

Sources of Economic Growth in MENA Countries: A Harrod- Neutral Technological Progress Identification Framework

Responses to Comments from the Editor

The authors thank the editor for giving us the opportunity to address in details each reviewers' comments.

Responses to Comments from Reviewer 2:

We would like to thank you for giving us the opportunity to revise our paper and thank you for taking the time to thoroughly review our manuscript and providing constructive feedback to improve our work. Below are the details on how we have addressed your comments.

Comment #1:

The paper is generally informative and flows well. The methodology is well detailed. More descriptive statistics on the dataset could be useful for an overall understating on the data used and the different trends in each country, especially that a general audience might not be familiar with specifics of MENA countries.

Response:

To address this point we discussed in the revised version of the paper some descriptive statistics and features of the MENA countries based on our previous work (Acikgoz, Ben Ali and Mert, 2016).

Ben Ali, M. S., Senay A and Mert, M. (2016). Sources of Economic Growth in The Middle East and North Africa, in Ben Ali, M-S. (eds), Economic Development in the Middle East and North Africa (MENA), Challenges and Prospects, Palgrave Macmillan. New York.

Comment #2:

The paper divides the MENA countries into oil rich and resource poor countries, but I would rather suggest a more accurate division into oil exporting (oil rich), developing resource poor, and underdeveloped resource poor, because the state of human capital in the latter is much lower than in the former and that would affect the understanding of growth trends in these countries.

Response:

To address this point we discussed some features of the MENA based on a different classification as suggested by the reviewer. The countries included can therefore be classified into three main groups based on the World Bank classification: (i) Resource-poor, labor-abundant economies (Arab Republic of Egypt, Jordan, Morocco, Tunisia); (ii) Resource-rich, labor-abundant economies (Islamic Republic of Iran, Iraq, Syrian Arab Republic); and (iii) Resource-rich, labor-importing economies (Bahrain, Kuwait, Qatar, and Saudi Arabia). Malta and Turkey are also considered resource-rich countries except oil resources. Sudan has been divided into two countries (Sudan and South Sudan) in 2011 because of internal conflicts. Thus, Sudan lost most of its oil reserves after 2011. We can list Sudan among resource-rich countries since our data set covers the period 1970-2011. Israel is one of the high-income countries in the MENA region.

Countries development process based on the variables of interest has been pictured pages 6 -12.

Comment #3:

In terms of the findings, I find the conclusions regarding Saudi Arabia quite surprising. As an oil exporting country that mainly relies on oil revenues for its growth, a negative contribution of capital stock and a major contribution of technological progress are questionable results, and I would recommend revisiting them.

Response:

We would like to thank you for your comment on the results for Saudi Arabia. First of all, the yearly growth rate of output per labor for Saudi Arabia's, on average, is negative in the period of analysis. The capital accumulation to labor ratio and human capital to labor are the factors that actually diminish the effects of this negative growth and the major contributor to this negative growth is actually the technological progress. We corrected this sentence in the text (revised version). Please see footnote 8 in page 22.

Minor Comments #4:

Comment #4-1

Page 3 – line 4: The word “replaced” seems inappropriate when setting the research question as the second question aggregates the first one and looks at regional rather than country trends.

Page 3 - line 18: sentence starting “The country in the region ... growth rate per worker” is unclear. Suggest rephrasing.

Page 3 – Last 5 lines have some information that could be presented graphically for more clarity.

Response

All inappropriate wording in the text has been replaced and rephrased in the revised version. We discussed some graphical features of our data by referencing some information detailed in our previous study (Ben Ali, M. S., Senay A and Mert, M., 2016). We also sent the manuscript to Elsevier to be edited for the English language.

Comment #4-2

Page 4 – First 4 lines: the sentence is too long. Consider rephrasing.

Response:

We rephrased the sentence.

Comment #4-3

Page 5 – Footnote 2: Elaborate on the idea of “no economically meaningful”

Response:

What we actually meant by the idea “no economically meaningful” is that the signs and the magnitudes of the estimated coefficients are not as expected. We also highlighted that in the revised version of the paper (in the first paragraph of page 13). We wanted to give information about why we could not continue growth accounting analysis for some countries. We clarified it in Footnote 2.

Comment #4-4

Page 12 – Line 17: Be careful when using the term “all MENA” countries, since the study results actually do not cover all the countries, so be more specific in order to avoid confusion.

Response:

We would like to thank you for highlighting that the growth accounting results do not cover all 15 MENA countries investigated in this paper. We modified this statement in the revised version (in the text and in the abstract as well).

Comment #4-5

Page 13 – lines 1 to 5. Not clear why such elasticities were obtained. Suggested more elaboration on this point.

Response:

We used two methods in order to check robustness of estimated long-run parameters as we mentioned in the paper. For seven countries, the two methods produced different signs and/or magnitudes than expected. Stability test results for the long-run elasticities mostly showed that parameters might not be stable over time. We also believe that diversity among the countries of this region resulted in such empirical findings.

Comment #4-5

Page 15 – Line14: “contribution of technological progress in Turkey is minimal”. I find this result rather surprising and it is worth looking more into it.

Response

We discussed why the contribution of technological progress in Turkey is Minimal in the “*Growth Accounting*” section. Please see footnote 6 in page 21.