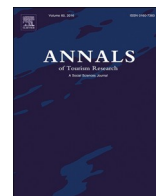


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Annals of Tourism Research

journal homepage: www.elsevier.com/locate/annals

Tourism boycotts and animosity: A study of seven events

Qionglei Yu^{a,*}, Richard McManus^b, Dorothy A. Yen^c, Xiang (Robert) Li^d^a Ph.D. Kent Business School, University of Kent, Canterbury CT2 1TN, UK^b Ph.D. Business School, Canterbury Christ Church University, Canterbury CT1 1QU, UK^c Ph.D. Brunel Business School, Brunel University, Kingston Lane, Uxbridge UB8 3PH, UK^d Ph.D. Department of Tourism and Hospitality Management, Temple University, Philadelphia, PA 19122, USA

ARTICLE INFO

Associate editor: Juan Luis Nicolau

Keywords:

Boycott

Animosity

Visitor numbers

Chinese tourists

ABSTRACT

The impacts of tourism boycotts on a destination's tourist economy can be vast, yet few studies have examined such events. This paper explores the effects of tourism boycotts by analysing seven events involving Chinese tourism boycotts during the past decade. The findings show that boycotts can significantly decrease visitor numbers. Also, non-political animosity boycotts and political animosity boycotts differ in their intensity and impact; the former are found to exert immediate short-term impacts, whereas the latter tend to have enduring effects. These results are based on local projection techniques using narratively identified boycott events and are robust to several specifications. This paper highlights tourism boycotts as a key risk factor in destination management.

Introduction

With increasing global mobility and a shifting global political landscape, international tourism has experienced turbulence recently. Research has shown that tourism is vulnerable to incidents such as terrorist attacks and crime (Bianchi, 2006), financial crises (Lim & McAleer, 2005), natural disasters (Huang & Min, 2002), disease outbreaks (Yang & Chen, 2009), and flight accidents (Hall & Page, 2016). Missing amongst these factors is tourism boycotts, where tourists withhold travel to a destination (Shaheer, Insch, & Carr, 2018). Compared with the aforementioned factors, tourism boycotts can have equally if not more damaging effects on a destination's tourism economy but have received surprisingly little attention in the literature (Shaheer et al., 2018).

The number of tourism boycotts has risen throughout the past decade; 146 boycotts occurred from 1948 to 2015, more than 90% of which took place between 2003 and 2015 (Shaheer et al., 2018, p. 129). Factors contributing to this increase include technological innovations, which facilitate boycott organisation via social media; an increase in social movements related to justice and morality; growing awareness of ethical consumerism; and use of tourism as a vehicle for social change (Shaheer et al., 2018) or political negotiation (Castañeda & Burtner, 2010). Given the negative effects of tourism boycotts on various stakeholders, including state and local governments, tourism establishments, tourism enterprises, employees, and residents (Sautter & Leisen, 1999), these boycotts represent an urgent matter warranting further investigation as a risk factor in destination management.

Consumer behaviour studies have confirmed that animosity greatly increases consumers' intentions to boycott and often leads to boycott actions via product purchasing behaviour (Klein, Ettenson, & Morris, 1998). In tourism, using a sample of young Chinese consumers, Guo, Zhou, and Tu (2016) findings showed that animosity adversely affected young Chinese tourists' willingness to visit

* Corresponding author.

E-mail addresses: Q.L.Yu@kent.ac.uk (Q. Yu), Richard.mcmanus@canterbury.ac.uk (R. McManus), Dorothy.Yen@brunel.ac.uk (D.A. Yen), robertli@temple.edu (X.R. Li).<https://doi.org/10.1016/j.annals.2019.102792>

Received 15 December 2018; Received in revised form 23 August 2019; Accepted 6 September 2019

Available online 24 October 2019

0160-7383/ © 2019 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Japan; however, the authors only measured consumers' visit intentions rather than their real tourist behaviour and were thus unable to capture actual damage from boycott behaviour. Campo and Alvarez (2017) also discussed animosity relative to a decrease in tourists' visit intentions, but their study suffered from the same issue as that of Guo et al. (2016): Campo and Alvarez (2017) measured visit intention rather than boycott behaviour. Despite the intuitive connection between visit intention and actual visitation, the former has been found to be an unreliable predictor of the latter (McKercher & Tse, 2012). Put simply, by measuring boycott intention instead of boycott behaviour, extant studies have not empirically assessed the true damage of boycotts on the tourism economy (Guo et al., 2016).

Given the lack of knowledge about tourism boycotts and the extent to which they may compromise the tourism economy, this study focuses on the following research objectives: 1) investigating the effects of tourism boycotts on visitor numbers; and 2) exploring how boycott effects differ based on the type of animosity (i.e., political versus non-political animosity). Our findings shed new light on tourism boycotts by empirically revealing the effects of boycotts on visitor numbers and how relevant impacts vary based on the nature of animosity.

Boycotts: motivations and impacts

Boycotts can be traced back to the 7th century (Peters, 2009). In modern times, boycotts have exemplified the empowerment of powerless groups to change their circumstances, such as the 1955 Montgomery bus boycott and Gandhi's boycotts of British salt and cloth before Indian independence. Garrett (1987) defined boycotts as “concerted, but nonmandatory, refusal by a group of actors (the agents) to conduct marketing transactions with one or more other actors (the target) for the purpose of communicating displeasure with certain target policies and attempting to coerce the target to modify those policies” (p. 47).

With wide adoption of the internet and social media, consumer boycotts can be organised and promoted more easily. One in five consumers has reportedly boycotted a brand following a scandal or negative press release (YouGov, 2017). Although it is difficult to determine a boycott's success (Friedman, 1985), the growing importance of boycotts for consumers, marketers, and public policy-makers has spurred investigations into these acts' historical evolution, antecedents, consequences, key dimensions, and influences (Sen, Gürhan-Canli, & Morwitz, 2001). Nevertheless, relevant studies in tourism contexts remain scarce.

The boycott phenomenon has been examined in diverse disciplines, including sociology and history (Friedman, 1985); psychology and economics (Heilmann, 2016; John & Klein, 2003); political science (Richter, 1983); and marketing (Garrett, 1987). The boycott literature generally focuses on four aspects: a) motivations underlying boycotts (e.g. Klein, Smith, & John, 2002); b) purposes of boycotts (e.g. Friedman, 1985; Klein et al., 2002); c) boycott actions (e.g. Friedman, 1985, 1991); and d) the effects of boycotts, such as changes in public policies (e.g. Braunsberger & Buckler, 2009), corporate practices (e.g. Lavorata, 2014), and financial impacts (e.g. Heilmann, 2016) (see Fig. 1).

Motivations behind organising a boycott may be tied to individual beliefs or value systems, an organisation's mission, or a governmental body's political purpose (Braunsberger & Buckler, 2009). Consumer boycotts embody individuals' attempts to achieve certain objectives via restraining their purchases (Friedman, 1985). Individuals' motivations for boycotting may include expressing altruistic sentiments, anger and animosity, or moral superiority (Klein et al., 1998). In particular, as “remnants of antipathy related to

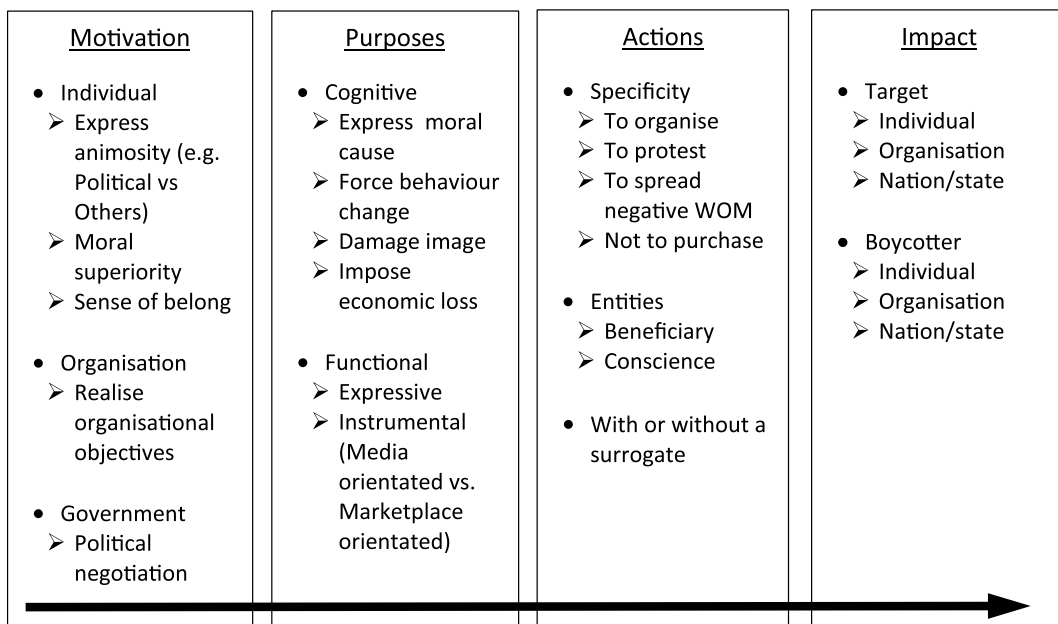


Fig. 1. A conclusive review of existing literature.

previous or on-going military, political, or economic events” (Klein et al., 1998, p. 90), animosity is a crucial element in consumer boycotts and can affect consumers' boycott intentions and behaviours (Huang, Phau, & Lin, 2010). People may also seek a sense of belonging from undertaking collective actions with others who share similar values, beliefs, or causes (John & Klein, 2003). At the organisational level, non-profit organisations may coordinate boycotts to realise organisational objectives, attract and maintain public attention, or transform non-marketplace concerns into marketplace goals (Heilmann, 2016). At the government level, nation-states may use boycotts as political weapons to impose pressure on less powerful counterparts in hopes of resolving political conflict (Castañeda & Burtner, 2010).

Derived from boycott motivation, boycott behaviour is often carried out to achieve specific cognitive purposes. These include the aims to impose economic loss, force behaviour change, damage the image of the boycott target, and express a moral cause. Friedman (1985) categorised boycotts into two groups, instrumental or expressive, based on their purposes. Instrumental boycotts are undertaken to pursue clear and measurable outcomes on policy changes in relation to human or animal rights (Klein et al., 2002) and to gain bargaining power in trade or international relations (Heilmann, 2016). Comparatively, expressive boycotts enable individuals to voice their displeasure towards a target entity (Ettenson & Klein, 2005). Friedman (1991) suggested that instrumental boycotts can be further classified as either media-oriented or market-oriented and surrogate or non-surrogate. Media-oriented boycotts seek to paint a negative image of a target, whereas market-oriented boycotts aim to damage the target's sales and reputation. Market- and media-oriented boycotts may both use a surrogate as an agent between the boycotter and the target (Friedman, 1985).

