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## The Borat effect: film-induced tourism gone wrong

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This research estimates the economic impact of an increase in tourism to Kazakhstan as a result of the film *Borat: Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan*, released in 2006. The film, controversial for its shock value, portrayed Kazakhstan in a negative light, yet raised awareness of the country as a tourist destination. Despite the negative depiction of Kazakhstan, international tourist expenditure increased by 6.4%. However, the increase in tourism was estimated to have an overall adverse effect on the economy. This adverse effect on the rest of the economy overshadowed the positive benefits of tourism.

*Keywords:* film-induced tourism; economic impact; computable general equilibrium model; Borat; Kazakhstan

Film-induced tourism has been a key niche market for many national tourism organizations and is a growing worldwide phenomenon (Hudson and Ritchie, 2006). Connell (2012) provides a thorough review of the evolution, progress and prospects of film tourism from a cross-disciplinary approach. While there has been an increasing amount of literature dedicated to film-induced tourism, there is still much debate about the perceived and actual impacts of film tourism to destinations. From a demand perspective, Connell (2012) notes 10 different ways in which tourists participate in some sort of film tourism: tourists visiting real locations portrayed in a specific film/television production; tourists visiting studio sets; tourists visiting specific film/television theme parks and attractions; tourists visiting theme attractions with a film theme; tourists visiting locations where filming is taking place; tourists visiting a location marketed as a film location; participation in an organized tour of film locations; participation in organized tours of film celebrity homes; tourists visiting film festivals; and tourists visiting a destination for film premieres.

Much of the early film tourism research highlighted the power of movies and television series in driving increased visitation to destinations. Early examples of films driving visitation are documented by Riley and van Doren (1992) and Riley *et al* (1998) in the USA; Tooke and Baker (1996), Connell (2005), Mordue (2009) and Busby *et al* (2013) in the UK and Bolan *et al* (2006)

in Ireland. The research focus then shifted to film and television set in Australasia, where researchers noted the impact that Korean TV dramas were having throughout Asia (Kim *et al.*, 2007, 2009) and the interplay between tourism, television and literature in China (Ryan *et al.*, 2009), while others noted the impact of film and television in Australia and New Zealand (Beeton, 2005; Frost, 2006; Buchmann *et al.*, 2010).

Film-induced tourism is seen to have three broad benefits for destinations. Destinations portrayed in films raise destination awareness. Destinations portrayed in films can enhance the attractiveness of a destination and film tourism can contribute to the tourism sectors in the destination (Riley *et al.*, 1998; Riley and van Doren, 1992; Beeton, 2005; Hudson *et al.*, 2011; Connell, 2012). In terms of raising awareness and portraying the destination in a positive light, these autonomous and organic images (Gartner, 1994) help to shape consumer perceptions of destinations. Yet these autonomous and organic images, while having higher credibility, are usually out of the control of the destination marketers (Tasci, 2009). In contrast to traditional advertising, destinations depicted in movies and television series allow the potential tourist to develop more complete destination images through vicarious consumption. Films can display attributes and unique characteristics of destinations in a film script (Hudson *et al.*, 2011). Media representations of a destination have a strong influence in how destinations are perceived (Sargent, 1998; Winter, 2002; Mercille, 2005). Tasci (2009) notes that visual information through film can increase familiarity and reduce stereotypes, prejudices and social distance. But what if the film portrays the destination negatively?

This research estimates the economic impact of the increase in tourism attributed to increased international tourism expenditure to Kazakhstan as a result of the film *Borat: Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan*, released in 2006. The film was controversial, depicting Kazakhstan as a backward country with the lead character, Borat Sagdiyev, an anti-Semitic, misogynistic but friendly Kazakhstani television reporter traveling through the USA. While most viewers of the film recognized that the portrayal of Kazakhstan was fictional and an exaggerated spoof, the response by the Kazakhstan government inflamed and exaggerated the caricature. Several authors attributed the negative publicity to increased interest in visiting Kazakhstan.

