Foreign Informational Lobbying Can Enhance Tourism

Evidence from the Caribbean

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Abstract

There exist legal channels for informational lobbying of U.S. policymakers by foreign principals. Foreign governments and private sector principals frequently and intensively use this institutional channel to lobby on trade and tourism issues. This paper empirically studies whether such lobbying effectively achieves its goal of trade promotion in the context of Caribbean tourism, and suggests the potential for using foreign lobbying as

a vehicle for development. Panel data are used to explore and quantify the association between foreign lobbying by Caribbean principals and U.S. tourist arrivals to Caribbean destinations. A variety of sensitivity analyses support the finding of a strong association. The policy implications are obvious and potentially important for developing countries.

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**FOREIGN INFORMATIONAL LOBBYING CAN ENHANCE TOURISM:
EVIDENCE FROM THE CARIBBEAN**

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1. Introduction

The Foreign Agent Registration Act of 1938 (FARA) provides a legal channel for foreign governments and businesses to lobby the US government and to influence the US public opinion. The main restriction is that such foreign “principals” must hire an “agent” based in the US. These agents may contact US government representatives on behalf of the foreign agent or engage in a public relations capacity for a foreign principal. Through this FARA channel, lobbying by foreign governments and foreign businesses has become a large and thriving industry. The total amount expended by US based agents on behalf of their foreign principals, reported by FARA agents to be nearly \$US 600 million in 1999, is of the order of magnitude of total spending by all domestic political action committees (PACs). These lobbying activities are not exclusively the domain of rich countries. Since expanding trade with the US is among the chief motives for foreign lobbying, a variety of rich and poor countries participate in lobbying activities through FARA channels. For example, in 1999 more than 1000 principals from 160 countries sought to engage the attention of US policymakers (Department of Justice, FARA site, 2003).

How do FARA agents lobby on the principals’ behalf? In this paper, we argue that a significant part of the expenditures made by FARA agents on behalf of their clients are on informational activities targeted at policymakers. Such activities may be conducted through the media, but also by disseminating informational materials to legislators, government agencies, public officials, as well as civic and educational groups.² We draw on the theoretical literature on informational lobbying to frame our empirical work.

Our focus is on the lobbying activities of a group of Caribbean countries that seek to promote tourism by US residents. Tourism constitutes a large part of their export earnings (Figure 1), and as traditional agro export industries have declined, tourism is increasingly looked to as a source of long run growth. However, there is concern that a high price elasticity for the relatively homogeneous package of “sea, sand, and sun” may be driving the perceived volatility of revenues and the observed erosion of the region’s share of the global market. By lobbying, just as in advertising, tourism destinations may benefit from product differentiation and make

² The sixteen-question registration form CRM-153 (formerly OBD-63) that FARA agents are required to fill out every 6 months inquires into the details of informational lobbying activities.

tourism less price sensitive. Engaged heavily in such activity are Caribbean governments and lobbies in those countries connected with the tourism industry. Jobst's (2002) data summaries of foreign lobbying (Jobst, 2002, Table 4) indicate that Latin American and Caribbean countries accounted for over 25 percent of total foreign lobbying in the US over the 1990-2000 decade. Our own FARA entries data indicates that the 13 Caribbean destinations used in our sample represent 6 percent of total foreign lobbying in the same period, of which, almost 60 percent was spent on tourism promotion.

The paper empirically investigates whether these efforts are effective. More specifically, are foreign lobbies successful in achieving their aim of increasing tourism? What is the quantitative impact of lobbying on tourism? Does foreign lobbying confer market power by making the demand for tourism less price-inelastic? If the results show lobbying to be effective, they have a practical and straightforward policy implication for foreign countries. Countries endowed with natural amenities can, through legal lobbying channels, increase tourism by earning endorsements from the client country's government.

In the economics literature, the only other empirical studies of foreign lobbying of which we are aware are Gawande, Krishna, and Robbins (2006), which studies the impact of foreign lobbying on US protectionism, and Kee, Olarreaga and Silva (2007) that studies whether South American lobbies succeeded in lowering US tariff preferences against those countries. Both studies indicate that foreign lobbying benefits countries that engage in it. An important difference is that in those studies, foreign lobbying is presumed to take the form of quid pro quo payment for services; thus, foreign lobbying "buys" reduction in a partner's protectionism.³ This paper, on the other hand, views foreign lobbying as informational lobbying designed to shift a rationally ignorant policymaker's position on an issue. These assumptions are consistent with the facts. The rollback of US protection confers large rents to foreign exporters, and those exporters (via the help of FARA agents) initiate the lobbying efforts. Since domestic producers indulge in quid pro quo lobbying of legislators via PACs contributions, these foreign exporters must also compete in the political market. Foreign lobbying in tourism, on the other hand, involves agencies of foreign governments like tourism boards and there is little or no competition

³ FARA rules prohibit campaign or other monetary contributions to US politicians by foreigners, either directly or via FARA agents. However, this rule is easily circumvented by agents, whose payments, while explicitly recorded under their own names, are made implicitly on behalf of their principals.

from domestic firms in this political market. Thus, lobbyists do not need to play zero- or negative-sum rent-shifting games, as is the case of protectionism. Rather, foreign lobbying takes the form of conveying information.

The link between tourism and development is relevant and empirically well-documented. That tourism promotes economic growth is confirmed in Dritsakis (2004) for Greece, Balaguer and Cantavella-Jordá (2002) for Spain, Oh (2005) for Korea, Durbarry (2004) for Mauritius, and Tosun (1999) and Guduz and Hatemi (2005) for Turkey. Cross-country studies by Sequeira and Campos (2006) and Brau, Lanza and Pigliaru (2003) demonstrate that tourism-specialized countries grow more than others. Sinclair's (1998) survey indicates that the main channel by which tourism helps growth is from the provision of foreign currency which can finance imports of capital goods. Further, since tourists consume goods with high domestic content, their arrival benefits domestic manufacturing and service sectors. Tourism boosts government revenues generated by taxes on incomes from tourism employment and tourism businesses, and by direct levies such as departure taxes. In sum, promoting tourism appears to be good for growth and development. We find that to be compelling motivation for our study.

The paper proceeds as follows. Section 2 provides important background information about foreign lobbying institutions in the US. In Section 3 we view foreign lobbying in tourism as a mechanism for resolving informational asymmetries. We supply primary survey evidence in support of this idea. Section 4 describes the data and panel econometric models we use to study the impact of informational lobbying on tourism. Section 5 discusses the empirical results. Section 6 concludes.