Boycott actions are difficult to define, as the interpretation of boycotts may involve different stages from the consideration of boycott action to actual action taken (Friedman, 1991). Criteria for boycott execution and success are similarly nebulous (Friedman, 1991). For example, action-requested boycotts (e.g. protests) differ from action-taken boycotts (e.g. refusal to purchase). The success of a boycott may refer to an actual decline in sales, a tarnished target image, or target-based policy change. Given the challenge in determining when a boycott is complete, evaluating a boycott's success is problematic (Friedman, 1991). The involved entities may also differ. In beneficiary boycotts, boycott sponsors and boycotters are members of the same constituency; in conscience boycotts, sponsors and boycotters represent different constituencies (Friedman, 1991; McCarthy & Zald, 1973).

The impacts of boycott actions are also difficult to measure. At the individual level, boycotts empower individuals who may feel powerless by enabling them to negotiate with organisations through collective actions (Lee, 2012). When individuals participate in a successful boycott, they may enjoy the free ride, the excitement of victory, or the satisfaction of punishing wrongdoers via boycott behaviour (John & Klein, 2003). Successful boycotts may also lead to long-term changes in individuals' buying habits, which often inspire enduring structural change. Conversely, individuals who may have been forced to comply with a boycott due to social pressure may experience negative impacts (Cheng & Wong, 2014).

Boycotts can result in economic pressure on the targeted entity, driving the entity to formulate a policy commitment and modify practices in response to coercion (Koku, 2012). For targeted companies, boycotts can have detrimental effects on corporate performance, particularly in terms of sales, brand image, reputation, and stakeholder relationships (Koku, Akhigbe, & Springer, 1997; Schrempf-Stirling, Bosse, & Harrison, 2013). When boycotts target a nation-state, impacts vary depending on the negotiating power between the target and the boycotter, the importance of boycotted products in the targeted nation-state, and other environmental factors. A boycotted nation-state may be affected by economic loss (Heilmann, 2016), job loss in relevant industries (Braunsberger & Buckler, 2009), and governmental changes in political stance or policy (Richter, 1983). Although a boycott may empower some consumers, organisations, and nation-states, the impacts of boycotts have not received much research attention, particularly in the tourism sector, despite the far-reaching effects of such events.

Tourism boycotts

Different from consumer product/corporate boycotts, a tourism boycott refers to any form of “withholding of tourism” against a particular tourist destination (Castañeda & Burtner, 2010, p. 2) rather than against a brand or a business entity. Similar to consumer product/corporate boycotts, tourism boycotts are collectively initiated by individuals for certain causes or surrogated by agents (e.g. NGOs or governments) as tools in negotiating international politics (Castañeda & Burtner, 2010). Nevertheless, tourism boycotts are likely to be engaged at a larger scale and have a more profound socio-economic impact (Shaheer et al., 2018) than consumer boycotts; by withholding tourism against a destination, tourism boycotts directly and indirectly affect different stakeholders, communities, and business entities.

With the growing popularity of social media adoption worldwide and a corresponding increase in social movements and emphasis on ethical consumerism, tourism boycotts are becoming more frequent and reoccurring (Shaheer et al., 2018). Existing works have shown that the most common purposes of tourism boycotts focus on resolving human rights violations, animal welfare concerns, and political and environmental issues (Shaheer, Carr, & Insch, 2019). For example, the International Union of Food and Allied Workers' tourism boycott against Guatemala came in protest against the country's governmental human rights violations in 1979 (Castañeda & Burtner, 2010), wherein the tourism boycott was used by institutions “as [a] governmental [mechanism] to negotiate international politics” (Castañeda & Burtner, 2010, p. 3).

Herrera and Hoagland (2006) reported on another tourism boycott related to animal welfare concerns: ScubaPoll.com respondents overwhelmingly supported a tourism boycott against Caribbean nations that voted in support of Japan's brutal slaughter of whales at the International Whaling Commission. Similarly, research on whale-watching tourists in Iceland showed that 79% of respondents expressed intentions to boycott trips to countries that were actively engaged in hunting whales (Parsons & Rawles, 2003). Both studies described the motivational cause of each boycott and relevant boycott intentions through survey results; however, they did not examine actual boycott impacts in terms of decreased visitor numbers to these boycotted countries.

Hudson (2007) discussed an ethical issue in tourism boycotts, namely whether such boycotts were ethical for local communities. The findings highlighted an interesting fact: although Burma Campaign UK called for a tourism boycott to Myanmar (formerly known as Burma) in 2006 so as not to fund the military government via travel, respondents were generally in favour of tourism in Myanmar and believed human-rights-conscious travel did more good for the country (Hudson, 2007). Teye and Diffenderfer's (1988) study represents the only attempt to measure the impacts of tourism boycotts using tourism figures. They discussed the 1980s tourism boycott against Arizona over the Martin Luther King holiday controversy; findings revealed an estimated loss of \$25.6 million affecting all major sectors of the tourism industry due to the cancellation of 48 conventions during the boycott's first year (Teye & Diffenderfer, 1988). Nevertheless, although they reported an estimated loss in tourism income, their work was brief and descriptive; it did not measure the actual decline in visitor numbers.

Boycotts are powerful acts that are public, information-forcing, and may cause real damage to boycotted businesses or communities (Lee, 2012); thus, it is disappointing that existing research has not investigated the actual impacts of tourism boycotts numerically. This lack of attention raises an important research question about the actual effects of tourism boycotts in terms of the prolonged decrease in visitor numbers over time. An answer to this question can help destination management organisations better plan, predict, and manage their resource allocation in an effort to rescue their respective tourism economies from the impacts of tourism boycotts.

Animosity and boycotts

Consumer behaviour research has pointed out that animosity is an important motive behind boycotting (Huang et al., 2010; Klein et al., 1998; Little & Singh, 2015), as cognitive appraisal theory suggests that individuals' emotions reflect their beliefs in certain events and can predict subsequent behaviour (Lazarus, 1982). Whilst emotions "evolve to solve evolutionarily relevant problems" (Saad, 2013, p. 355), it is unsurprising that animosity plays a predominant role in tourism boycotts, whatever the purpose of a boycott may be – from angry environmentalists calling for a tourism boycott against whale slaughter to active furious human rights advocates who demand tourism sanctions to certain destinations.

Studies of animosity have proposed numerous cause-based classifications, such as historical war/military animosity (e.g. Klein et al., 1998), economic animosity (Ang et al., 2004), political animosity (Russell & Russell, 2006), religious animosity (Riefler & Diamantopoulos, 2007), cultural animosity (Kalliny, Hausman, Saran, & Ismaeil, 2017), and people-related/social animosity (Nes, Yelkur, & Silkoset, 2012). Table 1 provides detailed definitions for different types of animosity.

Although a few recent studies within the tourism context have examined the relationship between individuals' animosity and their destination visit intentions, few works have considered how the impact of a boycott might differ based on the type of animosity. For example, Stepchenkova, Shichkova, Kim, and Rykhtik (2018) showed that tourists' willingness to visit a destination is influenced by individuals' animosity towards that country in the case of strained bilateral relations. In particular, animosity negatively influenced Russian respondents' perceptions of the US as a tourism destination and their intentions to visit. Using data collected from Turkish consumers, Sánchez, Campo, and Alvarez (2018) argued that various types of animosity could influence tourists' travel intentions differently; specifically, political animosity and social animosity were negatively related to visit intention. Campo and Alvarez (2019) also conducted similar research in Spain and reported that animosity was negatively related to individuals' visit intentions. They argued that social and political animosity were important dimensions of the overall animosity construct. However, as criticised before, intentions do not equate to actual behaviour, hence our second research question of whether the impact of a boycott on visitor numbers differs by the type of animosity.

Methodology

To address the aforementioned research gap and research questions, we examined the effects of tourism boycotts on visitor numbers using Chinese boycott events. We adopted a narrative approach for sample selection (Romer & Romer, 2010) and local projection models for data analysis (Jorda, 2005) to delineate the impacts of tourism boycotts on target destinations' visitor numbers and evaluate how such impacts vary by animosity type. China was selected as the research context as it is the largest tourism source market, accounting for 9% of the world's cross-border travel and a total expenditure over \$292 billion in 2015 (World Bank, 2017). Many tourism and hospitality providers have tailored their offerings to target Chinese tourists and boost revenue (Lai, Li, & Harrill,

Table 1
Types of animosity.

Types of animosity		
War/military	Hostile feelings from war-based aggressions or military actions taken by one nation/region against another	Klein et al., 1998
Economic	Feelings of dominance, exploitation, or aggression towards a country/region in relation to its economy, industry or commerce	Klein et al., 1998
Politics	An expression of animosity due to dyadic political hazards, nation-level conflict, such as territory, resources or political ideology	Arikan & Shenkar, 2013
Social/people	Strong dislike of the mentality, social values, or norms of the people from a given country/region	Nes et al., 2012
Religious	One's intolerance of and antipathy towards another person, country or nation because of religious differences	Kalliny et al., 2017
Cultural	One's intolerance of and antipathy towards another person, country or nation because of cultural difference	Kalliny et al., 2017

2013). Chinese tourism boycott events may thus pose great risks for many destinations.

Case selection

We included the following steps in our case selection process. First, using the rankings provided by [China Tourism Academy \(2017\)](#), the think-tank of China's national tourism authority, we narrowed the sample frame to the top 20 most popular overseas destinations amongst Chinese tourists in 2017 because such destinations would be more sensitive to a decline in Chinese visitor numbers in the event of a boycott. Second, to determine whether boycott incidents occurred in these top 20 destinations, we performed keyword searches using the top four search engines – Google, Bing, Yahoo, and Baidu ([Dwyer, 2016](#)) – in June 2017. The keywords were “Chinese tourism boycotts + destination name”, and we searched for them first in English and then in Mandarin Chinese. Using a narrative-based approach (see [Romer & Romer, 2010](#)), we reviewed all search results and ultimately identified nine cases.

Then, we used data from each country's national tourism organisation website to extract monthly tourism numbers over the last 10 years. However, we could not obtain the required data for two events: the Chinese tourism boycott of France as a result of French pro-Tibet protests in 2008; and a boycott against Thailand following negative social media comments about Chinese tourists in 2016. In both cases, data on inbound Chinese tourists were unavailable for the period of interest. These events were therefore excluded from our data analysis, leaving seven cases available for further examination.

