

Response to the Referee 2

We are very grateful to the Referee for her/his remarks, comments, suggestions and questions. They have helped us to substantially improve our previous version.

In what follows, we will present our response for each point of the Referee.

1. **Referee's comment and suggestion:** First of all, the paper introduces too many factors (trade agreements, local content requirement, firm heterogeneity and etc.) into play, which are distractive especially when the main question is not yet answered satisfactorily. I would suggest the authors to be more focused with the research question and try to address the key question rigorously.

Our reply is the following:

Indeed, we would like to investigate the role of different factors (trade agreement, LCR, third market size) because they are also determinant factors of Export-platform FDI. Otherwise, analyzing impacts of such factors are also important in terms of policy implications.

Obviously, we should improve the introduction section by raising clearly our key research question in the revised version. More precisely, two following questions will be introduced in the introduction

- (i) How does Export-platform FDI affect the level of backward linkages (the production of upstream industries)?
- (ii) What are the determinant factors of such impacts?

2. **Referee's comment and suggestion:** Second, the analysis does not appear to have actual export-platform FDI data. Using FDI in export-oriented industries as a proxy is not adequate and raises many issues. For example, it casts doubt on the interpretation of the results are we really capturing the effect of export-platform FDI or just the effect of general FDI?

Our reply is the following:

As described in Section 3.1, the data on Export-platform FDI is not available in Vietnam. In reality, it is difficult to have such data even in developed countries because we must have panel data including at least information about firm ownership status (foreign or domestic firm), firm's export value and firm's output level.

In such circumstance, our assimilation Export-platform FDI to FDI in export-oriented industries seems to be relevant. The production of foreign firms in those industries is likely to export to other countries rather than to serve the Vietnamese market as the example of Nike, Samsung, Bridgestone Corporation, or Hewlett-Packard. Hence, FDI in export-oriented industries is different to other types of FDI (vertical or horizontal FDI). That is why it is important to introduce different factors related to Export-platform FDI as the GDP of principal Vietnamese partners (APEC countries, U.S., European countries) and trade agreements (WTO, U.S. BTA) into the regression.

To make a closer look about our choice of FDI in export-oriented industries, a more detail discussion will be included in Section 3.1 of the revised version.

3. **Referee's comment and suggestion:** Third, I am not sure I follow the testable hypotheses listed on page 13 and subsequently the interpretations of the results. I don't think we can draw conclusions the way they are done at the moment by comparing

the coefficients (or their sums) of two different specifications. In fact, I am quite lost how we arrive at the various hypotheses. Why could not the coefficient itself tell us the net effect? I think it is unconvincing to rely on the magnitude of the coefficients to determine the sign of the net effect. More direct evidence is needed.

Our reply is the following:

On the one hand, the testable hypotheses listed on page 13 are a summary of our different propositions mentioned in Section 2. If you found that makes difficult to follow, they should be removed in the revised version.

On the other hand, comparing the extent of different coefficients could be used to detect the net effect of an interested variable. For example, to investigate the role of language skills on international trade, Melitz and Toubal (2014) construct different measures of common languages (native language, spoken language, official language, and language proximity).¹ They first introduce these variables separately and then all of them into the regression and by comparing the extent of related coefficients, they obtain the net impact of language skills on trade.

Turning to our case study, we would like to examine the net impact of FDI in export-oriented industries on the production level of supporting industries. According to our framework, we first estimated the sole impact of domestic demand for inputs. Taking the estimated coefficient displayed in Table 1 (Columns 1, 2), we thus have a baseline for the level of backward linkage in the export economy (cf. Equation 4) described in the three-country model. Second, we estimated both impacts of domestic and foreign demand for inputs (Columns 3 and 4 of Table 1). Taking the obtained coefficients and comparing them to that of Columns 1 and 2, we can drive the net impacts of FDI in Export-oriented industries on the production level of supporting industries).

To make more clearly our analysis, the impact of foreign demand will be solely estimated and included in Table 1. The updated table becomes as follows:

¹Melitz J. and F. Toubal (2014). Native language, spoken language, translation and trade. *Journal of International Economics*, Vol.93(2), pp 351-363.