2. Foreign Tourism Lobbying in the US

The data set used in the estimation of our empirical model was assembled using reports that FARA requires the US Attorney General to make available to Congress. The report collects information about foreign agents operating within the United States. A foreign agent, in the view of the US Department of Justice, is somebody who (a) engages in political activities or acts in a public relations capacity for a foreign principal, (b) solicits or dispenses anything of value within the United States for a foreign principal, or (c) who represents the interests of a foreign principal before any agency or official of the US government. Each entry in the FARA annual reports contains (i) the name and address of the foreign agent, (ii) the name of the foreign

principal (usually a private firm, an industry association, or a government agency), (iii) the purpose of the agency, including any US government entities contacted, and (iv) amount of money paid to the agencies for their services.⁴ The results presented in this paper use data taken from the reports that covered calendar years 1990-1999.

Foreign lobbying encompasses a wide range of activities, including lobbying those connected with the US government, lobbying the media, and incurring expenditures on promoting trade through advertising (Husted, 1991). Our data do not include expenditures spent directly by the foreign principal on media or advertising but on their agents who, in turn, lobby policymakers. Many Caribbean principals are in fact government agencies, primarily tourism boards, entrusted with ensuring a steady flow of tourists every season. Jobst (2002, Table 7) indicates that 85 percent of all FARA expenditures by Latin American and Caribbean lobbies during the 1990s was spent on export promotion, which includes tourism promotion

While FARA reports provide information about the money paid by foreign countries and the industry they represent, they do not provide information about how that money is used to achieve its objectives. In their studies, Krishna, Gawande and Robbins (2006) and Kee, Olarreaga and Silva (2007) assume that lobbying spending is a quid pro quo payment for changes in commercial policy either by lowering tariffs or resisting protectionist increases in tariffs. Since those studies are concerned with imports, and objective measures of policy (tariffs, nontariff barriers) may be targeted by lobbies, lobbying as payments-for-services is a reasonable assumption. Unlike trade in goods or services that are consumed in the home country (or “Mode 1” cross border trade) and may be regulated at the home country border, tourism involves consumption of foreign-produced goods and services within the foreign country’s borders (or “Mode 2” consumption abroad). Further, there are few, if any, domestic lobbies that demand regulation of tourism, unlike the ubiquitous import-competing lobbies that demand protection from imports and subsidies for exports. Thus, government’s motive behind regulating Mode 2 trade in services is distinct from government’s motive behind regulating Mode 1 trade in goods. The latter motive has its source in satisfying import-competing lobbies, and is best understood as a protection-for-sale interaction between lobbies and the domestic government. Foreign lobbies that play this game must also make similar quid-pro-quo payments. The former motive has its

⁴ Of the 1500 individual FARA entries in 1990, about 1000 reported a dollar amount of transactions. We presume that the unreported amounts are either negligible or are randomly missing.

source in government's concern for the health and safety of its citizens. Regulating tourism (from the US, say) consists of disseminating information to the (American) public about incidents concerning health and safety at every possible destination. In the extreme, tourism is banned to a country with considerable risk of injury or fatality, or where the (US) government has no diplomatic presence and is unable to help its citizens (e.g. Cuba). The US government encourages Americans traveling abroad to register online on the State department website in order to make the US consulate in the country of their destination aware of their visit. In the process of doing so, they are made aware of a number of issues concerning that destination. This has become common practice for Americans going abroad.

This suggests an important channel for lobbying to influence US tourism, namely influencing US government policies that may affect tourism along several dimensions. Tourists check the State Department's elaborate website for travel information (<http://travel.state.gov/>) on these and other issues before deciding upon their vacation destination and lobbying may be directed at providing information to counter or soften any negative information that the State department may otherwise place on their website, or provide positive information on how the host government has undertaken activities to ensure the safety of tourists.⁵

More generally, it may provide information on improvements in security of the destination, disease prevention, or natural calamity management (availability of weather-proof hotels, evacuation plans, etc.). Other government policies can delay or accelerate tourism flows by expanding or canceling permits for commercial flights or affecting visa or passport requirements. Recently, the Federal Aviation Authority raised the safety rating of Venezuelan carriers, thereby ending a decade old dispute that had inhibited tourism to the host country. Interviews with lobbyists also suggest more stringent passport requirements to travel to Mexico, Canada and selected Caribbean islands in the wake of 9/11 were successfully lobbied against by several affected governments. The interviews also highlighted the recent efforts of the government of Kazakhstan to counteract the negative image of the country portrayed by the character Borat in the popular movie "Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan (2006)."

⁵ For example, Haiti is on the State Department Travel Alert Watch for kidnapping, violence and political instability. http://travel.state.gov/travel/cis_pa_tw/tw/tw_917.html

Why should lobbying target policymakers and how can such lobbying provide the incentives for policymakers to take action, when it is not a quid pro quo payment for “services”? In the next section, we offer a modified version of the Austen-Smith and Wright (1992, 1994) model of informational lobbying, as a plausible model of lobbying for trade policy that should be explored as an alternative to, or a complement to, the more popularly used models of quid-pro-quo lobbying in the literature.

3. Informational Lobbying

In the case of tourism the information required to match buyers and sellers is more severe than for trade in goods since consumers personally care about the nature of the place and the people that produced the good.⁶ Informational lobbying by the destination country offers a mechanism to overcome the costs of matching. The information provision that accompanies such lobbying is beneficial to the rationally ignorant home country policymaker whose objective is to encourage tourism abroad if there are no hazards associated with it. As such, it fits the mold of a classic information provision game in which the objective of the foreign lobbyist is to bring the position of the home country government closer to that of the foreign principal (usually the tourism promoting arm of the foreign government).

3.1 Theory

The model of Austen-Smith and Wright (1992, 1994) aptly stylizes the informational lobbying that occurs in tourism, and we summarize the intuition behind its results.⁷ The main premise of the model is that interest groups have private information about the consequences of a legislative decision. Suppose the interest groups are government agencies in Caribbean countries charged with maintaining and increasing tourism. The “policy” they care about is the possibility that the US government will provide negative information to potential American tourists about the islands with respect to weather (the ability of hotels and buildings to withstand hurricanes, infrastructure planning for safety in the event of hurricanes), adverse incidents (outbreaks of

⁶ Rauch and Trindade (2002, 2003) model ethnic networks, as institutions designed to overcome information frictions in trade in goods.

⁷ The model of Potters and van Winden (1992) also leads to similar results in the case of dichotomous outcomes that we consider here.

disease, issues of safety and security), and political state of the islands (whether change in governments can give rise to security concerns). The private information that they have is the actual state of their facilities vis-à-vis weather, safety and security, that is, whether their buildings are hurricane-proof and up to what level, whether evacuation planning and strategies are up to the mark, what regulations are in place to hold down disease and other security concerns, and how stable the political situation is. The US policymakers (legislators, the office of the executive that directs the State Department to provide information for tourists on their website) are relatively uninformed. Lobbying by the Caribbean interest group takes the form of (hiring a US agent according to FARA rules for) making a speech and providing information to the policymaker.