Case description and classification

To assess whether the impacts of tourism boycotts on visitor numbers differed by animosity type, we read through media reports related to the search findings to identify the underlying reason(s) for animosity using a narrative-based approach.

Case 1 concerned a boycott against the Philippines, representing the evolution of negative emotions when responding to an incident wherein Chinese tourists were hijacked. The Chinese public reacted furiously due to disappointment over the handling of the hijack by the president of the Philippines and their displeasure towards Filipino people's lack of respect for Chinese victims ([Chinanews.com, 2011](#)). The tourism boycott was initially executed as a means of expelling anger and demanding apologies, associated with people and social animosity.

Case 2 involved a boycott against Japan due to the Diaoyu Islands dispute, which included a political battle between China and Japan over the territory of the Diaoyu Islands ([Cheng & Wong, 2014](#)). The boycott started when Japanese authorities detained Hong Kong activists attempting to enter the Diaoyu Islands. Mingled with historical war animosity, a tourism boycott against Japan was initiated with a clear instrumental purpose to subject Japan to economic loss.

Case 3 was a boycott against the Maldives, which stemmed from a dispute about kettles being removed from hotel rooms for Chinese tourists only. According to hotel management, the decision to remove kettles was made in the hopes that Chinese tourists would order more room service rather than consuming their own instant noodles in their rooms. This discriminative practice sparked social and cultural animosity amongst Chinese tourists and went viral on Sina Weibo, with many users calling for a boycott of the Maldives ([Penna, 2013](#)). However, compared to other cases, resort management teams reacted quickly to tackle the issue by stating that the kettles had been removed only for maintenance. This claim was backed up by the Maldives tourism minister, Ahmed Adheeb, who clarified that the authorities would take such incidents seriously if they received formal complaints over alleged discrimination at the country's resorts ([Min, 2013](#)).

Case 4 concerned a boycott against Malaysia, which proceeded similarly to Case 1. Animosity was exacerbated when flight MH370 went missing, and the Chinese were disappointed and frustrated with the Malaysian government over its handling of the missing plane ([Zeng, 2014](#)). This animosity was found to be social in nature.

Case 5 was a boycott against Hong Kong, which began with a political protest by Hong Kong residents that later escalated to a series of abusive online debates against control from Beijing ([Luo & Zhai, 2017](#)). This event challenged Mainland Chinese residents' political ideology and eventually transformed into a tourism boycott ([Chen, Hsu, & Li, 2018](#)).

The boycott in Case 6 was triggered when Taiwanese president Tsai Ing-Wen, elected in 2016, ignored the Chinese government's call for the ‘One-China policy’. Associated with historical and ongoing political tensions between mainland China and Taiwan ([Henderson, 2007](#)), this political rejection generated animosity amongst mainland nationalists and led to an urgent call for a tourism boycott against Taiwan. This boycott was further strengthened by the Mainland Chinese government who discouraged tour operators from organising group travel to Taiwan ([Horton, 2017](#)).

Case 7 involved a boycott against South Korea, which began when former president Park Geun-Hye expressed South Korea's alignment with the US to deploy the THAAD system, evoking tension in the trilateral relationship amongst China, South Korea, and the US in international politics ([Chung, 2009](#)). The Chinese government intensified this by issuing travel warnings asking travel agents to send Chinese tour groups to locations other than South Korea ([Mody, 2017](#)).

From the case descriptions, we identified four out of seven cases that exhibited political animosity; this type refers to animosity generated from the occurrence of an international bilateral political incident often associated with dyadic political hazards or national/regional conflict, such as that involving territory, resources, or political ideology ([Arikan & Shenkar, 2013](#); [Nes et al., 2012](#)). These findings are unsurprising, as political issues are regarded as a major driving force behind animosity ([Huang et al., 2010](#); [Lee, 2012](#)). Based on our analysis, we separated cases into two categories: boycotts associated with political animosity (Cases 2, 5, 6, and 7) and boycotts associated with non-political animosity (Cases 1, 3, and 4), which included boycotts associated with social, individual, and cultural animosity. [Table 2](#) summarises the seven boycott events into two groups based on animosity type; Appendix B

Table 2
List of cases and classification.

Year	Country/region	Event	Animosity types
2010	Philippines	Manila bus hijacking	Non-political
2012	Japan	Diaoyu Islands territory dispute	Political
2013	Maldives	Kettles for instant noodles	Non-political
2014	Malaysia	Missing flight MH370	Non-political
2014	Hong Kong	Occupy Central protest	Political
2016	Taiwan	President Tsai Ing-wen election	Political
2016	South Korea	Decision on deployment of US THAAD system	Political

provides more details on the seven cases.

Estimation model

As a starting point, annual aggregate tourism data were compiled from World Bank observations between 1996 and 2016 (World Bank, 2017). These data provided an overview of a destination's total tourist receipts and arrivals along with other macroeconomic indicators. To perform a detailed analysis on the impacts of the selected cases on Chinese tourist arrivals, data were gathered from the state tourism authority of each country/region in question (see the Data Reference). Monthly tourism arrival data were collected for Chinese arrivals and aggregate arrivals from all nations for a given destination. All monthly data were obtained between 1996 and 2017 when available.¹

For benchmark estimates, we focused on a reduced-form specification measuring the impacts of boycott events on tourist growth using a local projection approach (Jorda, 2005). In this method, projections of the estimated path of a variable are conditional upon some change or shock to another variable in each period. This method also enables estimation of non-linear relationships using simple regression techniques and is more robust to misspecification (Jorda, 2005).

Identifying boycott events exogenous to other variables that may influence tourist numbers was important to local projection in this study. Following the practice of Romer and Romer (2010), we applied a narrative-based approach to identify the timing of boycotts on the basis of primary sources (e.g. press coverage and social media reports) at the time of the event, as outlined above. This approach ensured that each boycott was a standalone event and not intertwined with other tensions. As part of this narrative identification, we sought to obtain confidence that each boycott was exogenous to tourist visits to the destination country and factors that might influence these tourism numbers; specifically, we aimed to ensure that boycotts were neither caused by tourism activity in a given country (e.g. more tourist arrivals in a destination *caused* the boycott) nor due to other control variables that would otherwise predict tourist visits (Romer & Romer, 2010).

To obtain confidence of our identification, we tested whether our identified shocks were exogenous in two ways. First, we applied several specifications to our estimations to determine whether including different control variables and lags thereof would affect point estimation of the impact of tourism. If truly exogenous shocks have been identified, the inclusion of these control variables should not influence the results (Romer & Romer, 2010). Second, we regressed identified shocks against lagged variables in our analysis to see if prior data patterns predicted future shocks (Romer & Romer, 2010); if the chosen boycott events were exogenous, this should not be the case. Moreover, we ran our specifications by excluding different boycott events one at a time to determine whether one potentially non-exogenous shock was driving our results. If these exogenous events are unrelated to other factors likely to influence tourism numbers (e.g. tourists' income), then a regression of inbound tourists to the destination country/region against these boycotts should yield unbiased, consistent, and asymptotically normal estimators (e.g. Jorda, 2005; Jorda & Kozicki, 2007; Romer & Romer, 2010; Wu, Lee, & Wang, 2011):

$$\Delta \ln(X_{i,j,t}) = \alpha + \sum_{k=0}^{k=12} \beta_i B_{j,t-k} + \gamma Z_j + \varepsilon_{j,t} \quad (1)$$

where $\Delta \ln(X_{i,j,t})$ represents a change in the natural logarithm of seasonally adjusted² tourists from country i to country j at time t ; $B_{j,t}$ represents a dummy variable equal to 1 if there is a boycott in country j at time t and 0 otherwise; Z_j denotes a matrix of dummy variables for each country/region in the sample; and $\varepsilon_{j,t}$ is an error term. Specification (1) can be estimated using a fixed-effects panel regression. The estimates of β_i provide a local projection of the impact of a boycott from the date of occurrence ($k = 0$) to 12 months thereafter ($k = 12$).

Although the estimation of Eq. (1) should lead to unbiased estimates of β_i if boycott events are exogenous, we tested this hypothesis by including controls in our benchmark and robustness test specifications. For benchmark results, we included l lags of the dependent variable in our specification to control for dynamics in tourist numbers, where many effects were likely serially correlated.

¹ The sample period for each country was determined by the period during which data were available from the state tourism authority.

² Seasonal adjustment was performed using an X-12-ARIMA process to control for any systematic variations in tourists throughout the year. For example, seasonal adjustment removed the impacts of weather and school holidays from our results. Such seasonal adjustment was performed on each time series for Chinese and global tourists to respective destinations, revealing distinct seasonal characteristics.

Therefore, we modified Eq. (1) as the following benchmark specification:

$$\Delta \ln(X_{i,j,t}) = \alpha + \sum_{k=0}^{k=12} \beta_i B_{j,t-k} + \sum_{l=1}^{l=12} \beta_l X_{i,j,t-l} + \vartheta Y_{j,t} + \gamma Z_j + \varepsilon_{j,t} \quad (2)$$

where $Y_{j,t}$ represents a matrix of control variables for which we included shifts in relative prices between countries i and j , represented through changes in relative inflation and exchange rates, along with changes in the price of oil to serve as a proxy for the cost of travel.³ The economic model underlying the inclusion of these variables is that consumers respond to prices, demanding more at cheaper costs; this specification is in line with Wang (2009). If boycott events are exogenous to these control variables (i.e. if boycotts were instigated unrelated to current and prior movements in income, prices, and exchange rates), then we would expect the estimates from these robustness tests to be consistent with those excluding these variables. As our boycotts were identified through analysing narrative records at the time, we were able to determine if this exogeneity assumption was appropriate.

We performed augmented Dickey-Fuller tests on each variable with the null hypothesis that the variable followed a unit root. For each variable in levels, there was insufficient evidence to reject the null hypothesis, as each variable was a unit root; for all variables expressed in growths, the null hypothesis was strongly rejected. Hence, we used growth rates exclusively in our specifications (see Table 1A for detailed results).

We tested the sensitivity of our results in three ways. First, we used inbound Chinese tourists to the boycotted destination for $X_{C,j,t}$ in our benchmark regressions and compared these results to the specifications in Eq. (2), where $X_{W,j,t}$ denotes global tourist visitors excluding those from China. This check helped to ensure that boycott behaviour was influential rather than an omitted variable affecting the destination country/region beyond Chinese tourists. Second, we included global tourist visits to country j as a control variable (Z_j) in Eq. (2); estimations from these specifications assessed impacts on Chinese tourists to the destination country, controlling for changes in global activity to that country. If a boycott event exerted an equal effect on Chinese and global tourists, then controlling for global tourists when estimating Chinese tourists should return estimates insignificant from zero. Finally, we analysed the data by destination for each boycott event, applying a similar local projection approach (Jorda, 2005) without pooling data across several destinations. This method followed a similar process as in Eq. (1), except this case involved calculating tourist growth rates for individual destinations, $\ln(X_{i,j,t}) - \ln(X_{i,j,t-k})$, for $k = 1, 2, \dots, 12$, along with the standard deviation of these growth rates. Analysing behaviour on a case-by-case basis allowed for a comprehensive view of the underlying mechanisms shaping boycott behaviour.