This paper contributes to the literature in several areas. First, the research quantifies the economic impact of film-induced tourism at the destination level. It does this using a computable general equilibrium (CGE) model. Second, the additional tourism attributed to the film results in a net economic loss to Kazakhstan. In other literature, increasing tourism expenditure has seen some industries lose out to the tourism-related sectors (Pratt and Blake, 2009). Other research has highlighted that increased tourism may be detrimental to some regions (Dwyer *et al.*, 2003), but rarely does tourism result in an overall loss to the host economy. In this case, the economic gains to the tourism-oriented industries, such as the accommodation and food service sectors, do not outweigh the costs to the minerals and fossil fuel sectors as the terms of trade worsen and resources are drawn away from these other industries – a phenomenon known as Dutch Disease. Third, it examines the economic impacts of film tourism for a film that projects this destination in a negative light. Other film-

induced tourism research has examined films that positively depict the destination. Lastly, the case study under investigation is based in Central Asia, a little-researched geographical area. For these reasons, together with the negative depiction of Kazakhstan, the research provides an example of film-induced tourism gone wrong.

### Film-induced tourism

Apart from the previously mentioned studies on increased visitation, several studies have attempted to measure the economic impact of the film industry and film tourists to the destination associated with film tourism. From a supply-side perspective, Edgerton (1986) outlines the growth of the film industry in the USA, highlighting the role of the film commission/bureau and the generous tax incentives provided by destinations to encourage film makers to set films in their particular state. Weinstein and Clower (2000) note how the State of Texas is competing with California and New York as a film and television production and filming destination. From 1989 to 1998, 234 feature films, 68 television movies and 135 television series were produced in Texas with a gross budget of US\$1.91 billion.

On the demand side, Kim *et al* (2009) examine the effects of Korean television dramas on Taiwanese outbound travel to Korea from 1997 to 2005. These authors note that not only did the Korean television series change the perception of a negative image associated with Korea, but there was also a significant change in the trend of tourism arrivals from Taiwan to Korea, which they attribute to Korean television series shown in Taiwan. Another example in the literature of quantifying film-induced tourism has been used by Visit Britain with its movie maps (Olsberg SPI, 2007; see also Pratt, 2009). Movie maps show potential tourists the locations of scenes depicted in the film. These movie maps are the key marketing stimuli in driving potential tourists to the destination, where film tourists visit different film locations where the movie was set. Conversion studies attempt to separate out the impact of the marketing campaigns from general visitation and have been used to assess whether recipients of destination marketing visit the destination (become converted) as a result of being exposed to destination advertising or a promotion (Perdue and Botkin, 1988; Burke and Gitelson, 1990; McLemore and Mitchell, 2001; Pratt *et al*, 2009). The net conversion rate represents the proportion of those who requested the movie map who travelled to the destination as a direct result of the marketing information they received. This metric includes only tourists who have not committed to a trip before requesting the movie map but were influenced by the marketing tools on the decision to visit (Burke and Lindblom, 1989).

Nonetheless, Croy (2011) points out that only in exceptional circumstances can film-induced tourism provide sustained economic contribution to destinations. He remarks that film tourism can fulfil several pre-visit roles such as the role of raising destination awareness, creating destination image and promoting decision making, but post-production impacts are more difficult to quantify. Croy stresses that the stronger the link between the film and the destination, the more likely are destination awareness, consideration and potential visitation.

Further, unknown destinations have a much greater chance of demonstrating the relationship between the film and the destination as these destinations do not have to compete with other pre-existing destination images that potential tourists might have.

One of the problems in quantifying the economic impact of film-induced tourism is attributing the influence of the film and its portrayal of the destination in motivating the tourist to visit the destination. The tourist decision-making process is a complicated process that is influenced by many factors (Woodside and Lysonski, 1989; Sirakaya and Woodside, 2005). Complicating factors include limitations on destination choice sets (Um and Crompton, 1990), the influence of other household members and friends on decisions (Gitelson and Kerstetter, 1994; Currie *et al.*, 2008) among other socio-demographic and psychographic variables. McKercher and Chan (2005) make the astute observation that often niche tourism, such as film-induced tourism, is overstated because destination marketing organizations and policymakers do not make the distinction between visiting a film-related attraction or event and a tourist primarily being motivated by a film-related attraction or event. The economic benefits of film-induced tourism can be exaggerated when tourists are motivated to visit the destination for other reasons than experiencing film-related tourist attraction but visit a film-related attraction during their stay. Fernandez-Young and Young (2008) outline similar arguments in the context of film tourism specifically. Elsewhere, Busby and Klug (2001) outline the potential pitfalls in surveying film tourists.