Austen-Smith and Wright predict that interest groups choose to lobby legislators who are “friends” or whose prior position on issues is closer to that of the lobbyists. In our case, this implies that foreign principals use FARA agents to push US policymakers’ priors closer to their own. We adapt the game with one foreign tourism-promoting lobby and one policymaker.

There are two possible states of infrastructure and hotel construction and evacuation plans (in the event of an adverse weather or other incident), either R (run-down state) or G (good state). There are two possible policy actions. Policymakers may choose to place unflattering information (R, denoting “Red”) about the state of the island or positive information (G, denoting “Green”)

The policymaker prefers R (discouraging tourists) in state R (run-down), and G (encouraging tourists) in state G (good). If the policymaker chooses policy G then it yields utility $U_L(G)=\$1$ in state G and $U_L(G)=-\$1$ in state R; if the policymaker chooses policy R then it yields utility $U_L(R)=\$0$ in both states. Suppose the prior probability assigned to the good state G is $p < 1/2$ (by the policymaker and lobby). In the absence of any information from the lobby, policy R is chosen, as the expected utility of policy R ($=0$) is higher than policy G ($=2p-1 < 0$).

The foreign tourism-promoting lobby obviously prefers policy G (green) to R (red): Its utilities in the two states are, respectively, $U_F(G)=\$1$, and $U_F(R)=-\$1$ regardless of whether the state is G or R. The lobby must incur a cost of $\$c$ for two things: (i) to learn the true state of infrastructure – which are both privately owned (hotels, tourist parks) and publicly owned (roads, transport, safety plans in the even of adverse incidents), and (ii) to hire a FARA agent in order to

communicate the message. Once the foreign lobby knows the true state, it instructs its FARA agent to convey the message “G” or “R” to the policymaker.

After being given the lobby’s message, the policymaker may try to verify the information by auditing the information at a cost of $\$k$. The audit reveals the true state (run-down or good) with probability $p=1$. If the audit proves the lobby’s message to be false, the policymaker penalizes the lobby $\$ \delta$. Austen-Smith and Wright use the equilibrium concept of perfect Bayesian equilibrium and show that:⁸

1. The lobby will never adopt the strategy of sending the message “G” regardless of the true state, because the policymaker, recognizing that there is no information in the signal, will choose to remain uninformed and choose policy R.

2. The lobby will not tell the truth all of the time, because a policymaker in a “believing” state offers the incentive to occasionally deviate from truth-telling and thereby earn a higher payoff.

3. Hence, the lobby will follow a strategy of always telling the truth if the state is G, and some of the time when it finds that the state is R with two implications. First, this induces the policymaker to update his probability of state G to be greater than p , since the lobby is willing to find the true state and tell the truth (at least some of time) when the true state is R. Second, the policymaker chooses a probability of auditing that will elicit as much truth-telling as possible when the state is R (the lower the penalty δ , the higher the probability it will do an audit).

4. The lobby will choose to send a message (i.e. lobby) only if it becomes informed of the true state (see 1. and 3. above), that is, it will lobby only if it is willing to expend $\$c$ to learn the true state (and hire the FARA agent). It will lobby only if $p > c/2$.

We can assess and understand several real-world scenarios on the basis of the predictions from this model. First, the act of lobbying is by itself a signal by the foreign principal that it is beneficial to the principal to attempt to update the probability of the policymaker. The reason is

⁸ In games with incomplete information, the perfect Bayesian equilibrium (PBE) solution concept succeeds where the proven concept of subgame perfect Nash equilibrium – used widely to solve games of perfect or symmetric information – fails, usually because in games of incomplete information there may be no proper subgames. In games with incomplete information each information set is considered to be a set containing multiple histories (that is, various possible sequences of actions could have been taken in order to reach that point in the game). PBE requires each player to form beliefs (using Bayes rule) about the history of the game at each information set, and then select the best response.

that if the principal expends the effort (incurs $\$c$) to upgrade his belief p about the good state, it means that either the cost of determining the true state is not onerous or the policymaker's prior probability p is very low. In either case, it pays the foreign principal to expend $\$c$ and send a message, that is, to lobby.

Thus, the absence of foreign lobbying by a host country is also informative per se and suggests three possible country situations: (i) the principal is an arm of the foreign government and has the power to enforce safety regulations in order to change the state to G, but determines that incurring $\$c$ is too costly (see e.g. fn. 9 about Haiti); (ii) the principal is a private entity and it is beyond its means to determine the true state (therefore only few private entities lobby in the data); (iii) the principal may be the government or a private entity, and finds that the probability that the true state is R (run-down) is too high. In all three cases, $p < c/2$, in the first two because c is too high and in the third because p is too low.

Second, consider the oft-used lobbying ploy of organizing expense-paid junkets for legislators. Apart from establishing friendly relations with legislators, it provides the opportunity for the legislators to personally undertake an "audit". This is itself a signal to legislators that the lobby is being truthful with its message (of the true state being G); else why would it reveal the true state at its own expense?⁹ Thus, junkets are not cheap talk.

The model is not without limitations. It assumes that all individuals in the foreign country benefit equally from tourism promotion. Otherwise, even if lobbying is informational, it can produce rents for a small set of beneficiaries whose interests are served, possibly at the expense of others. In that case, the welfare effects of informational lobbying may be ambiguous.

3.2 Evidence from a Survey

Available evidence suggests that lobbying in the tourism industry is directed towards reducing information asymmetries and managing the image of the country. In addition to anecdotal evidence in newspaper articles and our own informal conversations with lobbyists that we have footnoted, we present some findings from a survey of Registered Foreign Agents

⁹ Theoretically, a free audit implies these actions. The lobby never lies about the state being R. It will provide a free audit for the legislator only if it is sure the state is A (note the difference between this and implication 2. above). As a result, the legislator updates their personal probability that the state is G to 1.

conducted in 2003.¹⁰ A question on the survey asked FARA agents to indicate the proportionate breakdown of their total time and resources among various activities. These are summarized in Table A1. The first column describes seven possible types of activities, the second column shows the mean proportion of time and resources devoted to each type of lobbying activity across 13 FARA agents who had indicated serving at least one foreign client from the tourism industry, the third column shows similar means across 49 FARA agents who indicated not serving any foreign clients in tourism, and the last column shows the means across all 62 respondents. FARA agents are known by the sectors in which they specialize. A similar breakdown would be evident if instead of tourism we separated agents into, say, energy and non-energy sector experience. Thus, foreign clients in tourism would be drawn to FARA agents with lobbying experience in tourism.