Analysis and findings

Economic significance of Chinese tourism in sample destinations

Table 3 presents statistics quantifying the significance of tourism in general, and Chinese tourists specifically, for destinations in our sample. Hong Kong amassed the most international tourism receipts from international tourists over the sample period, which accounted for 8.7% of its total GDP during that time. Malaysia and Japan were the next largest countries in terms of tourism receipts, although these receipts were lower as a proportion of total GDP. Although the Maldives received the least revenue (US \$1.1 billion) from international tourists in our sample, these receipts constituted a substantial proportion of the country's total GDP (64.7%).

Chinese tourists made significant contributions to total tourism and GDP for all countries/regions in the sample⁴; for the Maldives, Chinese tourists represented 27.7% of total tourist numbers. With respect to arrivals, Hong Kong received the highest proportion of its tourists (64.9%) from mainland China.

Overall assessment

The results of local projection approach (2) are illustrated in Fig. 2, where Panel (a) presents cumulative changes as a result of a boycott in Chinese tourist growth rates; 95% confidence bounds using bootstrapping methods are also presented. Twelve months after a boycott event, inbound tourists from China to the boycotted destination were estimated to be 36.2% below their expected level had the boycott not occurred; this result was statistically significant at 95% confidence. Fig. 2 illustrates a clear initial decline in Chinese tourists that amplified as a boycott persisted. Panel (b) presents results from estimating specification (1), which did not include lagged values for tourism growth. Little difference was observed in point estimates for the cumulative impacts on Chinese tourist growth in the presence of boycott events relative to results derived from specification (2), suggesting that these events were exogenous.⁵ Panel (a) of Fig. 1A demonstrates that including control variables of relative prices, exchange rates, and transportation costs also exerted limited effects on point estimates of the impacts of boycotts on tourist numbers. Including lags of the dependent

³ Data on inflation and exchange rates came from the World Bank Global Economic Monitor; data on oil prices, measured as the global price of Brent crude oil, came from Federal Reserve Economic Data.

⁴ Data were unavailable regarding specific Chinese tourist receipts to destination countries for direct inferences of their contributions to GDP; however, evidence from the World Bank suggests that Chinese tourists' average expenditure is in line with tourists from other countries and that this ratio has increased substantially since 1995.

⁵ Similar to Romer and Romer (2010), we tested this directly by running a regression of the shock to all lagged variables in the analysis; no single variable was statistically significant, and the regressions had little explanatory power.

Table 3
International tourism and annual income.

	Global		China
	Tourist receipts (annual \$bn) (1)	Proportion of annual GDP (%) (2)	Inbound tourist (%) (3)
Philippines	3.3	2.4	7
Japan	11.7	0.2	18
Maldives	1.1	64.7	28
Malaysia	12.2	6.8	6
Hong Kong	19.5	8.7	65
Taiwan	–	–	30
South Korea	11.4	1.3	34

Note: Data collected from the World Bank with the exception of the proportion of Chinese tourists to total inbound tourists for the destination, for which data were obtained from local tourism bodies (note that the World Bank does not report figures for Taiwan). Column (1) represents total average annual tourism receipts (in US dollars) and column (2) represents the proportion of these receipts to total GDP of the country. Column (3) represents the proportion of total inbound tourists to the country which are Chinese tourists. Data in columns (1) and (2) are from between 1995 and 2016, whereas those in column (3) are for when data are available over the same period. If data were taken for when all countries have the same observations for column (3), similar results would prevail.

variable elicited smaller confidence bands, which is to be expected given that this method isolates the normal variable in tourist numbers.

Panel (c) of Fig. 2 indicates a smaller estimated initial fall in global tourists to a destination country after a boycott event (18.8%), and this immediate effect was not found to grow with time. Panel (d) demonstrates that when controlling for global demand, the estimated impact of boycott events on Chinese demand was smaller than Panel (a) (a cumulative decline of 25.8% 12 months after the event); however, this decline was still statistically significant and exceeded that in global demand.

Fig. 3 presents results of the seven Chinese boycotts on a destination-by-destination basis. Data are presented for 6 months prior to a boycott and 12 months after. The vertical line at time t in each pane represents the time of a given event. Inbound tourism figures have been normalised in each pane by dividing by the number of tourists in the month of a boycott to contextualise the percentage change in tourists after the event. For example, a month after the Manila bus hijacking in 2010, Chinese tourists to the Philippines were 45% below where they were prior to the boycott (i.e. 0.55 on the y-axis in the first pane of Fig. 3). Further, the trend in tourist growth appears in each pane (straight dashed black line starting from 1 at time t) with 95% confidence intervals, drawn from the standard deviations of growth rates over time horizons for the country/region in question. Trends were consistent with the local projection method in Eq. (1) (standard deviations calculated for growth rates over different time horizons), such that $\ln(X_{i,j,t}) - \ln(X_{i,j,t-k})$, $k = 1, \dots, 12$.

The first four cases revealed an immediate decline in tourist numbers, although this fall did not persist in many cases (especially in the Maldives). For the last three cases in Fig. 3, statistically significant declines in tourism numbers appeared 12 months after each event, but this reduction manifested gradually over time. Impacts on world tourism from the seven events are also illustrated in Fig. 3.

Although the results of individual cases in Fig. 3 were consistent with those in Fig. 2, clear heterogeneity applied in all cases. A test of statistical significance of the cumulative effects of boycotts between the results in Fig. 3 compared to those in Panel (a) of Fig. 2 revealed only one significant result, with the decline in tourists in South Korea larger than the average impact estimated above ($p = 0.037$).

Animosity types and impact variance

Fig. 4 illustrates the respective impacts of boycotts associated with political animosity and non-political animosity using local projection method (2). Non-political animosity boycotts had no effects on visiting behaviour amongst Chinese (Panel [a] of Fig. 4) and international (Panel [c]) tourists. The second column in Fig. 4 presents results from boycotts associated with political animosity, depicting a sharp fall in Chinese inbound tourists following these events. Twelve months after a boycott, Chinese arrivals to the boycotted country were 63.6% below where they should be if a boycott had not occurred. Therefore, Chinese tourist numbers fell significantly in response to boycotts marked by political animosity; such responses were also economically significant, with tourist numbers estimated to be less than half what they would be one year after the boycott if the boycott had not occurred.

In Cases 2, 5, 6, and 7, tourism boycotts were arguably born out of heightened political tension, rendering civil disputes more likely. In all examples except Case 5 (Hong Kong), which revealed no difference in Chinese tourism figures, political animosity boycotts resulted in statistically significant reductions in Chinese tourists 12 months after each event. In Case 2 (Japan), this effect manifested immediately, whereas in the Taiwan and South Korea cases, the effect strengthened over time. Both instances were characterised by initial debates and negotiations between the Chinese government and its counterpart, revealing a possible effect of government involvement in these cases. Although tourism has long been used as a political tool to retaliate against and reward counterparts (Castañeda & Burtner, 2010), the Chinese government did not wield its power in tourism overtly, hence inbound tourist numbers did not exhibit a sharp decline immediately after each event; however, after failed negotiations in both cases, the Chinese government issued travel warnings and recommended that tour operators send groups elsewhere. These measures exemplify the

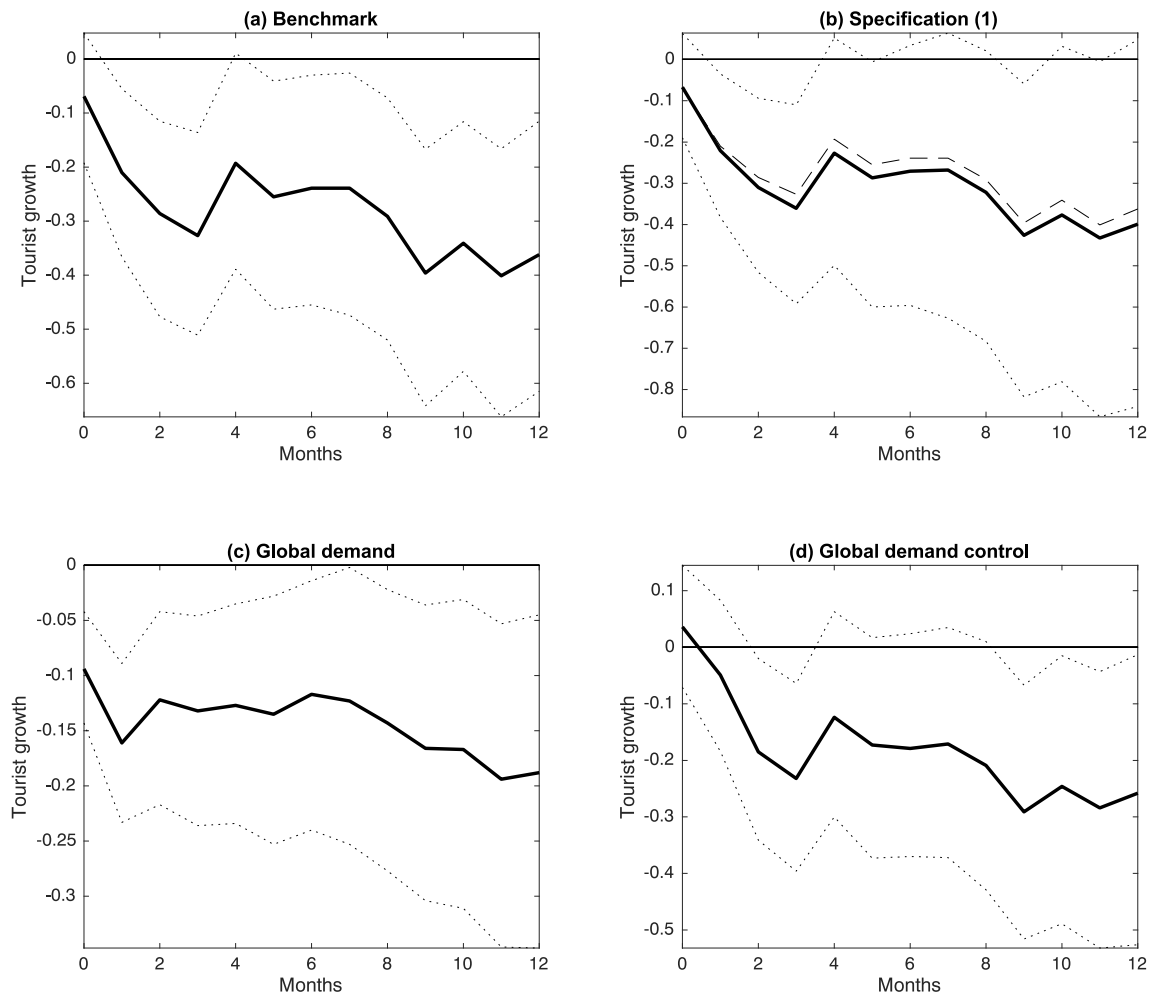


Fig. 2. The impact of boycott events on tourism.

