

## Decision on **#PROD1550**

2 messages

William Greene <em@editorialmanager.com> Reply-To: William Greene <wgreene@stern.nyu.edu> To: Dyah Wulan Sari <dyah-wulansari@feb.unair.ac.id> 20 August 2014 at 17:26

### CC: wgreene@stern.nyu.edu

Dear Wulan,

I have received reports from my Associate Editor and two reviewers on your manuscript,"The spillover effects of foreign direct investment on the firms' productivity performances", which you submitted to the Journal of Productivity Analysis.

Based on the advice received, I feel that your manuscript could be reconsidered for publication should you be prepared to incorporate major revisions. When preparing your revised manuscript, you are asked to carefully consider the reviewer comments which are attached, and submit a list of responses to the comments. Your list of responses should be uploaded as a file in addition to your revised manuscript.

PLEASE NOTE: YOUR REVISED VERSION CANNOT BE IN .PS OR .PDF AS TYPESETTING CANNOT MANIPULATE THE FILES. IN ORDER TO PROCEED WITH PUBLICATION YOUR ORIGINAL SOURCE FILES ARE REQUIRED. Submissions without original source files will be returned for these prior to final acceptance.

When preparing your revision be aware that under normal circumstances your revision should be returned within no more than 6 months.

In order to submit your revised manuscript electronically, please access the following web site:

#### http://prod.edmgr.com/

Your username is: dyah-wulansari Your password is: sari322288

Please click "Author Login" to submit your revision.

We look forward to receiving your revised manuscript.

Best regards, William Greene Editor Journal of Productivity Analysis

### COMMENTS FOR THE AUTHOR:

## COMMENT FROM ASSOCIATE EDITOR:

The reviewers have raised several issues, all of which need to be taken seriously. There is something else that puzzles me. The production frontier is the boundary of the production possibilities set. I can see why levels of foreign direct investment and levels of competition might cause firms to operate at different points on or below the production frontier, but I cannot see why these variables would cause the frontier itself to move [i.e., I can see why variables such as ForSpill and HHI might appear in the inefficiency effects equation (7.b), but I cannot see why they would appear in the production frontier equation (7.a)]. Relatedly, I cannot understand why the frontier would shift in over time (i.e., the finding of technical regress). Reviewer #3 suggests that this may be due to the business cycle, but does an economic downturn really mean that it is no longer technically feasible to do something that was possible the year before?

COMMENTS FROM REVIEWER #2: Please see file attached

COMMENTS FROM REVIEWER #3:

The paper deals with the spillover effects of foreign direct investment (FDI) on Indonesian manufacturing firms' productivity and the decomposition of total factor productivity (TFP) growth into different sources. As it uses a standard SFA model and does not have a significant methodological contribution, the contribution of the paper lies in its value as an empirical application and more particularly in its implications for policy. I consider that the paper is reasonably well-motivated, with a good review of the relevant literature. However, in order to provide guidance for policy, several issues need to be clarified in order to gauge the robustness of the results.

#### Main comments

1) Some issues need to be clarified with the regard to the database and the construction of variables. The identification of outliers is rather arbitrary and somewhat ambiguous. Does "the value of particular input materials in relation to gross output" less than 10 percent or higher than 90% refer to any of the individual inputs or the inputs as a whole? If you are referring to an individual input, I do not see the problem with its value being less that 10 percent of gross output. How do your results change when you adjust the specification of outliers (e.g., 5% and 95%)? If you include these so-called "outliers", how do the results change? Some more objective criterion is needed here (e.g., influential variable analysis). It is also not clear how many observation are "outliers".

Moreover, the interpolations used to fill in missing input values lead to a potential errors-in-variables problem. As these are a very small percentage of total observation, it may be better to eliminate them. In this case, how do your results change? Finally, from footnote 7, the interpolations referred to above seem only to apply to variable inputs, as missing values of fixed assets are calculate using an alternative methodology. Why was the same methodology not used for missing values of variable and fixed inputs? How many observations are affected by missing capital values?