Agents that did represent one or more clients in tourism reported spending a far greater fraction of their time informationally lobbying individual policymakers (15.3%) and the media (26.4%) than did FARA agents operating in sectors other than tourism. They also spent far less time learning about policymakers' positions (only 6.9%) and the likely consequences of policy decisions (8.2%) than did FARA agents not operating in tourism (16.4% and 20.5%, respectively). These differences are both statistically and economically significant. Foreign principals operating in tourism are clearly more interested in disseminating information to US policymakers. They are less interested in prior beliefs and ex ante positions of policymakers, and are likely to presume such priors to be weak anyway. Thus, their focus is, as in the theoretical model, on getting policymakers to update their priors by informing them via their FARA agents. They also appear to be well informed of the consequences of policy decisions, and hence spend less time on that than on informational lobbying. Foreign principals in other sectors are more concerned about these because (i) they might want to decide who their "friends" might be in order to target their limited resources, (ii) their lobbying activities may be of the quid pro quo kind which requires substantial resources, and therefore principals want to know much more about policymakers and policies before attempting to "purchase" a policy.

The theory clarifies that lobbying spending may vary widely across lobbyists, due to the variation in the underlying parameters (c , p , structure of payoffs), and that even though the

¹⁰ The survey, was conducted by the World Bank in 2003. The response rate was low, around 5%, not surprising given the political sensitivity of the subject. 62 FARA agents responded.

quantum of lobbying spending may be smaller than in quid-pro-quo lobbying models of payment-for-services, the returns to lobbyists may be as large. We turn now to the main contribution of the paper – to empirically evaluate the effectiveness of informational lobbying on tourism.

4. Econometric Model and Data

While the model is written simply in terms of communicating which of two states a country is in, it may be extended to a vector of characteristics that would differentiate one destination from others in the minds of consumers and policy makers. Intuitively, the effect of such informational lobbying should be visible in both the level of tourism in a country as well as the elasticity of demand.

4.1 Econometric Model

We use an autoregressive dynamic panel data model to study the impact of foreign lobbying on tourism:

$$\ln(\text{Tourism Arrivals})_{it} = \gamma \ln(\text{Tourism Arrivals})_{it-1} + \beta \ln(\text{Lobbying})_{it-1} + \alpha_1 \ln(\text{Real GDP Per Capita})_{it} + \alpha_2 \ln(\text{Real Exchange Rate})_{it} + c_i + d_t + u_{it} . \quad (1)$$

In (1), i indexes the 13 destination countries in the Caribbean, and t indexes years 1991-2000. $\ln(\text{Tourism Arrivals})_{it}$ is the log of the number of US tourist arrivals in country i during year t and $\ln(\text{Lobbying})_{it-1}$ is the log of tourism-related foreign lobbying spending during year $t-1$ by foreign principals in country i . The coefficient of interest β is the elasticity of US tourist arrivals with respect to foreign lobbying spending by principals in country i .

The autoregressive specification is motivated by the fact that tourism demand displays the characteristics of a persistent series. Idiosyncratic shocks to an island are likely to linger over time. In the interest of parsimony, we choose an autoregressive specification of order 1 (AR(1)) by including the lagged value of $\ln(\text{Tourism Arrivals})_{it}$ as a regressor.

Two additional variables are included as regressors. $\ln(\text{Real GDP Per Capita})$ of each destination is motivated by gravity considerations (Anderson, 1979). It is also an adequate proxy

for amenities that are correlated with the island’s economic development, for example, security, transportation, and infrastructure, which are hard to measure directly. $\ln(\text{Real Exchange Rate})$ captures the relative price of different destinations and hence the parameter measures the price sensitivity of tourism demand. We note that both these variables perform the valuable function of controlling for macroeconomic shocks.

Since we want to eliminate bias due to unobserved country characteristics being correlated with the regressors of interest, we choose a fixed effects specification, where the country-fixed effects are denoted by c_i . They are intended to pick up unobserved effects including, among other things, government policy towards tourism, multiple measures of natural “sun, sea and sand” amenities (for example, opportunities for scuba diving), and attractiveness of the island’s unique culture. In fixed-effects models, the unobserved effects may be correlated with other regressors without inducing bias. Further, we include year fixed effects d_t in order to control for common shocks that may be, for example, weather related or changes in economic and non-economic characteristics of American tourists. Finally u_{it} encompasses unexplained tourism shocks. We presume these shocks to have constant variance and to be cross-sectionally and serially uncorrelated conditional on the regressors.

4.2 Data

The Caribbean Tourism Organization tabulates time series on tourist flows by destination and origin from the statistical and tourism offices of its member states in the annual *Caribbean Tourism Statistical Report*. The CTO has adopted the international definition of “tourist” advocated by the World Tourism Organization of “Any person visiting a country other than that in which they normally reside, for not more than one year, and whose purpose of visit is leisure, business (including meetings, study and research) health treatments, religious pilgrimages, and aircraft and ship crew stayover.” Most statistics are obtained by analysis of embarkation / disembarkation cards completed for the national immigration authorities. In cases where a tourist card is not required because travel is consider domestic (e.g. US to Puerto Rico or US Virgin Islands), greater reliance is put on the analysis of hotel registrations. We focus on stay-over tourists which is the larger and more lucrative market.

Data on lobbying in tourism by foreign principals residing in the Caribbean destinations for the period 1990-99 were compiled from FARA reports for those years. In each year there were about 1,300 entries containing data on the calendar year of the activity, the country of the principal, the name of the principal, and the amount of money the agent and principal transacted. On the basis of the description of the representation activity by the US agent in the FARA report, each entry was assigned a primary 3-digit SIC industry. Over 25 percent of the FARA entries were in the tourism sector (SIC 961). Those entries from the Caribbean destinations are used in this study.¹¹ They are aggregated up to the country level for each year.

In the FARA reports, dollar figures for the three years 1992-94 are completely missing. However, foreign principals who lobbied are quite completely identified. In order to obtain a complete sample with no discontinuities, we imputed lobbying expenditures for each identified principal for the missing years, based on how much they spend on lobbying in other years. The imputed value, in 1992 for example, for a specific principal is simply the predicted lobbying spending from a trend equation for that principal for 1992. These imputed values are then aggregated up to the country level.

We restrict the sample to countries that participated in foreign lobbying at least once during this period, since we wish to exploit within-country variation in lobbying. If in any year one of these countries did not participate in US lobbying, lobbying spending for that country was set to \$1, so that $\ln(\text{Lobbying})$ equaled zero. GDP per capita is taken from the CTO. The real exchange rate is measured as the nominal exchange rate (island's currency per dollar) times the ratio of the US CPI (1995 base) to the island's price level (1995 base). The real exchange rate, taken from World Development Indicators (2003) and CTO, is standardized to a value 1 in the 1995.

Complete data on the lobbying and tourism variables were available for one or more years during the ten-year period for these 13 countries: Aruba, Barbados, Netherlands Antilles (Bonaire and Curaçao), Belize, Bermuda, Cayman Is., Dominica, Dominican Rep., Grenada, Jamaica, Montserrat, St. Lucia, and Trinidad and Tobago. Our sample is thus a balanced panel consisting of 130 observations.