Figure note: Results from estimating specification (2) applying twelve lags in both the boycott event and lagged dependent variable. Panel (a) presents the benchmark results for the cumulative impact on Chinese tourist numbers as a result of a boycott at time zero. Panel (b) compares results from specification (2) in panel (a) – the dashed line – to those from specification (1), dropping the lagged dependent variables. Panel (c) presents results estimating the impact on all international tourists to the destination country excluding Chinese tourists, and panel (d) presents results from reperforming specification (a) controlling for the movement in all tourists to the destination country. The dashed lines in each plot represent 95% confidence bands derived using bootstrapping methods.

government's primary motive in a boycott intended for economic retaliation, which may force counterparts to alter their political stance (Dillow, 2017). As long as tension persisted between the Chinese government and that of a destination country/region, Chinese arrivals to these areas appeared unlikely to increase.

Conversely, non-political animosity incited by unpredictable events (e.g. accidents) often spawned from dissatisfaction with or disapproval of crisis management at the destinations. In this study, these boycotts were found to exert temporary effects at most on Chinese tourism to destination countries, with tourist numbers falling within the margin of error after 6 months in all cases (see Fig. 3). In each of these boycotts, a year after the event, Chinese tourists to these destinations were estimated to be fewer compared with if long-term visitor trends had continued (i.e. beneath the trend line), but this disparity was not statistically different from zero (i.e. within confidence bounds). The cases of the Philippines and Malaysia revealed a noticeable decrease in Chinese tourist arrivals, although arrivals began to rebound after a year.

Persistence and further robustness tests

We conducted additional robustness tests to confirm the above analyses. Fig. 2A presents estimated impacts on Chinese tourists from boycott events more than one year thereafter for all shocks and types of boycotts in Panels (a), (b), and (c), respectively. Declines in tourist numbers were estimated to manifest within the first 9 months of a boycott before levelling off. However, tourist growth remained statistically significantly lower than would be expected 2 years after the boycott event, demonstrating a slight

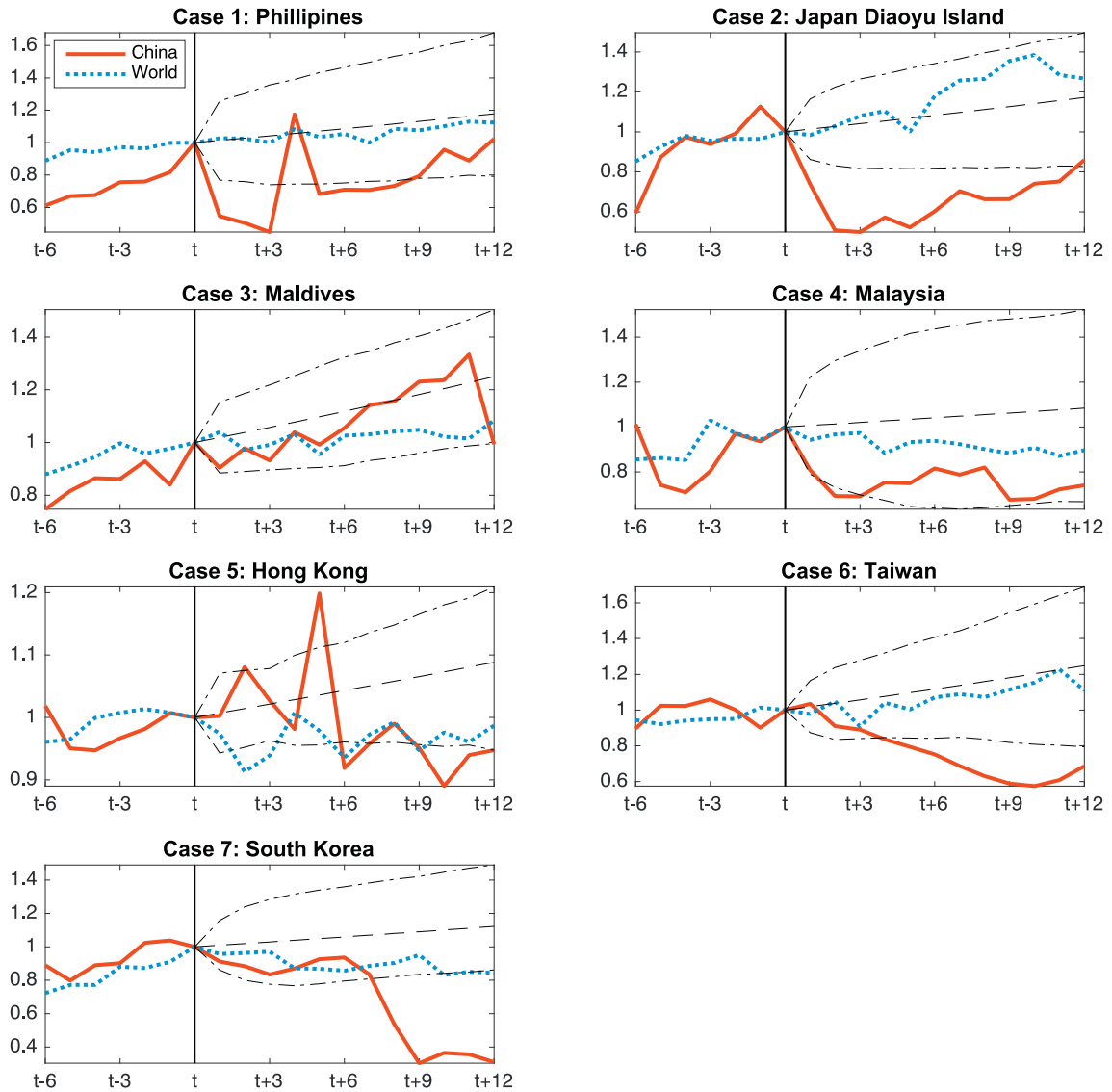


Fig. 3. The impact of boycott events on tourism case-by-case.

Figure note: In each pane, the solid red line represents Chinese inbound tourists and the blue-dashed line tourism from the rest of the world; each figure is normalised to one at the time of the event. Trend growth (dashed line) and confidence bounds (dashed-dot lines either side of trend) for these figures are also included. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

reversion to where levels would have been without a boycott; that is, growth demonstrated a similar rate to before the boycott, but such growth began from a lower level given the boycott's impact.

We then tested the robustness of our results using quarterly data. This approach enabled us to add income as a control variable in the specifications, measured as the growth rate of real GDP (see Panels [b]–[d] in Fig. 1A). The estimated results aligned with our benchmark specification, providing further support that our identification of exogenous boycott events was correct. The number of Chinese tourists was significantly lower 12 months after the boycott event, demonstrating clear heterogeneity between events involving non-political and political animosity.

We also estimated our specifications by excluding one case at a time to test the robustness of our results to outlier cases (see Panels [e]–[j] in Fig. 1A). We estimated the impact of each case associated with non-political/political animosity depending on how the case was classified in Table 2. For example, when excluding Case 1, we evaluated the impact on events associated with non-political animosity. In all cases, results were robust to this sensitivity check; thus, boycotts associated with non-political animosity were estimated not to have significant effects on Chinese tourism, whereas boycotts associated with political animosity resulted in significant declines in Chinese tourists. Although point estimates and confidence bounds changed when dropping each of our seven boycott cases, the results remained the same.