2) There appears to be a substantial reduction in the number of observations due to the desire to use a balanced panel. Thus, we are informed (footnote 5) that the number of firms ranges between approximately 20,000 and 30,000 firms per year but in the end less than 12,000 are used, implying that at least half the sample is eliminated. The justification provided (footnote 3) is that a balanced panel is used in order to decompose TFP. However, it would be better to use the much larger unbalanced panel to estimate the technology and then use the smaller balanced panel for the posterior decomposition (relying on the parameters estimated from the larger sample).

3) The materials input used includes domestic and imported raw materials. Is there information available on the proportions of imported materials? More importantly, can fluctuations in this variable be due to exchange rate fluctuations? How is this controlled for?

4) The definition of foreign ownership as at least 10% of equity being in the hands of foreigners follows OECD and IMF conventions. However, this is still arbitrary and it would be interesting to know how changes in this definition affect your results. Following previous studies, how do your results change if the definition of foreign ownership changes to 5% and 20%? I am assuming here that the foreign equity share in each firm is available. If indeed it is, an extension would be to construct a variable denoting the foreign equity share and interacting this with the FOR dummy variable (defined as 5%, 10% and 20% in each model) to capture the effect of higher percentages of foreign ownership on firm productivity and efficiency. It is reasonable to expect that performance may vary depending on the degree of foreign ownership. The same applies to the effect of horizontal and vertical spillovers.

Finally, do many of the firms in the sample change from domestic to foreign-owned (and vice versa) in the sample? If so more detail should be provided.

5) When constructing the vertical spillovers, you use the BPS input-output tables for the years 2000 and 2005. In particular, you use the 2000 I-O table to construct the spillovers for the years 2003 and 2004 and the 2005 table for the years from 2005 on. However, it could be argued that the 2005 table would provide a better approximation to the I-O structure for the years 2003 and 2004 as these years are closer to 2005 than to the year 2000. Do your results change when you use the 2005 tables for years 2003 and 2004?

6) The inclusion of firm size defined as firm output as a proportion of industry output to capture "industry effects" is questionable. Two industries may have reasonably similar structures in terms of relative firm sizes but be affected by different unobservable factors. You should include industry dummy variables to account for unobservable heterogeneity ("industry effects").

7) Here, a suggestion. As an open economy, manufacturing productivity will be influenced not only by the presence of foreign firms in domestic industries but also the presence of foreign firms through competing imports. These effects, among other things, will be captured by the industry dummies suggested in the previous point, but if data were available, the share of imports in industry sales in the domestic market could be an interesting variable to include. That is, some measure of openness of the industry could be included if available.

8) Turning to the results, the negative coefficient on the "BackSpill" variable suggests that there are negative effects from foreign firms in upstream industries, not "that there [is] no positive learning from direct foreign competitors in the upstream industry". Some justification or possible explanation for this result should be provided.

9) The elasticity of materials seems to be extraordinarily high. Can you provide any intuition for this result? Relating back to my earlier comment on domestic and imported materials, could exchange rate fluctuation be playing a role

here?

10) The discussion of the results could be improved by providing TFP calculations for different industries. The overall TFP change is quite small but this is surely camouflaging potentially interesting differences across manufacturing industries. Likewise, the conclusions are very generic and do not necessarily follow from the empirical results. For example, policies are suggested "for strengthening technological progress through investing in knowledge and capital formation" and "a need for further institutional reforms such as government administration, and trade policies in order to develop a more competitive environment in the manufacturing sector", and so on. These are very broad conclusions that seem to be based somewhat tenuously on the result that technological change (TC) has been negative. However, this has been the same for foreign and domestic firms on average, and has surely to do with environmental circumstances (e.g., business cycle,) than technical regress per

se. Presenting calculations from different industries would give you greater scope to identify possible common characteristics between better and poorer performing industries and draw more precise policy conclusions.

Minor comments

1) In Table 1, the output and input variables should be expressed in levels, not logarithms.