¹¹ Only data on lobbying devoted to tourism (SIC 961) are used in this study. Data on lobbying devoted to advertising (SIC 731) and to media and media relations (SIC 874) are excluded from the study. Thus, the analysis is focused exclusively on lobbying for tourism.

Over 1990-2000, the 13 destinations accounted for 38 percent of total tourist arrivals in the Caribbean, and 32 percent of the US-Caribbean tourism (US tourists account for more than a half of total arrivals in the Caribbean). These destinations accounted for about 70 percent of the total reported foreign lobbying spent by all the Caribbean destinations (about \$306 mn.).

5. Empirical Results

5.1 Base Model

Our empirical strategy is to first estimate a static baseline model with and without fixed-effects in order to observe whether, all else held constant, foreign lobbying is positively associated with tourism. Next, we address the possible endogeneity of lobbying spending and include a lagged dependent variable as in model (1). Most of our inferences come from models estimated using Arellano and Bond's (1991) GMM method, which solves both the short-panel and endogeneity biases.

Columns 1 and 2 of Table 1 present, respectively, OLS estimates without and with fixed-effects (FE) of the baseline model in equation (1). The simple OLS estimate of 0.12 on $\ln(\text{Lobbying})$ implies that a 10 percent increase in foreign lobbying expenditure increase tourism arrivals by 1.2 percent. Including fixed-effects shows that the simple OLS estimates are biased upwards: now a 10 percent increase in foreign lobbying expenditure increases tourism arrivals by 0.49 percent. Although smaller, the elasticity is estimated with precision. The elasticity of tourism with respect to the island's income is both statistically and economically significant. A 10 percent increase in per capita income increases tourism arrivals by 25 percent. The coefficient on $\ln(\text{Real Exchange Rate})$ reveals that this group of islands is quite inelastic (0.82). These coefficients are, however, imprecisely measured across the models.

If the amount of foreign lobbying expenditure is based on expectations about future tourism shocks, then $\ln(\text{Lobbying})$ is likely endogenous. In order to correct for possible endogeneity of $\ln(\text{Lobbying})$ we use a two-stage procedure in which $\ln(\text{Lobbying})$ is predicted using exogenous instruments in addition to the regressors in (1) in the first stage, and the predicted values are used in place of $\ln(\text{Lobbying})$ in the second stage.

We use three instruments. The first is the log of the external asset position of reporting banks on the islands, $\ln(\text{External Asset Positions})$. Data on the external asset position are from

Bank of International Settlements. Its use is motivated by the fundamental instrumental variables idea of finding variables that are related with the lobbying variable $\ln(\text{Lobbying})$ but not the error term in the baseline regression. Foreign lobbying is partly designed to attract US institutions and individuals to use the services of Caribbean financial institutions that are less stringently regulated than their developed country counterparts. Since such lobbying spending is likely to be correlated with the size of external assets, the external asset position is correlated with $\ln(\text{Lobbying})$. However, foreign lobbying directed at increasing participation by US institutions and individuals in their financial sectors, for example offshore banking, is unrelated with the error term in the tourism regressions since shocks to the number of tourist arrivals (for example, due to inclement weather during a particular season) have little impact on financial sector participation. Further, there is no evidence in the literature of any significant participation of tourists in the Caribbean financial sector. To reduce any remaining doubt about its exogeneity, the one period lagged value of the external asset positions is used to instrument $\ln(\text{Lobbying})$.

Foreign countries lobby in the US for several reasons, and there is no reason to expect lobbying for non-tourism related reasons to be correlated with the unexplained component of tourism arrivals in (1).¹² Thus, the second instrument we use is the log of FARA lobbying spending in sectors other than tourism (or media and advertisement), $\ln(\text{Other Lobbying})$. The last instrument is the log of FARA lobbying spending in the media and advertising sectors, $\ln(\text{Media\&Advertising Lobbying})$. Both instruments are lagged one period to maximize its correlation with $\ln(\text{Lobbying})$.

The validity of the three instruments depends on shocks to the value of a country's fixed tourism resources being uncorrelated with shocks to other sectors of the economy *conditional* on the exogenous variables. Consider an impending devaluation which dries up capital flows to the Caribbean, reducing the value of hotels by halting improvements or expansions. Since this macro shock is very likely to impact income, much of its impact should be conditioned out due to the per capita GDP variable. The most likely source of variation in changes in external asset position are source country-specific institutional changes -- laws about offshore financing in advanced countries, their differential tax rates -- which are largely exogenous.

¹² We are grateful to an anonymous referee for suggesting the use of this instrument.

The instrumental variable estimates with fixed effects (Table 1, column 3 -- IV-FE) are almost five times the previous estimates (Table A2 in the Appendix reports the first stage regressions): doubling lobbying spending increases the number of tourist arrivals from the US by approximately 25 percent. This order of magnitude increase in the lobbying coefficient deserves further explanation. In the FE specification $\ln(\text{Lobbying})$ is negatively correlated with the error term (contemporaneous shocks) because destinations traditionally popular for American tourists are likely to already have a well-organized lobbying sector. When they experience or predict a negative shock these islands step up their lobbying, and during years in which they expect no shocks they step it down. Thus, the FE estimates of Table 1, column 2 are downward biased. Instrumenting $\ln(\text{Lobbying})$ removes this bias and increases the magnitude of the lobbying coefficient. Since correcting for the endogeneity of $\ln(\text{Lobbying})$ increases the effect of lobbying on tourist arrivals, this suggests that tourism boards are likely to intensify lobbying when they forecast a future tourism decrease, and that lobbying spending may be negatively correlated with the one-period ahead error term.

Using three instruments for an endogenous variable also allows us to test for exogeneity of the instruments themselves. The Hansen test of overidentification cannot reject the null hypothesis of exogeneity of the instruments, which further corroborates the validity of our inferences using instrumental variables. The instruments are jointly significant with a first-stage F -value of 4.60, which is statistically significant at 1%. This is less than the rule of thumb of 5 (Staiger and Stock, 1997), and hence we examine further the implication of possibly weak instruments for small-sample properties of our IV estimators. Stock and Yogo (2005) suggest that the limited information maximum likelihood estimator (LIML) is more robust to small-sample bias than is IV-FE and we report these results in the next column.¹³ The LIML estimates

¹³ A recent literature (see e.g. Stock and Yogo 2005; Staiger and Stock 1997) contends that with weak instruments (i.e. low correlation between the endogenous regressors and instruments used to identify their coefficients) the asymptotic approximation of the limiting distribution of an IV estimator may be quite different from its small-sample distribution. Simplicity of using asymptotic approximations do not justify their use if the inaccurate inferences cannot be tolerated (e.g. if the inferences are to be used for policymaking). The literature prefers methods that (i) yield better approximations, (ii) allow transparency of inferences in terms of the expected bias from the use of one method versus another, and (iii) allow the use of diagnostics, for example, size of the test that one is willing to tolerate with weak instruments when using testing using an asymptotic approximation. An emerging consensus from this literature is the preference for the use of limited information maximum likelihood (LIML) estimators over IV-FE.

go in the same direction as IV-FE (although LIML has less precision) increasing our confidence in the inferential properties of the IV estimator in our sample.

