

Author's Accepted Manuscript

The Impact of Shoreline Stabilization on Economic Growth in Small Island Developing States

Leonardo R. Corral, Maja Schling



www.elsevier.com/locate/jeem

PII: S0095-0696(17)30366-2
DOI: <http://dx.doi.org/10.1016/j.jeem.2017.06.001>
Reference: YJEEM2037

To appear in: *Journal of Environmental Economics and Management*

Received date: 24 March 2016
Revised date: 17 May 2017
Accepted date: 3 June 2017

Cite this article as: Leonardo R. Corral and Maja Schling, The Impact of Shoreline Stabilization on Economic Growth in Small Island Developing States *Journal of Environmental Economics and Management* <http://dx.doi.org/10.1016/j.jeem.2017.06.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and a review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

The Impact of Shoreline Stabilization on Economic Growth in Small Island Developing States*

Leonardo R. Corral^{a1}, Maja Schling^{b*}

^aInter-American Development Bank, Strategy Development Division, 1300 New York Avenue N.W. Washington, D.C., 20577

^bInter-American Development Bank, Strategy Development Division, 1300 New York Avenue, NW, Office SE-0831E, Washington, DC 20577

leonardoc@iadb.org

majas@iadb.org

*Corresponding author. +1 202 623 4244

Abstract

This paper assesses the economic growth impact of shoreline stabilization policy in Small Island Developing States. Concentrating on the Barbadian efforts to stem shoreline retreat, it explores whether investments in shoreline stabilization and beach amenity enhancement have beneficial effects on medium-term economic growth. The analysis relies on the synthetic control method as a way to systematically choose comparison units (beach sites), which allows for precise quantitative inference in small-sample studies. Our results indicate that in the first three years after shoreline stabilization works were completed, local economic effects, as measured by nighttime lights data, are positive and indicate a positive trend. Confidence bounds obtained by a bootstrapping method suggest that the positive trend is robust in the last two years post-treatment. Shoreline stabilization works may therefore not only help preserve fragile ecological conditions, but further lead to sustainable growth in the local economy.

JEL Codes:

O44; Q54; D04; N56

* The authors would like to thank Naijun Zhou for designing the geographic information system (GIS) dataset used in the analysis, as well as Cassandra Rogers, Janice Cumberbatch and Fabian Hinds for supporting data collection efforts and providing institutional and project specific knowledge. The authors are grateful for the support of the Environment, Rural Development, Environment and Disaster Risk Management Division of the Inter-American Development Bank and the Coastal Zone Management Unit (CZMU) of Barbados in conducting the study, and to participants of the SPD Half-Baked Lunch seminar series for their helpful comments. Finally, we thank Prof. Alberto Abadie and Paul Winters for their useful comments and advice on earlier versions of this paper, as well as two anonymous reviewers for their helpful comments.

¹ +1 202 623 1690

Download English Version:

<https://daneshyari.com/en/article/7361553>

Download Persian Version:

<https://daneshyari.com/article/7361553>

[Daneshyari.com](https://daneshyari.com)