2) In Table 3, include the number of observations.

3) The English needs to be thoroughly revised as parts of the document do not read well. The discussion after equation (3), for example, is not easy to follow.

\_\_\_\_

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

http://prod.edmgr.com/l.asp?i=9433&I=GR12QVWC

**Dyah Wulansari** <dyah-wulansari@feb.unair.ac.id> To: William Greene <wgreene@stern.nyu.edu> 21 August 2014 at 17:34

Dear William Green,

Thank for your information.

Regard Wulan [Quoted text hidden]



# Decision on your Manuscript #PROD1550R1

1 message

William Greene <em@editorialmanager.com> Reply-To: William Greene <wgreene@stern.nyu.edu> To: Dyah Wulan Sari <dyah-wulansari@feb.unair.ac.id> 24 July 2015 at 18:19

## CC: wgreene@stern.nyu.edu

Dear Mrs Sari,

I have received reports from an Associate Editor and two reviewers on your manuscript, "The spillover effects of foreign direct investment on the firms' productivity performances", which you submitted to the Journal of Productivity Analysis. The reports from the reviewers are generally positive, but the report from the Associate Editor is very negative.

Based on the advice received, I feel that your manuscript could be reconsidered for publication should you be prepared to incorporate further revisions. When preparing your revised manuscript, you are asked to carefully consider the all the comments which are attached, and submit a list of responses to the comments. Your list of responses should be uploaded as a file in addition to your revised manuscript. Be advised that this time the revised paper will be rejected if the Associate Editor is not satisfied with your response to the two issues he raised in his first report.

When preparing your revision be aware that under normal circumstances your revision should be returned within no more than 6 months.

In order to submit your revised manuscript electronically, please access the following web site:

http://prod.edmgr.com/

Your username is: dyah-wulansari Your password is: sari322288

Please click "Author Login" to submit your revision.

We look forward to receiving your revised manuscript.

Please make sure to submit your editable source files (i. e. Word, TeX).

Best regards,

William Greene Editor Journal of Productivity Analysis

## COMMENTS FROM ASSOCIATE EDITOR:

I am not at all satisfied with your response to the two issues I raised in my previous report. First, I wrote that "The production frontier is the boundary of the production possibilities set. I can see why levels of foreign direct investment and levels of competition might cause firms to operate at different points on or below the production frontier, but I cannot see why these variables would cause the frontier itself to move". In other words, I can see why levels of FDI and competition would affect the maximum output that is technically feasible USING GIVEN INPUTS. You have responded by saying "Foreign firms may have incentives to improve productivity of domestic buyers as well as high concentration among firms may increase the firm's productivity through technological progress and scale efficiency." This poorly-written sentence simply does not address the issue.

Second, I wrote that "I cannot understand why the frontier would shift in over time (i.e., the finding of technical regress)". In other words, I cannot see why the maximum output that is technically feasible using given inputs in period t is less than the maximum output that was technically feasible using those inputs in period t-1. You have responded by saying that "First, this may be due to the business cycle. Second, the firms may not be updated with the advanced technology ... most of Indonesian manufacturing firms seem to use old machinery for their production processes and unfortunately they do not upgrade their machinery regularly." Again, this does not address the issue. Based on your response to these issues, I can only conclude that there is no economics in this model — it is a data

mining exercise.

COMMENTS FROM REVIEWER #2: Please see attached file.

## COMMENTS FROM REVIEWER #3:

The authors have dealt with virtually all the comments I raised. The exceptions are their response to my comment in the original review about using the I-O table for 2005 for years 2003 and 2004, and an explanation for the output elasticity of materials. I am sure that readers of the journal would be curious to know whether the results changed substantially if you used the 2005 table instead of the 2000 table for the years 2003 and 2004. By this I do not mean that you should include the full set of results in the paper (which is already rather long) but some mention of the results using the 2005 table could be made, say, in a footnote.