Table 1: Export FDI and production of supporting industries

Variable	Label	(1) RE	(2) FE	(3) RE	(4) FE	(5) RE	(6) FE
		Coefficient Std. Err.	Coefficient Std. Err.	Coefficient Std. Err.	Coefficient Std. Err.	Coefficient Std. Err.	Coefficient Std. Err.
Domestic demand	DBK	0.24*** 0.05	0.35*** 0.09	0.0003 ^{ns} 0.09	0.041 ^{ns} 0.13		
Foreign demand	FBK			0.22** 0.07	0.24** 0.07	0.22*** 0.05	0.24*** 0.07
Industry size	indus_size	0.17*** 0.04	0.14** 0.05	0.17*** 0.04	0.13** 0.05	0.18*** 0.04	0.14*** 0.05
Industrial investment	indus_inves	0.27*** 0.03	0.24*** 0.03	0.25*** 0.03	0.24*** 0.03	0.26*** 0.03	0.24*** 0.03
Labor qualification	w	0.15*** 0.02	0.13*** 0.02	0.13*** 0.02	0.12*** 0.02	0.13*** 0.02	0.12*** 0.02
Constant		5.55*** 0.76	4.51*** 1.05	6.14*** 0.81	5.68*** 1.15	6.14*** 0.63	5.6*** 1.2
Observations	N		382		382		382
Number of industries	n		33		33		33
R ^{2a}		0.7921	0.7649	0.799	0.7754	0.7986	0.7699
Breusch et Pagan' test	LM	415.9***		430.26***		423.57***	
Ficher' test	F		92.38***		75.36***		73.31***

Significant levels : * : $p < 0.05$ ** : $p < 0.01$ *** : $p < 0.001$ ^{ns} : not significant ⁺ : $p < 0.1$

Standard errors are robust.

^a: R² within for fixed effects model and R² between for random effects model

Otherwise, a more in-depth explanation about the empirical findings including policy implications will be developed in the revised version.

4. **Referee's comment and suggestion:** Fourth, there are many omitted factors on the right hand side that could potentially affect industry output, including, for example, trade. The empirical specifications need to be substantially augmented. The current version and controls are poorly motivated and even confusing.

Our reply is the following:

Actually, control variables on the right hand side include *Industrial investment*, *Industry size*, and *Labor qualification* together with other interested variables as *Domestic demand*, *Foreign demand*, *Trade agreement*, etc. We decided to do not augment the empirical specifications for several reasons. First, our main interests are to estimate variables associated with the three-country model. Second, the explanation quality of different estimations displayed in Table 1 and 2 is high. The associated R² of each estimation (within R² for fixed effects estimator and between R² for random effects estimator) is nearly 80%. Last, our are estimation is at industrial level and there are a few variables to introduce into the regression. For instance, over the three control variables used in Section 3, we can include number of located foreign firms, export taxes, import taxes, or debts.

As for your suggestion about trade, we also thought to take into account the role of annual export of each supporting industry. However, such inclusion may generate the endogeneity problem with the log of GDP's variable since the latter is used to capture third market size. As a consequence, trade is not added in the regression.

5. **Referee's comment and suggestion:** Fifth, I am not sure the term "backward linkage" is used appropriately in the paper. The paper, in my view, attempts to

examine the effect of export-platform FDI on the output of upstream industries; while the effect is indeed channeled through backward linkage, it should not be defined as the effect on backward linkage.

Our reply is the following:

Indeed, we follow Lim and Saggi (2005,2007)² as for the definition of backward linkages. According to your suggestion, the new title of the paper should be “*Impacts of Export-platform FDI on production of upstream industries Do third country size, trade agreements and heterogeneity of firms matter? Evidence from the Vietnamese supporting industries*”. Otherwise, the “level of backward linkages” term should be replaced by “production level of upstream industries”

²Lin P. and K. Saggi (2007). Multinational firms, exclusivity, and backward linkages. *Journal of International Economics*, Vol.71, pp 206-220.

Lin P. and K. Saggi (2005). Multinational firms and Backward Linkages: a critical survey and a simple model. In T. H. Moraan, E. Graham, and M. Blomstrom, *Does Foreign Direct Investment promote development?*. Washington: Peterson Institute for International Economics.