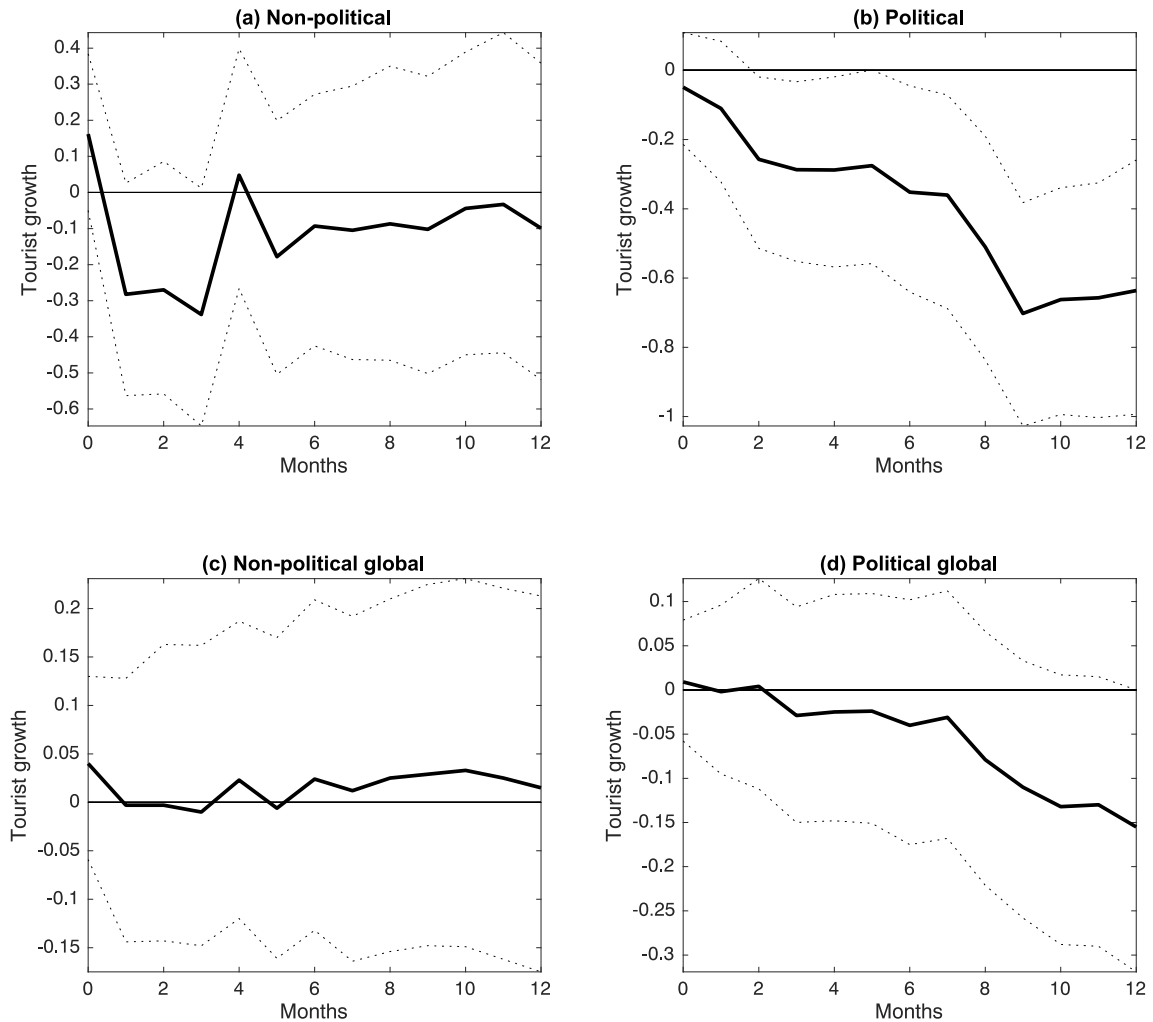


Fig. 4. Boycotts associated with non-political versus political animosity. Figure note: Results from applying specification (2), presenting cumulative effects of boycott events on tourists to the country of interest. The first row (panels (a) and (b)) represents the impact on Chinese tourists, and the second row (panels (c) and (d)) on global tourists (after deducting Chinese tourists from the total); the left column (panels (a) and (c)) results from boycotts with non-political animosity and the right column (panels (b) and (d)) political animosity. The dashed lines in each plot represent 95% confidence bands derived using bootstrapping methods.

Finally, we conducted robustness tests combining components of our various extensions; findings were robust to all tests. Specifically, boycott events led to significant declines in Chinese tourists to destination countries; the effects across boycott events on countries involving political and non-political animosity amongst Chinese tourists were clearly heterogeneous. Significant declines in Chinese tourists appeared when controlling for movements in global tourists, and these results persisted over time.

Discussion and implications

By theoretically articulating and empirically demonstrating the significant effects of tourism boycotts on decreasing visitor numbers and the various impacts between boycotts associated with political versus non-political animosity, this study contributes to the tourism boycott literature in four ways. First, by summarising key schools of thought regarding boycotts and illustrating how boycotts can be categorised by motivation, purpose, boycott actions, and boycott impacts, we provide a comprehensive framework for understanding and evaluating boycotts and their potential consequences.

Second, by illustrating and demonstrating the significant effects of tourism boycotts on visitor numbers beyond visit intention (e.g. Herrera & Hoagland, 2006; Parsons & Rawles, 2003), this paper confirms the profound effects of tourism boycotts (Shaheer et al., 2018) with conclusive empirical evidence. Our findings highlight tourism boycotts as an important area as well as an increasingly significant global phenomenon calling for more research attention. It is worth noting that more studies should investigate the causes, process, participants, consequences, and coping strategies associated with tourism boycotts in destination management.

Third, by showing that the reduction in visitor numbers varies across boycotts associated with political versus non-political

animosity, this paper reveals that animosity type does not only affect tourists' travel intentions (Alvarez & Campo, 2014; Sánchez et al., 2018) but also actual visitor numbers, extending the previous debate on animosity and boycotts. In particular, whilst our findings reveal that boycotts associated with political animosity and non-political animosity differ in their reaction time, decreases in visitor numbers, and enduring effects, we shed new light on studies of tourism boycotts. Although boycotts associated with non-political animosity may quickly lower visitor numbers, boycotts associated with political animosity can result in more enduring damage on long-term tourist arrivals. Our findings also suggest that institutional intervention may worsen the effects of tourism boycotts, as in the cases of Taiwan and South Korea; Chinese inbound tourist numbers to these destinations will likely remain low until the Chinese government lifts its sanction (Jennings, 2018).

Finally, this paper describes and highlights boycott behaviour specific to our research context of the Chinese tourism market. Due to collective memories of past national experiences, resulting in a mixture of the glories of Chinese empires and humiliation in the 19th and 20th centuries (Carlson, 2009), Chinese consumers' animosity could be easily transferred to boycott behaviour. Such behaviour may be reinforced by state nationalism, manipulated top-down by the state or by popular nationalism (Zhao, 2013). Furthermore, collectivism is rated highly amongst the Chinese (Hofstede, 2007), which may result in a greater chance of collective action and organised boycotts against a particular destination.

Considering the scale and economic significance of international tourism, our study offers several implications for destination marketers and tourism stakeholders, especially those targeting major source markets. First, tourism practitioners are advised to monitor international tourist-consumer sentiments and remain alert to rises in consumer animosity. Destination marketers should intervene early to prevent potential boycotts, as our results indicate that animosity-inspired boycotts can decrease visitor numbers significantly.

Whereas boycotts associated with non-political animosity may be sparked by issues such as cultural misunderstandings and/or miscommunication, immediate action must be taken to prevent negative emotions from morphing into animosity. Crisis management teams may be organised to respond to and compensate affected individuals. Social media posts should be updated frequently to provide the public with the latest information (Hall & Page, 2016).

Communication should be transparent to avoid intensifying negative emotions, and the public should be assured that crisis resolution efforts are ongoing. Sincerity and humility are of paramount importance, especially when communicating with consumers from eastern Asian countries given the concept of '*mianzi*' ('face') deeply rooted in Confucian culture (Hwang, 1987). As boycotts associated with non-political animosity tend to be temporary, destination tourism authorities should try to reinforce tourists' confidence and express goodwill and respect towards event victims (Richter, 1983). Public relation efforts should seek to restore destination image and reputation.

Tourism practitioners must also exercise caution when monitoring international markets characterised by political animosity due to historical conflicts; tourism mishaps will likely trigger more profound boycott effects. Over-reliance on a single source market is not advisable, especially in areas with potential for heightened political tension. Tourism is often sensitive to political and diplomatic environments (Moufakkir, 2010); therefore, governmental policymakers should realise the vulnerability of the tourism industry and institute safeguards to reduce or prevent damage when boycotts occur.

Large boycotts may greatly influence a country's image and directly affect all parties in the tourism industry; thus, contingency plans should be discussed frequently. Such plans may include radical sales promotions of flights and hotels to boost tourist demand from other markets, easier and faster visa applications to facilitate destination access, or tailored marketing towards potential customers from other countries/regions. Destination government authorities should also consider local residents' wellbeing along with that of employees and businesses in a boycott to support them effectively during such events (Kim, Prideaux, & Timothy, 2016).

Limitations and future research

Although this paper represents a pioneering attempt to empirically evaluate the effects of tourism boycotts on visitor numbers and assess how these effects differ on the basis of animosity, our study does have limitations that open avenues for future investigation. First, the concepts of animosity and boycotts are inherently complex with various interpretations. Although animosity often refers to individuals' emotional responses, close attention is needed when animosity is viewed as a collective phenomenon (Cheng & Wong, 2014); however, it is difficult to trace whether animosity is a genuine individual intrinsic emotion or one triggered and intensified by media reports, moral pressure, or institutional influence. It is also challenging to judge whether animosity remains consistent throughout an event. Animosity can have different and complex causes, mixing military, economic, or social-cultural factors (Campo & Alvarez, 2017). Scholars are thus encouraged to further confirm the linkages between animosity and boycott behaviour.

Second, boycotts represent a multifaceted concept, as motivations to boycott can be initiated by individuals, groups, the government, or a combination thereof. The purposes of boycotts are not uniform and can be expressive, instrumental, or a combination of both. Expressive boycotts can also become instrumental. Future studies may wish to investigate tourists' boycott motivations and purposes relative to boycott actions, taking into account different influential variables, such as government policy restraints or adoption of new media forms. Researchers may also be interested in the broader impacts of boycotts, such as direct economic consequences, destination residents' wellbeing, destinations' long-term strategic plans, and immediate coping responses to boycott risks.

Third, the effects of boycotts were investigated in this study using data on China as a source market. As China scores high on cultural collectivism, wherein people tend to work together to support a common cause, group cohesion is strongly emphasised (Hofstede, 2007). The Chinese media may also play a prominent role in terms of directing individuals towards or away from certain events (Stockmann & Gallagher, 2011). Hence, the effects of tourism boycotts may differ by cultural context. Future research could

explore cases from other tourist markets to compare whether the impacts of boycotts vary across cultures and markets. It may also be interesting to investigate how relevant stakeholders in receiving markets undertake reciprocal boycotts.

Appendix A

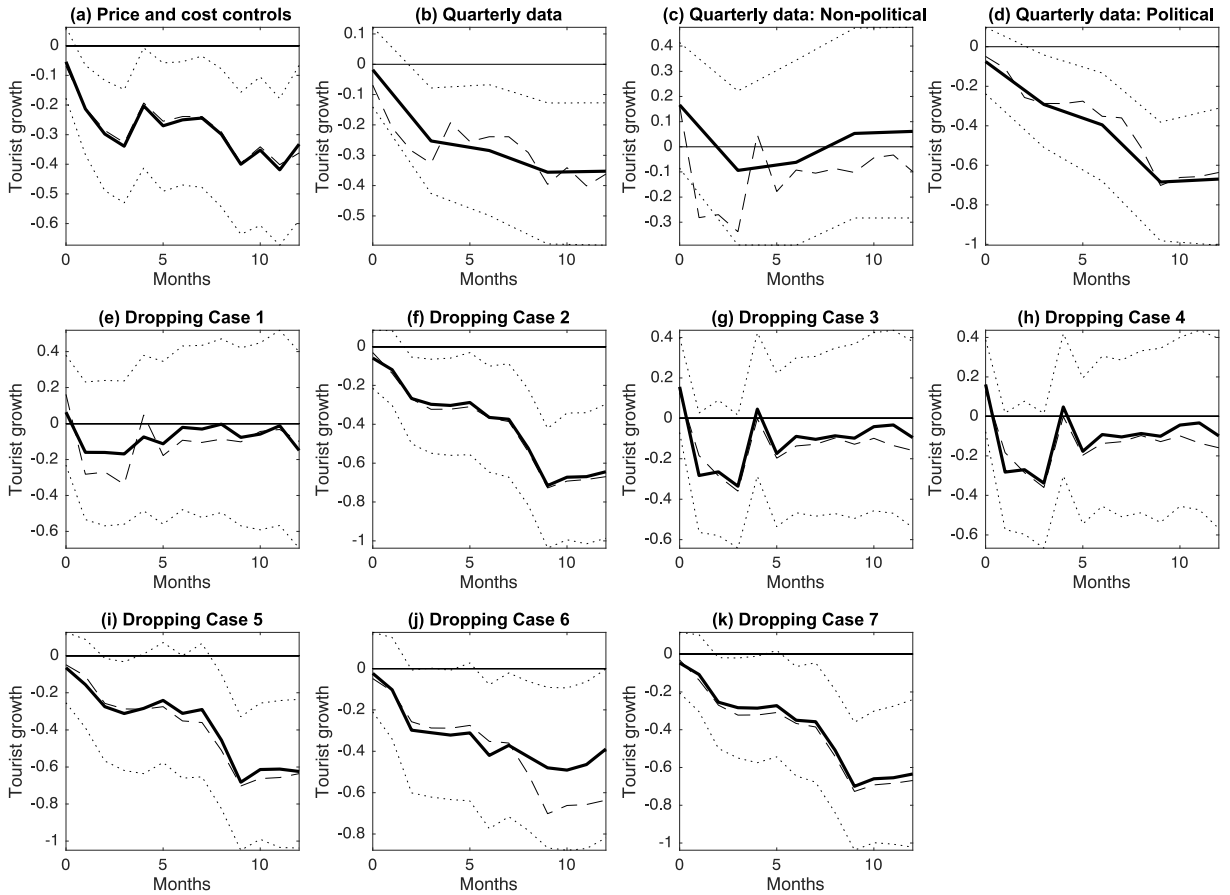


Fig. 1A. Further tests.