Also, the high output elasticity of materials is maintained. If there are any studies in the empirical literature on Indonesian manufacturing with similar results, it would be good to include them.

\_\_\_\_

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column. http://prod.edmgr.com/l.asp?i=11537&I=EIRGSGYH



# Submitting manuscript #PROD1550

1 message

**Dyah Wulansari** <dyah-wulansari@feb.unair.ac.id> To: William Greene <wgreene@stern.nyu.edu> 9 January 2016 at 13:36

Dear

Prof. William Greene Chief Editor Journal of Productivity Analysis

We would like to inform you that I have submitted the second revised version of our manuscript #PROD1550 entitled "The spillover effects of foreign direct investment on the firms' productivity performances".

We would like to thank the associate editor and the two reviewers for their comments and suggestions. We respond all comments and suggestions as well as accommodate them into our second revised version.

Our responses to the comments of the associate editor and the reviewers are attached in a separate file, with the lists as followed:

A list of responses for associate editor's comments

A list of responses for reviewer #2's comments

A list of responses for reviewer #3's comments

Looking forward for the further process and in the mean time with best regards.

Sincerely Yours,

Dyah Wulan Sari (⊠)

Faculty of Economics and Business, Airlangga University

Jl. Airlangga No. 4, Surabaya 60286 Indonesia

e-mail: dyah-wulansari@feb.unair.ac.id

telp: +62 811334664; fax number: +62 31 5026288



# Decision on your Manuscript #PROD1550R2

4 messages

William Greene <em@editorialmanager.com> Reply-To: William Greene <wgreene@stern.nyu.edu> To: Dyah Wulan Sari <dyah-wulansari@feb.unair.ac.id> 25 May 2016 at 21:41

## CC: wgreene@stern.nyu.edu

Dear Dr. Sari,

I have received reports from an Associate Editor and two reviewers on your manuscript, "The spillover effects of foreign direct investment on the firms' productivity performances", which you submitted to the Journal of Productivity Analysis.

Based on the advice received, I feel that your manuscript could be reconsidered for publication should you be prepared to incorporate minor revisions. When preparing your revised manuscript, you are asked to carefully consider the comments of Reviewer #2 which are attached, and submit a list of responses to the comments. Your list of responses should be uploaded as a file in addition to your revised manuscript.

When preparing your revision be aware that under normal circumstances your revision should be returned within no more than 6 months.

In order to submit your revised manuscript electronically, please access the following web site:

#### http://prod.edmgr.com/

Your username is: dyah-wulansari

Your password is: available at this link http://prod.edmgr.com/Default.aspx?pg=accountFinder.aspx& firstname=Dyah&lastname=Sari&email\_address=dyah-wulansari@feb.unair.ac.id;wlnsari@yahoo.com

Please click "Author Login" to submit your revision.

We look forward to receiving your revised manuscript.

Please make sure to submit your editable source files (i. e. Word, TeX).

Best regards, William Greene Editor Journal of Productivity Analysis

#### COMMENTS FROM REVIEWER #2:

The authors have addressed some of the issues raised in my second report. For the paper to be suited for publication in "Journal of Productivity Analysis" the authors should better tackle a methodological major issue:

The authors cannot motivate the choice of parametric approach stating that "This study follows one-step stochastic frontier model proposed by Kumbhakar et al. (1991); Huang and Liu(1994) as well as Battese and Coelli (1995) which allowing the impact of environment factors simultaneously in the model." As the authors all know there is large nonparametric literature modelling the effect of environmental variables on efficiency (Cazals C, Florens J P, Simar, L 2002, Bădin L, Daraio C, Simar L 2012, Mastromarco C, Simar, L 2015). It is not clear why the authors in this version delete from the previous version the nonparametric literature treating with this issue that indeed should be included. Moreover the authors must motivate the choice of parametric approach by stressing the strengths with respect to nonparametric one.

