



ELSEVIER

www.elsevier.com/locate/worlddev

World Development Vol. 58, pp. 41–52, 2014
© 2013 Elsevier Ltd. All rights reserved.
0305-750X/\$ - see front matter

<http://dx.doi.org/10.1016/j.worlddev.2013.12.002>

Does Tourism Eco-Certification Pay? Costa Rica's Blue Flag Program

ALLEN BLACKMAN

Resources for the Future, Washington, DC, USA

Centro Agronómico Tropical de Investigación y Enseñanza, Turrialba, Costa Rica

MARÍA ANGÉLICA NARANJO, JUAN ROBALINO and FRANCISCO ALPÍZAR

Centro Agronómico Tropical de Investigación y Enseñanza, Turrialba, Costa Rica

and

JORGE RIVERA*

George Washington University, USA

Centro Agronómico Tropical de Investigación y Enseñanza, Turrialba, Costa Rica

Summary. — According to advocates, eco-certification can stem environmental damages from tourism in developing countries. Yet we know little about tourism operators' economic incentives to get certified. To help fill that gap, we use detailed panel data to analyze the Blue Flag beach certification program in Costa Rica where nature-based tourism has caused significant environmental damage. We use new hotel investment to proxy for private benefits, and fixed effects and propensity score matching to control for self-selection bias. We find that Blue Flag certification spurs significant new hotel investment, particularly in luxury hotels and in economically advantaged communities.

© 2013 Elsevier Ltd. All rights reserved.

Key words — Costa Rica, eco-certification, propensity score matching, tourism

1. INTRODUCTION

Tourism associated with beaches, protected areas, and other natural resources often has serious environmental impacts (Buckley, 2004; Holden, 2000; Mieczkowski, 1995). Hotels, cruise ships, and transportation operations, along with roads and other supporting infrastructure, generate pollution, destroy and degrade biodiversity habitat, and introduce invasive species. Moreover, they spur economic and population growth that multiplies these effects. The problem is especially acute in developing countries, where nature-based tourism is increasingly important, representing the backbone of some economies (Balmford *et al.*, 2009; Christ, Hillel, Matus, & Sweeting, 2003), and where land-use planning, coastal zone management, and other types of environmental regulation are typically weak (Blackman, 2010; Russell & Vaughan, 2003).

According to advocates, private-sector voluntary schemes certifying that tourism operations adhere to defined environmental process or performance standards can help address this problem (Honey & Rome, 2001; UNEP, 1998). First introduced in Europe in the 1980s, they have proliferated over the past 25 years (Dodds & Joppe, 2005; Font, 2002). Today, dozens are active in developing countries. Among the best known are the Blue Flag and Green Globe programs, which are international in scope, and the Certification for Sustainable Tourism (CST) program, which is based in Latin America (Dodds & Joppe, 2005). In theory, initiatives like these create incentives for tourist operations to improve their environmental performance by widening the availability of reliable information about this performance, thereby enabling consumers, capital markets, and civil society to more easily reward green operators and sanction dirty ones. For example, armed with better information, vacationers can patronize or boycott

certain hotels, and lenders can extend or withhold credit. Hence, in principle, eco-certification can create a private-sector system of incentives, monitoring, and enforcement, effectively sidestepping the problem of weak regulation.

But for tourism eco-certification programs to spur such environmental improvements, they also must provide eco-certified operators with significant private economic benefits, such as price premiums and more customers (Blanco, Rey-Maquiera, & Lozano, 2009). The reason is twofold. Participation in eco-certification programs is costly: operators incur substantial pecuniary and non-pecuniary costs to meet certification environmental performance standards and to pay application fees and other transactions costs (Salzhauer, 1991; Sasidharan, Sirakaya, & Kerstetter, 2002). In addition, by definition, participation is voluntary. Therefore, unless certification generates economic returns sufficient to at least offset these costs, few operators will participate.

* Funding for this research was provided by Sida, the Swedish International Cooperation Agency through the Environment for Development (EfD) Initiative and by the Swedish Research Council Formas through the Human Cooperation to Manage Natural Resources (COMMONS) program. We are grateful to Darner Mora and Arcelio Chavez of Costa Rica's National Water Laboratory for multifaceted assistance, Juan Roeschmann for help with data compilation and stakeholder interviews, Lorena Coronel for GIS expertise, Sally Atwater for editorial assistance, and two anonymous reviewers for helpful comments and suggestions. We also acknowledge contributions of seminar participants in the EfD annual meetings, the European Environmental and Resource Economics Association annual meetings, and the Ohio State University Voluntary Pollution Control workshop. Remaining errors are our own. Final revision accepted: December 17, 2013.

Yet we know little about the private economic effects of tourism eco-certification in developing countries. One reason is that requisite producer-level data are scarce. In particular, data on profits and market share of tourism operators in developing countries are proprietary and tightly held. A second reason is that evaluating economic effects of eco-certification is challenging. To be credible, evaluations must control for the non-random selection of certain types of tourism operators into certification—that is, for self-selection bias. Already-green operators generally have strong incentives to participate because few additional investments are required to meet certification standards. Profitable operators also typically have strong incentives to participate because they can best afford to cover the associated costs. Evaluations that fail to control for the disproportionate participation of such operators conflate the economic effects of certification with the effects of certified operators' preexisting characteristics.