Nevertheless, film and television's portrayal of destinations do have an impact of destination image and visitation (Beeton, 2005; Hudson *et al.*, 2011; Connell, 2012). The following case study of the film *Borat: Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan* is remarkable for several reasons. First, the film portrays Kazakhstan in a negative light and there is evidence that even films with controversial plots may contribute to the tourism industry of a destination (Shani *et al.*, 2009). Although Beeton (2005) argues against the notion that all filming is good for tourism at all places, in this case one point of view may be there is no such thing as 'bad publicity', at least in terms of raising destination awareness. Second, the main character, Borat, is a tourist himself, making a road trip across the 'U, S and A'. The 'mockumentary' is a chain of unrelated 'road' experiences during which things happen to Borat and, more often, to those he interacts with (Kononenko and Kukhareenko, 2008). Third, it is an example of place substitution (Schofield, 1996; Butler, 2011): the film is shot in the poor Romany village of Glod in Romania, but is meant to portray the village of 'Kuzcek', Kazakhstan (Wallace, 2008).

### *Borat*

*Borat: Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan* (2006) is the creation of British comic Sacha Baron Cohen. He plays the character Borat Sagdiyev, an anti-Semitic, misogynistic but friendly Kazakhstani television reporter. The film grossed US\$250 million and gained cult status, but generally divided audiences worldwide. Some people thoroughly enjoyed the comedy, going as far as purchasing Borat merchandise and mimicking

Borat's mannerisms. Other people left the cinema in disgust (Kononenko and Kukharensko, 2008). Baron Cohen first introduced Borat to international audiences in short skits through his *Da Ali G Show* television series, a satirical interview programme, which started in 2000 (Borenstein, 2008). The film synopsis is that Borat Sagdiyev, the Kazakh journalist and his producer, Azamat Bagatov, travel to America on an 'honourable mission', to make a documentary about the American way of life in order to enlighten their countrymen at home. Along the way, Borat interviews Americans of different walks of life showing them up to be racist, anti-Semites and sexist, or embarrassing and humiliating them by exhibiting the same inappropriate behaviour.

Throughout the film, there are many inconsistencies as to what is 'real' about Kazakhstan. Borat speaks a mix of Hebrew, Polish and Russian, while the subtitles shown on the screen are non-sensical Cyrillic characters or grammatically incorrect Russian, and Borat does not particularly look Kazakhstani (Kononenko and Kukharensko, 2008). Further, the scenes supposed to be depicting Kazakhstan are shot in an isolated Romany village in Romania. Despite the negative portrayal of Kazakhstan and Kazakhstanis, the film is more a social comment on the USA than on Kazakhstan (Lee, 2008). The choice of Kazakhstan as the background to Baron Cohen's character is random, but has had significant consequences for the nation of Kazakhstan. The reason why Kazakhstan was chosen as Borat's nationality was because very few Americans had actually heard of the country (Lee, 2008). For the large majority of viewers, particularly from the West, Baron Cohen's Kazakhstan is the real Republic of Kazakhstan. The awareness of the nation, prior to the success of *Borat*, was minimal, if it existed at all. Particularly in the American imagination, the only Kazakhstan is the hyperreal Kazakhstan depicted by Borat (Wallace, 2008). Baron Cohen relies on the lack of awareness of Kazakhstan as a vehicle for his humour.

Many young viewers of the comedy wished to learn more about the real Kazakhstan (Bly, 2006). For example, the Kazakhstan Embassy in the UK reported a record number of visa applications for British tourists (Lea, 2005). The Kazakhstan Foreign Minister has recently credited *Borat* with increased tourist numbers (Kilner, 2012). Saunders (2008) argues that the heightened publicity from *Borat* will benefit the country well after Baron Cohen is forgotten. However, in the lead-up to the 2012 London Olympics, Borat seems to have had the last laugh – in Kuwait the organizers of a shooting championship mistakenly downloaded and played Baron Cohen's comedy version of the Kazakh national anthem instead of the real version. This was played as the gold medal-winning team stood on the podium (Barrett, 2012).