Finally, to capture dynamic effects, we include a lag of the dependent variable. The inclusion of lagged dependent variables in fixed effects estimators induces a bias of order $1/T$ (see e.g. Arellano, 2002, ch.6), which is of potential concern in our relatively short 10-year panel. Therefore, we follow Arellano and Bond (1991) in taking first order differences in model (1) to eliminate fixed effects and then using lagged values of the dependent variable and other exogenous covariates in levels to instrument the autoregressive dependent variable. We instrument lagged $\ln(\text{Tourism Arrivals})$ and $\ln(\text{Lobbying})$ using the lagged values in levels of $\ln(\text{Tourism Arrivals})$, $\ln(\text{Real Exchange Rate})$, $\ln(\text{Real GDP Per Capita})$ plus the three external instruments. These estimates are reported in Table 1, column 5. The lagged dependent variable coefficient is 0.68 and short-run elasticity of lobbying spending on tourism 0.039 implying a long-run elasticity of 0.122. Though yielding impacts below those found in the static specifications, this is our preferred model. The Hansen tests confirm of the validity of the set of instruments, and the specification is clear of AR(2) serial correlation.

There is thus evidence that the potential for foreign lobbying to increase tourism is substantial. Doubling, or even quadrupling, lobbying spending is easily accomplished by countries that have a small or negligible political presence in the US. For countries such as the Cayman Islands that already have a large inflow of US tourists, even a 10% increase in tourism implies a substantial increase in the number of tourists since the tourist base on which this increase applies is already large. For smaller countries that do not lobby up to their potential, our estimates could potentially imply a substantial increase in tourism via a large, say, five-fold increase in lobbying spending. And, to the extent that tourism benefits development, it is possible for foreign lobbying to spur growth.

Robustness checks

To ensure the robustness of our results, we conduct a set of sensitivity analyses. In order to see whether resetting zero lobbying spending arbitrarily to \$1 changes our results, in (1) we replace the continuous variable with a dummy variable that takes a value of 0 for observations where $\ln(\text{Lobbying})$ was set equal to zero, and 1 otherwise. Table 2, column 1, shows the model

estimates from the IV-GMM method. The effect of the indicator variable is estimated to be 0.28 and 0.808 for the short-run and long-run effects respectively, both statistically significant, broadly consistent with the previous exercises. The (short run) estimate on the dummy variable also provides a robustness check for the validity of the magnitude of the effects. The mean of $\ln(\text{Lobbying})_{t-1}$ taken over non-zero values is 9.6. Dividing the coefficient estimate on the dummy by this mean should approximate the estimate on $\ln(\text{Lobbying})$ in Table 1. This yields $(0.28/9.6=) 0.029$, which is not different from the one-period effect of $\ln(\text{Lobbying})_{t-1}$ in Table 1, column 5 (0.039), and $0.808/9.6=0.084$ which is close to the long –run effect estimate of 0.122 in Table 1, column 5.

A second robustness check concerns lobbying classified in other SIC codes, but which may also influence tourism. In particular, FARA lobbying by Caribbean principals classified under advertising (SIC 731) and media and media relations (SIC 874) may serve to increase tourism, but via media and channels other than informational lobbying of policymakers in the US government. If they are not separately included, then $\ln(\text{Lobbying})$ may possibly pick up their effects, so that the influence of $\ln(\text{Lobbying})$ is overstated in the reported results. We check for whether this is the case in Table 2, column 2, where we include both $\ln(\text{Lobbying})$ and $\ln(\text{Media\&Advertising Lobbying})$ as endogenous variables (and use $\ln(\text{External Asset Positions})$ and the sum of lobbying other than tourism, advertising and media as instruments). The coefficient estimate of $\ln(\text{Lobbying})$ is consistent with that from our preferred specification in Table 1, indicating that these two variables are not (conditionally) closely correlated. Moreover, the coefficient on $\ln(\text{Media\&Advertising Lobbying})$ is not statistically significant.

5.2. Extended Model with Elasticities

Tourism in the Caribbean is price-elastic (Rosensweig, 1988; Maloney and Montes-Rojas, 2005). These elasticities are a concern for Caribbean policymakers, who have deliberately controlled exchange rates in the Caribbean area in order to keep their tourism industries competitive (Rosensweig, 1988). In this section we examine whether foreign lobbying can serve a similar purpose by differentiating destinations and hence reducing the sensitivity to exchange rate movements. In addition to the log of the real exchange rate, we add its interaction with lobbying spending to the basic model:

$$\begin{aligned} \ln(\text{Tourism Arrivals})_{it} = & \gamma \ln(\text{Tourism Arrivals})_{it-1} + \beta_1 \ln(\text{Lobbying})_{it-1} + \beta_2 \ln(\text{Real Exchange} \\ & \text{Rate})_{it} + \beta_3 [\ln(\text{Real Exchange Rate})_{it-1} \times \ln(\text{Lobbying})_{it-1}] + \\ & \beta_4 \ln(\text{Real GDP Per Capita})_{it} + c_i + d_t + \varepsilon_{it}. \end{aligned} \quad (2)$$

Model (2) allows us to infer whether foreign lobbying decreases the price elasticity of tourism demand. The demand elasticity for tourism, $\partial \ln(\text{Tourism Arrivals}) / \partial \ln(\text{Real Exchange Rate}) = \beta_2 + \beta_3 \ln(\text{Lobbying})$ is expected to be positive.¹⁴ The positive coefficient (in the FE specifications) on $\ln(\text{Real Exchange Rate})$ indicates tourist demand to the Caribbean to be inelastic – conferring the ability on Caribbean destinations to be price-makers since tourists are willing to pay a higher price for their distinct characteristics. The interaction of $\ln(\text{Real Exchange Rate})$ with $\ln(\text{Lobbying})$ reveals whether lobbying makes Caribbean destinations even more inelastic. If so, it should be captured by a negative sign on the coefficient β_3 .

Table 3 presents the results from the IV-GMM estimates when $\ln(\text{Lobbying})$ and $(\ln(\text{Real Exchange Rate}) \times \ln(\text{Lobbying}))$ are again instrumented using $\ln(\text{external Asset Position})$, $\ln(\text{Media\&Advertising Lobbying})$ and $\ln(\text{Other Lobbying})$. The coefficient on the interactive term is negative and significant confirming that lobbying is associated with a decrease in the elasticity of tourism demand. The short-run price elasticity of Caribbean tourism demand by US tourists decreases from 0.48 to 0.41 when comparing a destination that does not lobby at all with a destination that lobbies at the average of (log) lobbying spending, and proportionally even more over the long run.