It is perhaps not surprising, then, that credible evidence on the link between developing country tourism eco-certification and private economic benefits is quite thin. What is more, the evidence that we do have is mixed. To our knowledge, the only published quantitative evaluation of this link is [Rivera \(2002\)](#), which examines CST hotel certification in Costa Rica. The author uses original survey data on 169 hotels along with a Heckman model to control for self-selection bias. He finds that CST certification does not boost prices or market share for the average hotel but does have price benefits for hotels with particularly strong environmental performance.

Three other strands of literature bear on the link between developing country tourism eco-certification and private economic benefits. However, their findings must be applied cautiously since they focus on economic sectors other than tourism and/or on industrialized countries—sectors and countries where the drivers of and links between environmental and economic performance are likely to be different. The first relevant strand of the literature is on the private economic benefits of eco-certification in non-tourism sectors. This strand also is limited, however. [Blackman and Rivera \(2011\)](#) review the published literature on producer-level effects of eco-certification in five sectors where it is particularly prevalent: bananas, coffee, fish products, forest products, and tourism. Among the non-tourism sectors, they find 20 empirical retrospective studies of eco-certification's private economic effects, only eight of which control for self-selection bias. All eight focus on Fair Trade and organic certification of bananas or coffee in developing countries. Three find some evidence of economic benefits ([Arnould, Plastina, & Ball, 2009](#); [Bolwig, Gibson, & Jones, 2009](#); [Fort & Ruben, 2008a](#)), and five find none ([Fort & Ruben, 2008b](#); [Lyngbaek, Muschler, & Sinclair, 2001](#); [Ruben & van Schendel, 2008](#); [Sáenz Segura & Zúñiga-Arias, 2008](#); [Zúñiga-Arias & Sáenz Segura, 2008](#)).

The literature on voluntary actions other than eco-certification that tourism operators take to improve environmental performance also is relevant. However, it too is quite thin. In their review of this nascent literature, [Blanco et al. \(2009\)](#) find just six published studies, only one of which—[Kassinis and Soteriou \(2005\)](#)—attempts to control for selection bias. Using a structural econometric model to examine a sample of high-end European hotels, the authors find that environmental management does not have a direct effect on economic performance, although it does affect it indirectly through customer demand.

Finally, the voluminous literature on the link between corporate social responsibility (CSR)—actions not required by law that firms take to improve environmental quality, workers' health and safety, and/or community welfare—and

private economic benefits in industrialized countries has some bearing. Several recent meta-analyses conclude that on average the relationship, if it exists at all, is at best mildly positive: although CSR does not usually entail significant losses, neither does it generate significant profits. In other words, most CSR essentially just pays for itself ([Margolis, Elfenbein, & Walsh, 2007](#); [Portney, 2008](#); [Reinhardt, Stavins, & Vietor, 2008](#)).

Hence, overall, we have little rigorous evidence on the link between eco-certification and private economic benefits in the tourism sector of developing countries—or for that matter, any type of eco-certification in any sector in developing and industrialized countries. To help fill this gap, we examine the Blue Flag Program (BFP), an international program that certifies beaches and other tourist destinations, in Costa Rica. We focus on BFP because, as noted above, it is one of the most prominent eco-certification programs in the developing world ([Dodds & Joppe, 2005](#)). We study Costa Rica because it is a global leader in nature tourism and is struggling to mitigate the serious environmental damage this sector causes, particularly in coastal areas ([Fonseca, 2010](#); [Lunmsdon & Swift, 1998](#)).

Our analysis aims to determine whether BFP certification of tourist beach communities generates significant private economic benefits for local hotels. We use panel data on 141 tourist beach communities in Costa Rica, compiled from a variety of sources, including the country's national tourism and census agencies and a geographic information system (GIS) on beach communities' geophysical characteristics. We use fixed effects and propensity score matching to control for self-selection bias. Data directly measuring economic benefits—for example, hotel occupancy rates and room prices—are proprietary and/or quite noisy. Therefore, as a proxy, we use new hotel investment, which is closely associated with expected private economic benefits. A finding that, all other things equal, past BFP certification spurs new hotel investment would indicate that local hotels expect significant private economic gains from certification; the opposite finding suggests they do not.

We find that past BFP certification has a statistically and economically significant effect on new hotel investment, particularly investment in luxury hotels and in economically advantaged communities. Our results suggest that certification has spurred the construction of 19 additional hotels per year in our matched regression sample. These findings provide some of the first evidence that eco-certification in developing countries can generate private benefits for tourism operators and therefore has the potential to improve their environmental performance.

The remainder of the paper is organized as follows. The next section discusses possible causal links among BFP certification, private economic benefits, and hotels' location decisions. The Section 3 presents background on tourism in Costa Rica and BFP. The Section 4 discusses our empirical approach and data. The Section 5 presents results, and the last section sums up and concludes.

2. ECO-CERTIFICATION AND HOTEL LOCATION

The aim of the present paper is to determine whether and to what extent BFP certification affects hotel investment, not to identify the specific causal mechanisms that drive this investment. That said, to motivate the empirical analysis, it is helpful to hypothesize about potential causal chains. Two countervailing sets of links among BFP certification, hotel profits, and investment are possible: BFP certification could

Download English Version:

<https://daneshyari.com/en/article/991701>

Download Persian Version:

<https://daneshyari.com/article/991701>

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