survey of the evidence from firm-level data, World Economy 30, 60–82.
- Wagner, J. (2012). International trade and firm performance: A survey of empirical studies since 2006, Review of World Economics (Weltwirtschaftliches Archiv), 148(2), 235– 267.