6. Conclusion

This paper contributes to the emerging literature on whether lobbying by foreigners can effectively promote their business interests. Specifically, it explores the subject of tourism-

¹⁴ In our sample most countries peg to the US dollar, but some float and one pegs to the Euro. Future research should consider samples where currencies of tourist destinations are pegged or aligned with a variety of currencies. Then movements in the real exchange rate would come from variation in the dollar relative to the pound, franc, gilder and peso -- a source of exogenous variation that would strongly identify the elasticity coefficient.

related foreign lobbying by Caribbean principals. Unlike previous work on lobbying, although complementary to it, we argue that the mechanism of effect is not quid pro quo bargaining, the resolution of information asymmetries. In this sense, we are close to Rauch and Trindade (2002, 2003) who have emphasized the role that informational barriers play in restricting trade, and how private networks can overcome those barriers. Our case emphasizes a similar mechanism at work but involving trans-boundary business-government networks.

We offer robust findings that, in fact, lobbying both increases the level of tourism, as well as reduces the price elasticity of demand, suggesting an ability of destinations to differentiate their product. Both are of magnitudes that suggest important policy implications for developing economies. Our results are among the first in the literature and therefore deserve scrutiny. Gathering time-varying data on US Department of State website postings on Caribbean countries would provide direct evidence on (i) whether the postings affect tourism, and (ii) whether the postings respond to lobbying. Of theoretical relevance is the question of whether, as more islands participate in the lobbying game, lobbying competition among them may be used strategically by policymakers being lobbied to capture rents without benefiting any lobby. While that outcome is likely with quid-pro-quo lobbying (Grossman and Helpman 1994), it remains to be demonstrated with informational lobbying.

References

- Anderson J. A theoretical foundation for the gravity equation. *American Economic Review* 1979; 69; 106-16.
- Arellano M. Panel data econometrics. Oxford University Press: Oxford; 2002.
- Arellano M, Bond S. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economics Studies* 1991;58;277-297.
- Austen-Smith D, Wright J R. Competitive lobbying for a legislator's vote. *Social Choice and Welfare* 1992; 9;229-257.
- Austen-Smith D, Wright J R Counteractive lobbying. *American Journal of Political Science* 1994;38;25-44.
- Bank of International Settlements. Site: <http://www.bis.org/statistics/bankstats.htm>.
- Balaguer J, Cantavella-Jordá M. Tourism as a long-run economic growth factor: the Spanish case. *Applied Economics* 2002;34;877-884.
- Brau R, Lanza A, Pigliaru F. How fast are the tourism countries growing? The cross-country evidence. CRENoS Centro Ricerche Economiche Nord Sud, Working Paper N003-09; 2003. Site: <http://www.crenos.it/working/pdf/03-09.pdf>
- Caribbean Tourism Organization. *Caribbean Tourism Statistical Report 1990-2002*. Barbados.
- Chen L, Devereux J. Tourism and welfare in Sub-Saharan Africa: a theoretical analysis. *Journal of African Economies* 1999;8;209-227.
- Copeland, B R. Tourism, welfare, and de-industrialization in a small open economy. *Economica* 1991;58;515-529.
- de Ferranti D, Perry G, Lederman D, Maloney W. From natural resources to the knowledge economy: trade and job quality. The World Bank: Washington DC; 2002.
- Diaz B.D. The viability and sustainability of international tourism in developing countries. Symposium on tourism services, 22-23 February 2001, World Trade Organization, Geneva. Site: http://www.wto.org/English/tratop_e/serv_e/diaz.doc

- Dritsakis N. Tourism as a long-run economic growth factor: an empirical investigation for Greece using causality analysis. *Tourism Economics* 2004;10;305-316.
- Durbarry R. Tourism and economic growth: the case of Mauritius. *Tourism Economics* 2004;10;389-401.
- Department of Justice. FARA. Site: <http://www.usdoj.gov/criminal/fara>.
- Gawande K, Krishna P, Robbins M. Foreign lobbying and US trade policy. *Review of Economics and Statistics* 2006;88;563-571.
- Grossman G, Helpman E. *Special Interest Politics*. Cambridge, MA: MIT Press; 2002.
- Grossman G, Helpman E. Protection for sale. *American Economic Review* 1994;;4: 833-850.
- Gunduz L, Hatemi-J A. Is the tourism-led growth hypothesis valid for Turkey? *Applied Economics Letters* 2005;12; 499-504.
- Harper's Magazine. Plenty of Loopholes in New Lobbying Regulations.
Site: <http://www.harpers.org/sb-plenty-of-loopholes-1168542976.html>; 2007.
- Husted S. Foreign lobbying: A theoretical analysis. *Eastern Economic Journal* 1991;17;89-99.
- Jobst A. "Foreign lobbying in the US: A Latin American perspective. *ETSG Working Paper*. European Trade Study Group; 2002. Site: <http://www.etsg.org/wpapers/Papers2002.html#12>
- Kee H L, Olarreaga M, Silva P. Market access for sale: Latin America's lobbying for US tariff preferences. *Journal of Development Economics* 2007;82;79-94.
- Lim C. Review of international tourism demand models. *Annals of Tourism Research* 1997;24;835-849.
- Maloney W, Montes-Rojas G. How elastic are sea, sand and sun? Dynamic panel estimates of the demand for tourism. *Applied Economics Letters* 2005;12;277-280.
- Potters J., van Winden F. Lobbying and asymmetric information. *Public Choice* 1992;74; 269-292.
- Rauch J E, Trindade V. Ethnic Chinese networks in international trade. *Review of Economics and Statistics* 2002;84;116-130.

- Rauch J E, Trindade V. Information, international substitutability, and globalization. *American Economic Review* 2003;93;775-791.
- Oh C. The contribution of tourism development to economic growth in the Korean economy. *Tourism Management* 2005;26;39-44.
- Rosensweig J. Elasticities of substitution in Caribbean tourism. *Journal of Development Economics* 1988;29;89-100.
- Sequeira T N, Campos C. International tourism and economic growth: A panel data approach. In: Matias A, Nijkamp P, Neto P (Eds.), *Advances in Modern Tourism Research.*; 2006, p. 153-163.
- Sinclair M T. Tourism and economic development: A survey. *Journal of Development Studies* 1998;34;1-51.
- Staiger D, Stock J H. Instrumental Variables Regression with Weak Instruments. *Econometrica* 1997;65;557-586.
- Stock J H., Yogo M. Testing for Weak Instruments in Linear IV Regression. In Andrews D W K, Stock J H (Eds), *Identification and inference in econometric models: essays in honor of Thomas J. Rothenberg.* Cambridge University Press: Cambridge; 2005.
- Tosun C. An Analysis of Contributions International Inbound tourism to the Turkish Economy. *Tourism Economics* 1999;5;217-250.
- UNCTAD. Site: <http://www.uneptie.org/pc/tourism/sust-tourism/economic.htm>; 2007.
- World Development Indicators (CD-ROM) *Washington DC: World Bank; 2003.*