**Dyah Wulansari** <dyah-wulansari@feb.unair.ac.id> To: khalifah@ukm.edu.my, na.khalifah@gmail.com, suyanto@ubaya.ac.id 1 June 2016 at 09:10

[Quoted text hidden]

#### Noor Aini Khalifah <khalifah@ukm.edu.my> To: Dyah Wulansari <dyah-wulansari@feb.unair.ac.id>

1 June 2016 at 09:57

ALHAMDULILLAH. CONGRATULATIONS!!!!!! [Quoted text hidden]

**suyanto** <suyanto@ubaya.ac.id> To: Dyah Wulansari <dyah-wulansari@feb.unair.ac.id>

semangat. tinggal selangkah lagi.

salam, Suyanto [Quoted text hidden] Suyanto, PhD Dean Faculty of Business and Economics University of Surabaya Address: JI Raya Kalirungkut, Surabaya East Java, Indonesia Phone: +62-31-2981230 Fax.: +62-31-2981131 Mobile: +62-81332713516 E-mail: suyanto@ubaya.ac.id (office) suyanto160276@yahoo.com (personal) My Author page: Research Gate: https://www.researchgate.net/profile/Suyanto Scopus Author ID: 36678277200 Thomson Reuter Researcher ID: B-4381-2016 ORCID: http://orcid.org/0000-0001-9084-8379 http://scholar.google.co.id/citations?hl=id&user=YxObZYAAAAAJ RePEC: http://ideas.repec.org/f/psu315.html

2 June 2016 at 11:17



3 October 2016 at 21:33

## Decision on your manuscript #PROD1550R3

4 messages

William Greene <em@editorialmanager.com> Reply-To: William Greene <wgreene@stern.nyu.edu> To: Dyah Wulan Sari <dyah-wulansari@feb.unair.ac.id>

CC: wgreene@stern.nyu.edu

Dear Dr. Sari,

I am pleased to inform you that your manuscript, "The spillover effects of foreign direct investment on the firms' productivity performances", has been accepted for publication in the Journal of Productivity Analysis.

Please remember to quote the manuscript number, PROD1550R3, whenever inquiring about your manuscript.

With best regards,

William Greene Editor

Dyah Wulansari <dyah-wulansari@feb.unair.ac.id>4 October 2016 at 12:54To: Noor Aini Khalifah <na.khalifah@gmail.com>, suyanto@ubaya.ac.id, us3198@yahoo.com, khalifah@ukm.edu.my

[Quoted text hidden]

 Suyanto <us3198@yahoo.com>
 4 October 2016 at 12:59

 Reply-To: Suyanto <us3198@yahoo.com>

 To: Dyah Wulansari <dyah-wulansari@feb.unair.ac.id>, Noor Aini Khalifah <na.khalifah@gmail.com>,

 "suyanto@ubaya.ac.id" <suyanto@ubaya.ac.id>, "khalifah@ukm.edu.my" <khalifah@ukm.edu.my>

Congratulation Wulan. A hard work has its outcome.

Best,

Suyanto

Suyanto, PhD Dean Faculty of Business and Economics University of Surabaya Address: JI Raya Kalirungkut, Surabaya East Java, Indonesia Phone: +62-31-2981230 Fax.: +62-31-2981131 Mobile: +62-81332713516 E-mail: suyanto@ubaya.ac.id (office) suyanto160276@yahoo.com (personal) My Author page: Research Gate: https://www.researchgate.net/profile/Suyanto Scopus Author ID: 36678277200 Thomson Reuter Researcher ID: B-4381-2016 ORCID: http://orcid.org/0000-0001-9084-8379 http://scholar.google.co.id/citations?hl=id&user=YxObZYAAAAAJ RePEC: http://ideas.repec.org/f/psu315.html [Quoted text hidden]

**Noor Aini Khalifah** <khalifah@ukm.edu.my> To: Dyah Wulansari <dyah-wulansari@feb.unair.ac.id>, suyanto@ubaya.ac.id 4 October 2016 at 14:20

Alhamdulillah. Alhamdulillah. Alhamdulillah. [Quoted text hidden]