Figure note: Results from estimating specification (2) applying twelve lags in both the boycott event and lagged dependent variable. Panel (a) presents results from adding additional control variables of relative inflation, exchange rate movements and the oil price in to the specification, with the benchmark results presented in the dashed line. Panels (b) to (d) present results estimating the cumulative impact of all, non-political and political shocks (respectively) using a quarterly dataset and therefore now including income as a control variable; dashed lines represent the benchmark results. Panels (e) to (k) run estimations dropping each case one at a time. The results presented are those relating to the impact of political or non-political shocks, depending on whether the dropped case was itself political or non-political; dashed lines represent the benchmark results.

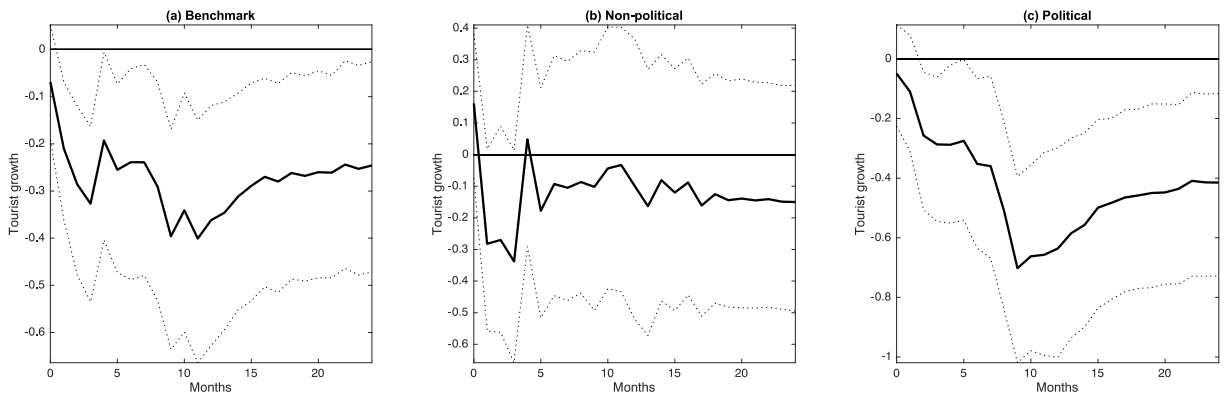


Fig. 2A. The persistent impact of boycott events on tourism.

Figure note: Results from estimating specification (2) applying twelve lags in both the boycott event and lagged dependent variable, now estimating the impact of boycott on cumulative Chinese tourist growth over a 24 month period for: all shocks (panel (a)); non-political shocks (panel (b)) and political shocks (panel (c)). In all, specification (2) is applied with twelve lags each in the shock variable and the lagged dependent variable, and the dashed lines in each plot represent 95% confidence bands derived using bootstrapping methods.

Table 1A

Augmented Dickey-Fuller tests.

Variable	PHL	MAL	JAP	HK	TWN	SK	MDV	China	World
Chinese tourist numbers									
Levels	0.187	0.262	0.414	0.144	0.360	0.457	0.000	N/A	N/A
Growth	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A	N/A
World tourist numbers									
Levels	0.966	0.448	0.447	0.126	0.789	0.428	0.088	N/A	N/A
Growth	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A	N/A
Exchange rate									
Levels	0.130	0.191	0.811	0.090	0.202	0.127	0.726	1.000	0.197
Growth	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CPI inflation									
Levels	0.999	0.954	0.721	0.930	0.912	0.967	0.997	0.999	1.000
Growth	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oil price									
Levels	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.846
Growth	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000

Note: Results from augmented Dickey-Fuller tests, testing the null hypothesis for each variable in our analysis follows a unit root test. This is performed for each variable in levels and in growth rates, the latter calculated as the change in the natural log of the variable from the previous time period. In each case the MacKinnon approximate p -value is presented from the test. N/A means not applicable.

Appendix B. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.annals.2019.102792>.

References

- Alvarez, M. D., & Campo, S. (2014). The influence of political conflicts on country image and intention to visit: A study of Israel's image. *Tourism Management*, 40, 70–78.
- Ang, S., Jung, K., Kau, A., Leong, S., Pompitakpan, C., & Tan, S. (2004). Animosity towards economic giants: What the little guys think. *The Journal of Consumer Marketing*, 13(2), 190–207.
- Arikan, I., & Shenkar, O. (2013). National animosity and cross-border alliances. *Academy of Management Journal*, 56(6), 1516–1544.
- Bianchi, R. (2006). Tourism and the globalisation of fear: Analysing the politics of risk and (in) security in global travel. *Tourism and Hospitality Research*, 7(1), 64–74.
- Braunsberger, K., & Buckler, B. (2009). Consumers on a mission to force a change in public policy: A qualitative study of the ongoing Canadian seafood boycott. *Business and Society Review*, 4, 457–489.
- Campo, S., & Alvarez, M. D. (2017). Consumer animosity and affective country image. In A. Correia, M. Kozak, J. Gnoth, & A. Fyall (Eds.). *Co-creation and well-being in tourism*. Springer.
- Campo, S., & Alvarez, M. D. (2019). Animosity toward a country in the context of destinations as tourism products. *Journal of Hospitality & Tourism Research*. <https://doi.org/10.1177/1096348019840795>.
- Carlson, A. (2009). A flawed perspective: The limitations inherent within the study of Chinese nationalism. *Nations and Nationalism*, 15(1), 20–35.
- Castañeda, Q., & Burtner, J. (2010). Tourism as “a force for world peace”: The politics of tourism, tourism as governmentality and the tourism boycott of Guatemala. *The Journal of Tourism and Peace Research*, 1(2), 1–21.
- Chen, N., Hsu, C., & Li, X. (2018). Feeling superior or deprived? Attitudes and underlying mentalities of residents towards Mainland Chinese tourists. *Tourism Management*, 66, 94–107.
- Cheng, M., & Wong, A. I. (2014). Tourism and Chinese popular nationalism. *Journal of Tourism and Cultural Change*, 12(4), 307–319.
- China Tourism Academy (2017). *China outbound tourism development annual report 2017*. Beijing: Tourism Education Press.
- Chinanews.com (2011). 90% netizens boycott Philippine tour and experts said not worth going if tourists are not respected. <http://www.chinanews.com/life/2011/08-31/3295599.shtml>, Accessed date: 12 May 2017.
- Chung, J. H. (2009). China's “soft” clash with South Korea. *Asian Survey*, 49(3), 468–483.
- Dillow, C. (2017). China is lashing out at neighbours by withholding tourists. *Fortune.com*, Accessed date: 12 May 2017 <http://fortune.com/2017/06/15/chinese-tourism-south-korea/>.
- Dwyer, D. (2016). Top 12 best search engines in the world. <https://www.inspire.scot/blog/2016/11/11/top-12-best-search-engines-in-the-world238>, Accessed date: 4 January 2019.
- Ettenson, R., & Klein, J. G. (2005). The fallout from French nuclear testing in the South Pacific: A longitudinal study of consumer boycotts. *International Marketing Review*, 22(2), 199–224.
- Friedman, M. (1985). Consumer boycotts in the United States: 1970–1980: Contemporary events in historical perspectives. *Journal of Consumer Affairs*, 19(1), 96–117.
- Friedman, M. (1991). Consumer boycotts: A conceptual framework and research agenda. *Journal of Social Issues*, 47(1), 149–168.
- Garrett, D. (1987). The effectiveness of marketing policy boycotts: Environmental opposition to marketing. *Journal of Marketing*, 51(April), 46–57.
- Guo, G. X., Zhou, X., & Tu, H. W. (2016). Consumer animosity, self-efficacy and willingness-to-visit: An empirical study on young outbound tourism market. *Tourism Tribune*, 31(2), 44–52.