Table 1: Base Models: OLS, FE, IV-FE, LIML and IV-GMM estimates

Dependent variable: $\ln(\text{Tourism Arrivals})_t$	OLS	FE	IV-FE	LIML	IV-GMM
$\ln(\text{Tourism Arrivals})_{t-1}$					0.681*** (0.050)
$\ln(\text{Lobbying})_{t-1}$	0.120*** (0.035)	0.049*** (0.018)	0.248*** (0.070)	0.371*** (0.142)	0.039** (0.018)
$\ln(\text{Real Exchange Rate})_t$	-0.244 (1.66)	0.818** (0.394)	0.796 (0.561)	0.783 (0.798)	0.389 (0.289)
$\ln(\text{Real GDP Per Capita})_t$	0.248 (0.318)	2.45* (1.28)	1.58 (1.53)	1.05 (2.19)	2.21 (1.45)
Long run effect (<i>p</i> -value)					0.122* (0.030)
<i>N</i>	117	117	117	117	117
<i>R</i> ²	0.17	0.97	0.95	0.86	
First-stage <i>F</i> -statistics for IVs (<i>p</i> -value)			4.60 (0.00)	4.60 (0.00)	
Hansen's test of overidentification			6.25 (0.10)	3.448 (0.18)	42.1 (0.98)
Arellano-Bond test for AR(2) (<i>p</i> -value)					-0.14 (0.89)

Notes:

1. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.
2. OLS: ordinary least squares. FE: fixed effects. IV-FE: fixed effects instrumental variables estimation where $\ln(\text{Lobbying})_{t-1}$ is endogenous and $\ln(\text{External Asset Positions})_{t-1}$, $\ln(\text{Media\&Advertising Lobbying})_{t-1}$ and $\ln(\text{Other Lobbying})_{t-1}$ are used as instruments. LIML: limited information maximum likelihood. IV-GMM: Arellano and Bond (1991) autoregressive dynamic panel data model, using the same set of instruments as IV-FE plus past values of $\ln(\text{Tourism Arrivals})$, $\ln(\text{Real Exchange Rate})$ and $\ln(\text{Real GDP per capita})$.
3. All specifications include year dummies.

Table 2 – Robustness checks

Dependent variable: $\ln(\text{Tourism Arrivals}_t)$	IV-GMM 1	IV-GMM 2
$\ln(\text{Tourism Arrivals})_{t-1}$	0.653*** (0.041)	0.687*** (0.050)
$I(\text{Lobbying}_{t-1}=0)$	0.280*** (0.104)	
$\ln(\text{Lobbying})_{t-1}$		0.038* (0.021)
$\ln(\text{Media Lobbying})_{t-1}$		-0.0043 (0.0077)
$\ln(\text{Real Exchange Rate})_t$	0.322 (0.275)	0.420 (0.319)
$\ln(\text{Real GDP Per Capita})_t$	2.09 (1.36)	2.28 (1.47)
Long run effect (<i>p</i> -value)	0.808*** (0.011)	0.123* (0.099)
<i>N</i>	117	117
<i>R</i> ²		
Hansen's test of overidentification.	36.3 (0.99)	54.9 (0.98)
Arellano-Bond test for AR(2) (<i>p</i> -value)	-0.62 (0.54)	-0.02 (0.98)

Notes:

1. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.
2. IV-GMM 1: Arellano and Bond (1991) autoregressive dynamic panel data model , using the same set of instruments as IV-GMM in Table 1. IV-GMM 2, similar to IV-GMM 1 but both $\ln(\text{Lobbying})_{t-1}$ and $\ln(\text{Media\&Advertising Lobbying})_{t-1}$ are now endogenous and $\ln(\text{External Asset Positions})_{t-1}$ and $\ln(\text{Other Lobbying})_{t-1}$ are used as instruments together with past lagged values of $\ln(\text{Tourism Arrivals})$, $\ln(\text{Real Exchange Rate})$ and $\ln(\text{Real GDP per capita})$.
3. All specifications include year dummies.

Table 3– Extended models: Elasticity

Dependent variable: $\ln(\text{Tourism Arrivals})_t$	IV-GMM
$\ln(\text{Tourism Arrivals})_{t-1}$	0.673*** (0.045)
$\ln(\text{Lobbying})_{t-1}$	0.039** (0.018)
$\ln(\text{Real Exchange Rate}_t \times \ln(\text{Lobbying})_{t-1})$	-0.014** (0.007)
$\ln(\text{Real Exchange Rate})_t$	0.484* (0.275)
$\ln(\text{Real GDP Per Capita})_t$	2.20 (1.44)
N	117
Hansen's test of overidentification.	52.5 (0.96)
Arellano-Bond test for AR(2) (p -value)	-0.22 (0.83)

Notes:

1. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.
2. IV-GMM: Arellano and Bond (1991) autoregressive dynamic panel data model, using the same set of instruments as IV-GMM in Table 1, but both $\ln(\text{Lobbying})_{t-1}$ and $\ln(\text{Real Exchange Rate}_t) \times \ln(\text{Lobbying})_{t-1}$ are treated as endogenous.
3. All specifications include year dummies.

Figure 1 – Tourism receipts and GDP, Caribbean countries.

Source: Authors' calculations using Caribbean Tourism Organization data.

Table A1: Registered Foreign Agent Survey, The World Bank 2003

	Tourism	Non-Tourism	All
Number of respondents	13	49	62
Resources (time, money) devoted to:			
Acquiring information about likely consequences of policy decisions	8.2%	20.5%	17.7%
Acquiring information about policymakers' positions	6.9%	16.4%	14.3%
Information dissemination directed at the media (TV, newspapers)	26.4%	11.4%	14.7%
Information dissemination directed at the individual policymakers	15.3%	9.8%	11.1%
Obtaining access to influential policymakers	15.5%	14.2%	14.5%
Economic and legal analysis	17.8%	17.0%	17.1%
Other	10.0%	10.7%	10.6%
Total	100%	100%	100%

Table A2: First stage regressions for IV-FE and LIML estimates in Table 1

Dependent variable: $\ln(\text{Lobbying})_{t-1}$	IV- FE&LIML
$\ln(\text{External Asset Positions})_{t-1}$	0.486* (0.290)
$\ln(\text{Media\&Advertising Lobbying})_{t-1}$	0.141** (0.066)
$\ln(\text{Other Lobbying})_{t-1}$	-0.058 (0.085)
$\ln(\text{Real Exchange Rate})_t$	-3.72 (2.84)
$\ln(\text{Real GDP Per Capita})_t$	-1.25 (7.02)
N	117
R^2	0.90

Notes:

1. Standard errors in parenthesis. Significance level: * 10%, ** 5%, *** 1%.
2. The model includes islands' fixed-effects and year dummies.