

Peer Review Report

Review Report on Are wealthier times healthier in cities? Economic fluctuations and mortality in urban areas of Latin America

Original Article, Int J Public Health

Reviewer: Felix Ettensperger

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EVALUATION

Q 1 Please summarize the main findings of the study.

The original article "Are wealthier times healthier in cities? Economic fluctuations and mortality in urban areas of Latin America" presents novel results about the linkage of economic fluctuations and oscillations in mortality in 340 urban areas of 10 Latin American countries. The article uses adjusted panel regression models with and without Hodrick–Prescott filter. Results are presented as effects analyzed via gender, age groups, and causes of death for all included urban areas and for individual countries one by one. The main models are tested by using a time-lagged dependent variable, exclusion of cases, weighting, and model adjustments. Results remain robust within these variations.

The main findings are that female mortality, Infant mortality, and disease-related mortality all follow a procyclical pattern, while only homicides show a clearly countercyclical pattern. Suicides as a mortality factor are also tested but remain insignificant.

Q 2 Please highlight the limitations and strengths.

The limitations of the study are all correctly mentioned by the authors in the paper. Especially the usage of GDP as the sole indicator of economic change in urban settings is not optimal. But the argument of the authors is correct: With the vast informal employment sectors in Latin American cities, using any official employment statistic does not provide reliable figures in urban regions. Also, GDP remains the most comparable indicator for all 10 countries included in this study. I see no alternative to the proposed framework and find the authors' solution acceptable.

The high number of observations also helps to somewhat alleviate this limitation.

Q 3 Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

The article is overall very well written and well structured. The results are presented orderly and with all necessary detail. The applied statistical methods are suitable for the proposed research question and the conducted application. The results appear to be statistically consistent and are sufficiently tested with a variety of models, time-lag, and the HP filter. The results indicate interesting deviations from previous studies (which are, as the authors pointed out, are indeed few for urban settings). National studies or urban studies from outside of Latin America find different patterns which makes the publication of these results very relevant and interesting for the scientific community.

The limitations of the study, especially the question of how to measure an economic change in urban areas with large informal employment, are sufficiently mentioned and addressed by the authors.

I recommend the publication of this article in SSPH – but recommend a short list of minor changes and additions to better connect the results to previous research.

Minor points:

One interesting (but sad) finding of the paper is the increased mortality rate of children 0–9 in phases of economic expansion. This is contradicting a lot of existing studies about economic fluctuation and mortality among children (mostly studies on national level). The authors explained that it is probably connected to an increase in road accidents. A plausible connection in the urban context but maybe not the only risk factor. Maybe adding a few short sentences to this finding could be beneficial for the paper. Could higher mortality rates among this group also be related to higher employment rates among women (primal caretakers) in economic growth phases and the resulting change in childcare quality? Or maybe the procyclical consumption of alcohol and other substances by parents might be a risk factor for young children? Looking in the data at the most prevalent causes of death in this age group might provide some additional insights.

Similar suicide, the third leading cause of death among adolescents and young adults in Latin America, does not become significant in the regression results in any of the main M1 & 2 and additional M3, M4, and weighted M1 and 2 models (except once for Peru). An interesting finding that might warrant a short explanation and connection to the procyclical/neutral/countercyclical discussion in the literature on suicide rates and economic expansion/contraction.

Both points can be addressed in brevity but would help to better connect these findings to existing research.

Besides these minor points, I found the article was very well written and suitable for publication.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

Yes, the title is appropriate, concise, and indicative of the studies content and purpose

Q 5 Are the keywords appropriate?

Yes, keywords are appropriate.

Q 6 Is the English language of sufficient quality?

Yes, absolutely.

Q 7 Is the quality of the figures and tables satisfactory?

Yes.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?

yes, but i proposed additional references to be included to discuss some of the findings included in the study

QUALITY ASSESSMENT

Q 9 Originality



Q 10 Rigor



Q 11 Significance to the field



Q 12 Interest to a general audience

Q 13 Quality of the writing

Q 14 Overall scientific quality of the study

REVISION LEVEL

Q 15 Please make a recommendation based on your comments:

Minor revisions.