### Tourism in Kazakhstan

According to Kazakhstan's National Tourism Organization, Visit Kazakhstan (<http://visitkazakhstan.kz>), the country has a wide variety of attractions to entertain tourists. Visit Kazakhstan emphasizes nature-based tourism and activities associated with its mountains, such as trekking and winter sports, and activities associated with its lakes and rivers, such as water sports, sunbathing and health resorts (Visit Kazakhstan, 2012). One tour operator, Sayat Tours, is leveraging the Borat connection by offering two Borat-themed tours, 'Kazakhstan

vs. Boratistan' and 'Jagzhemash!!! See the Real Kazakhstan'. The tours include visits to the cosmopolitan city of Almaty and its surroundings, tours of ancient sites such as the Hodja Akhmed Yassau Mausoleum in Turkestan, as well as opportunities to meet and interact with the real Kazakhs. The tours also include visits to local bazaars, artefact shops and high fashion boutiques, as well as trying *kumyss*, a Kazakh traditional drink made from fermented horse milk. The Ministry of Tourism is arranging familiarization tours to tourism journalists and tour operators, particularly from Western Europe, to generate increased awareness and product knowledge with the hope of increased tourist arrivals (Saunders, 2008).

Kazakhstan is the ninth largest country in the world, is situated in Central Asia and is the largest landlocked country, covering 2.7 million km<sup>2</sup>. It had an estimated population of 15,776,492 in 2009, of which 53% resided in urban areas (Agency of Statistics of the Republic of Kazakhstan, 2012a). In 2009, gross domestic product (GDP) was US\$115.306 billion (KZT 17,007,647 million) with a GDP per capita of US\$7,165 (KZT 333,425) (World Bank, 2012). The Agency for Statistics of the Republic of Kazakhstan produced a Tourism Satellite Account (TSA) in 2010 (Agency of Statistics of the Republic of Kazakhstan, 2012b). The TSA shows that in 2010 there were 12,009 tourism businesses including 445 in the accommodation sector. The tourism sectors employed 600,511 persons, of which 72.1% were male. The number of international tourist arrivals in 2010 reached 3,393,000. International tourism receipts generated US\$1,236 million (KZT 182,130.8 million). However the tourism sector comprises only a small proportion of the Kazakhstan economy. For example, tourism as a proportion of GDP was only 0.8% in 2010 and as a proportion of total exports it was 1.9%.

### A macroeconomic model of Kazakhstan

Estimating the economic impact of different 'events', such as policy changes or exogenous shocks on tourism and the economy in general has been the subject of much research. Undertaking such modelling using a CGE model is now recognized as the most appropriate way to estimate such impacts (Dwyer *et al*, 2004). Estimating the economic impacts of tourism and its resultant effect on the whole economy using the CGE approach is a more sophisticated technique and incorporates more realistic assumptions of the workings of the economy than other techniques, such as input–output modelling (Song *et al*, 2012). A CGE model consists of a number of equations describing the key relationships within an economy. These key relationships are built on a neo-classical microeconomic foundation (Song *et al*, 2012). The model used in this research is a relatively standard CGE model. CGE models with similar structure and characteristics have been described in detail in other literature (Blake, 2000; Pratt, 2012). The comparative static CGE model used in this research replicates the interactions and relationships of a market economy and solves for a set of prices including production prices, factor prices and exchange rate and levels of production that clear all markets. A comparative static model provides projections at only one point in time. The model refers implicitly to the economy at some future period to ensure the economy adjusts after the initial

event. Comparative static models are only concerned with the estimated differences between the original situation and the economic situation after the event.

Tourism is modelled explicitly. As with the resident consumers, tourists are assumed to maximize their utility subject to their budget constraint. Tourists are endowed with foreign exchange. The international tourism demands a bundle of tourism goods and services in Kazakhstan at an aggregated tourism price level. The demand for tourism in Kazakhstan varies according to the price of the appropriate bundle of tourism goods and services and hence follows the standard downward sloping demand curve for its tourism. Tourism demand is the variable in the model that will be used to simulate an increase in tourism demand as a result of the film. The effects on the remainder of the economy flow through this variable. At the time of writing, the author is unaware of any other research in which Kazakhstan has been the economy of interest for estimating the economic impact of tourism, nor has there been any attempt to estimate the economic impacts of film tourism using this method.

The data for this macroeconomic modelling come from two sources. The Kazakhstan Social Accounting Matrix (SAM) data used for the economic modelling are taken from Naumov (2009). SAMs provide a snapshot of the whole economy for a specific time period – in this case, 2002 – and show the economic linkages between different productive industries in the economy as well as the transactions between different institutions, such as the public sector, households and the rest of the world. They can be used for analytical or modelling purposes. Macroeconomic modelling using an SAM as the underlying dataset has been undertaken by Wagner (1997), Zhou *et al* (1997) and Polo and Valle (2008), among others, in the tourism context. Naumov built an SAM for Kazakhstan that contained 57 industry sectors. In the interest of parsimony, the SAM was aggregated to 30 sectors. The sectors and several characteristics of the economy, such as the export share and import share and the proportion of imports and exports that contribute to sectoral output are shown in Table 1. The largest sectors in terms of output are metallic ores and non-metallic minerals and food manufactures. The sectors that are imported the most are food manufactures and machinery and equipment. The sectors that are exported the most are metallic ores and non-metallic minerals and basic metals and fabricated metal products.