- Hall, C. M., & Page, S. J. (2016). *The Routledge handbook of tourism in Asia*. New York: Routledge.
- Heilmann, K. (2016). Does political conflict hurt trade? Evidence from consumer boycotts. *Journal of International Economics*, 99, 179–191.
- Henderson, J. C. (2007). *Tourism crises: Causes, consequences and management*. Oxford: Elsevier.
- Herrera, G. E., & Hoagland, P. (2006). Commercial whaling, tourism, and boycotts: An economic perspective. *Marine Policy*, 30, 262–269.
- Hofstede, G. (2007). Asian management in the 21st century. *Asia Pacific Journal of Management*, 24(4), 411–420.
- Horton, C. (2017). China's attempt to punish Taiwan by throttling tourism has seriously backfired. <https://qz.com/907429/chinas-attempt-to-punish-taiwan-by-throttling-tourism-has-seriously-backfired/>, Accessed date: 16 November 2017.
- Huang, J. H., & Min, J. C. H. (2002). Earthquake devastation and recovery in tourism: The Taiwan case. *Tourism Management*, 23, 145–154.
- Huang, Y. A., Phau, I., & Lin, C. (2010). Effects of animosity and allocentrism on consumer ethnocentrism: Social identity on consumer willingness to purchase. *Asia Pacific Management Review*, 15(3), 359–376.
- Hudson, S. (2007). To go or not to go? Ethical perspectives on tourism in an 'outpost of tyranny' *Journal of Business Ethics*, 76, 385–396.
- Hwang, K. K. (1987). Face and favor: The Chinese power game. *American Journal of Sociology*, 92(4), 944–974.
- Jennings, R. (2018). Why it hurts less now as China punishes South Korea with tourism cuts, Forbes. <https://www.forbes.com/sites/ralphjennings/2018/03/04/china-keeps-punishing-south-korea-with-tourism-cuts-for-now/>, Accessed date: 20 October 2017.
- John, A., & Klein, J. (2003). The boycott puzzle: Consumer motivations for purchase sacrifice. *Management Science*, 49(9), 1196–1209.
- Jorda, O. (2005). Estimation and inference of impulse responses by local projections. *American Economic Review*, 95, 161–182.
- Jorda, O., & Kozicki, S. (2007). Estimation and inference by the method of projection minimum distance. *Working Papers*, 52(2), 461–487.
- Kalliny, M., Hausman, A., Saran, A., & Ismael, D. (2017). The cultural and religious animosity model: Evidence from the United States. *Journal of Consumer Marketing*, 34(2), 169–179.
- Kim, S., Prideaux, B., & Timothy, D. (2016). Factors affecting bilateral Chinese and Japanese travel. *Annals of Tourism Research*, 61, 80–95.
- Klein, J. G., Ettenson, R., & Morris, M. D. (1998). The animosity model of foreign product purchase: An empirical test in the People's Republic of China. *Journal of Marketing*, 62, 89–100.
- Klein, J. G., Smith, N. C., & John, A. (2002). Exploring motivations for participation in a consumer boycott. *Advances in Consumer Research*, 29, 363–369.
- Koku, P. S. (2012). On the effectiveness of consumer boycotts organized through the internet: The market model. *Journal of Services Marketing*, 26(1), 20–26.
- Koku, P. S., Akhigbe, A., & Springer, T. M. (1997). The financial impact of boycotts and threats of boycott. *Journal of Business Research*, 40, 15–20.
- Lai, C., Li, X., & Harrill, R. (2013). Chinese outbound tourists' perceived constraints to visiting the United States. *Tourism Management*, 37, 136–146.
- Lavorata, L. (2014). Influence of retailers' commitment to sustainable development on store image, consumer loyalty and consumer boycotts: Proposal for a model using the theory of planned behaviour. *Journal of Retailing and Consumer Services*, 21, 1021–1027.
- Lazarus, R. S. (1982). Thoughts on the relations between emotion and cognition. *American Psychologist*, 37(9), 1019–1024.
- Lee, T. J. (2012). Democratizing the economic sphere: A case for the political boycott. Lecturer and other affiliate scholarship series, paper 3. <https://digitalcommons.law.yale.edu/ylas/3>, Accessed date: 10 June 2019.
- Lim, C., & McAleer, M. (2005). Analysing the behavioral trends in tourist arrivals from Japan to Australia. *Journal of Travel Research*, 41(3), 265–271.
- Little, J. P., & Singh, N. (2015). Decontextualizing consumer animosity. *Journal of Global Marketing*, 28(2), 83–98.
- Luo, Q., & Zhai, X. (2017). "I will never go to Hong Kong again!" How the secondary crisis communication of "Occupy Central" on Weibo shifted to a tourism boycott. *Tourism Management*, 62, 159–172.
- McCarthy, J. D., & Zald, M. N. (1973). *The trend of social movements in America: Professionalization and resource mobilization*. Morristown: General Learning Press.
- McKercher, B., & Tse, T. S. M. (2012). Is intention to return a valid proxy for actual repeat visitation? *Journal of Travel Research*, 51(6), 671–686.
- Min, H. (2013). Maldivian hotel denies taking kettles from rooms of Chinese guests. <http://en.people.cn/205040/8164933.html>, Accessed date: 14 March 2019.
- Mody, S. (2017). China lashes out as South Korea puts an American anti-missile system in place. <https://www.cnn.com/2017/03/17/taad-anti-missile-system-makes-china-lash-out-at-south-korea.html>, Accessed date: 22 June 2018.
- Moufakkir, O. (2010). What's immigration got to do with it? Immigrant animosity and its effects on tourism. *Annals of Tourism Research*, 49, 108–121.
- Nes, E., Yelkur, R., & Silkoset, R. (2012). Exploring the animosity domain and the role of affect in a cross-national context. *International Business Review*, 27(6), 630–651.
- Parsons, E. C. M., & Rawles, C. (2003). The resumption of whaling by Iceland and the potential negative impact in the Icelandic whale-watching market. *Current Issues in Tourism*, 6(5), 444–448.
- Penna, M. (2013). China: 'Noodles crisis' lands Maldives hotels in hot water. <https://asiancorrespondent.com/2013/03/china-maldives-instant-noodles-crisis/#C2M7k07RfMiTmrzi.99>, Accessed date: 5 December 2017.
- Peters, F. E. (2009). *The monotheists: Jews, Christians, and Muslims in conflict and competition, volume II: The words and will of god. Vol. 2*. Oxford: Princeton University Press.
- Richter, L. K. (1983). Tourism politics and political science: A case of not so benign neglect. *Annals of Tourism Research*, 10, 313–335.
- Riefler, P., & Diamantopoulos, A. (2007). Consumer animosity: A literature review and a reconsideration of its measurement. *International Marketing Review*, 24(1), 87–119.
- Romer, C. D., & Romer, D. H. (2010). The macroeconomic effects of tax changes: Estimates based on a new measure of fiscal shocks. *American Economic Review*, 100, 763–801.
- Russell, D. W., & Russell, C. A. (2006). Explicit and implicit catalysts of consumer resistance: The effects of animosity, cultural salience and country-of-origin on subsequent choice. *International Journal of Research in Marketing*, 23, 321–331.
- Saad, G. (2013). Evolutionary consumption. *Journal of Consumer Psychology*, 23(3), 351–371.
- Sánchez, M., Campo, S., & Alvarez, M. D. (2018). The effect of animosity on the intention to visit tourist destinations. *Journal of Destination Marketing & Management*, 7, 182–189.
- Sautter, E. T., & Leisen, B. (1999). Managing stakeholders a tourism planning model. *Annals of Tourism Research*, 26(2), 312–328.
- Schrepf-Stirling, J., Bosse, D. A., & Harrison, J. S. (2013). Anticipating, preventing, and surviving secondary boycotts. *Business Horizons*, 56, 573–582.
- Sen, S., Gürhan-Canli, Z., & Morwitz, V. (2001). Withholding consumption: A social dilemma perspective on consumer boycotts. *Journal of Consumer Research*, 28, 399–417.
- Shaheer, I., Carr, N., & Insch, A. (2019). What are the reasons behind tourism boycotts? *Anatolia*, 30(2), 294–296.
- Shaheer, I., Insch, A., & Carr, N. (2018). Tourism destination boycotts – Are they becoming a standard practise? *Tourism Recreation Research*, 43(1), 129–132.
- Stepchenkova, S., Shichkova, E., Kim, M., & Rykhtik, M. I. (2018). Do strained bilateral relations affect tourists' desire to visit a country that is a target of animosity? *Journal of Travel & Tourism Marketing*, 35(5), 553–566.
- Stockmann, D., & Gallagher, M. E. (2011). Remote control: How the media sustain authoritarian rule in China. *Comparative Political Studies*, 44(4), 436–467.
- Teye, V. B., & Diffenderfer, P. (1988). The impact of a convention boycott on metropolitan Arizona. *Visions in Leisure and Business*, 7(2), 34–45.
- Wang, Y. S. (2009). The impact of crisis events and macroeconomic activity on Taiwan's international inbound tourism demand. *Tourism Management*, 30(1), 75–82.
- Wu, J. L., Lee, C., & Wang, T. W. (2011). A re-examination on dissecting the purchasing power parity puzzle. *Journal of International Money and Finance*, 30(3), 572–586.
- Yang, H. Y., & Chen, K. H. (2009). A general equilibrium analysis of the economic impact of a tourism crisis: A case study of the SARS epidemic in Taiwan. *Journal of Policy Research in Tourism, Leisure and Events*, 1(1), 37–60.
- YouGov (2017). One in five have boycotted a brand. <https://yougov.co.uk/news/2017/04/07/one-five-consumers-have-boycotted-brand/>, Accessed date: 9 September 2018.
- Zeng, X. (2014). Malaysia Airlines products have been stopped for sales and Malaysia Tourism dropped to the lowest. <http://www.traveldaily.cn/article/78992>, Accessed date: 15 November 2017.
- Zhao, S. (2013). Foreign policy implications of Chinese nationalism revisited: The strident turn. *Journal of Contemporary China*, 22(82), 535–553.

Data references

- Hong Kong Census of Statistics Department (2017). <https://www.censtatd.gov.hk/hkstat/sub/sp130.jsp?productCode=D5600551>, Accessed date: 21 August 2017.
- International Monetary Fund (2019). Global price of Brent Crude [POILBREUSD], retrieved from FRED, Federal Reserve Bank of St. Louis. <https://fred.stlouisfed.org/series/POILBREUSD>, Accessed date: 21 July 2019.
- JTB Tourism Research and Consulting Co (2017). <https://www.tourism.jp/en/tourism-database/stats/inbound/>, Accessed date: 21 August 2017.
- Korean Tourism Organisation (2017). <http://kto.visitkorea.or.kr/eng/tourismStatics/keyFacts/KoreaMonthlyStatistics/eng/inout/inout.kto>, Accessed date: 21 August 2017.
- Philippines Government tourism department (2017). <http://www.visitmyphilippines.com/index.php?title=visitorstatistics&func=all&pid=39&tbl=1>, Accessed date: 21 August 2017.
- Republic of China Tourism Bureau (2017). http://admin.taiwan.net.tw/statistics/release_en.aspx?no=7, Accessed date: 21 August 2017.
- Republic of Maldives, Ministry of Tourism (2017). <http://www.tourism.gov.mv/statistics/arrival-updates/>, Accessed date: 21 August 2017.
- The World Bank (2017). World development indicators. <https://data.worldbank.org/products/wdi>, Accessed date: 29 November 2017.
- Tourism Malaysia (2017). <http://www.tourism.gov.my/statistics>, Accessed date: 21 August 2017.

Qionglei Yu's research interests include internal marketing, consumer behaviour, cross-cultural studies and tourist behaviour, q.l.yu@kent.ac.uk.

Richard McManus's research interests include: consumer behaviour; macroeconomic policy and performance; the aggregate and distribution impact of fiscal policy.

Dorothy A. Yen studies how cultures influence consumer behaviour and business relationships, in particular consumers' identity and food consumption during travel.

Xiang (Robert) Li's research interests include destination marketing, tourist behaviour, and knowledge development.