The other source of data for the modelling was the Kazakhstan TSA outlined above. TSAs provide a way of measuring the contribution of tourism to the economy, this time in a manner that is consistent with a country's system of national accounts, such as an SAM (Rossouw and Saayman, 2011). As in Chen and Yang (2010), a tourism-augmented SAM can be developed that can be used to explicitly model the economic impacts of tourism. This involves merging and reconciling TSA data provided by the Agency for Statistics of the Republic of Kazakhstan with Naumov's Kazakhstan SAM. This is essentially done by 'backing out' international tourism demand as shown in the TSA from the exports of goods and services shown in the SAM. International tourism consumption by product category from the Kazakhstan TSA is shown as a percentage of total tourism expenditure in Table 2. Table 2 shows that international tourists to Kazakhstan spend approximately 23% of their budget on accommodation, just over 10% on food and beverage services and almost one-fifth on passenger transportation services.

Table 1. Features of the Kazakhstan economy, 2002.

Sector	Share of output	Share of total imports	Imports as % of sector output	Share of total exports	Exports as % of sector output	Capital to labour ratio
Agriculture	4.1%	0.6%	2.5%	6.0%	28.4%	3.8
Forestry	0.1%	0.0%	8.6%	0.0%	4.2%	5.3
Fisheries	0.2%	0.0%	0.3%	0.0%	0.1%	15.7
Metallic ores and non-metallic minerals	15.8%	4.1%	4.7%	43.8%	53.7%	2.7
Food manufactures	11.0%	26.2%	43.9%	0.8%	1.3%	2.1
Beverage and tobacco manufactures	0.6%	0.3%	8.9%	0.1%	3.2%	3.5
Textiles, garments and leather products	2.8%	6.7%	44.1%	0.4%	2.9%	0.6
Wood and paper products	1.3%	4.1%	59.5%	0.1%	1.6%	0.7
Chemicals and chemical products, petroleum, coal and coke products	3.7%	7.1%	35.5%	4.0%	21.4%	3.3
Rubber and plastic products	0.5%	2.2%	78.2%	0.0%	0.7%	0.9
Non-metallic mineral products	0.6%	1.3%	39.6%	0.0%	0.4%	1.1
Basic metals and fabricated metal products	8.9%	6.8%	14.0%	23.9%	51.9%	1
Machinery, equipment, appliances, parts and supplies	3.9%	18.3%	86.2%	1.1%	5.5%	0.3
Transport equipment	0.5%	0.4%	13.3%	0.0%	0.0%	1.3
Other manufactured products	0.7%	2.5%	63.8%	0.5%	12.5%	0.4
Electricity and water	3.7%	0.3%	1.4%	0.0%	0.2%	0.5
Construction	7.0%	7.0%	18.4%	0.0%	0.0%	1.2
Wholesale and retail trade	8.1%	0.0%	0.0%	12.5%	30.0%	3.1
Transportation	8.1%	4.3%	9.7%	1.2%	2.9%	1.1
Accommodation	0.6%	0.0%	0.0%	1.3%	44.6%	3.2
Food service	0.5%	0.0%	0.0%	0.5%	19.4%	0.6
Communications	1.2%	0.5%	7.1%	0.5%	7.3%	1.2
Finance and insurance	1.6%	1.4%	16.5%	0.1%	1.4%	0.6
Real estate services	3.7%	0.0%	0.0%	0.0%	0.0%	4.2
Business services	4.2%	5.8%	25.6%	0.7%	3.2%	0.8
Public administration, defence and security	2.0%	0.3%	2.7%	1.9%	18.3%	0.4
Education	1.9%	0.0%	0.0%	0.0%	0.0%	0.3
Health	1.9%	0.0%	0.0%	0.0%	0.0%	0.3
Culture, sports and entertainment	0.6%	0.0%	0.5%	0.5%	14.0%	0.1
Personal, community, social and other services	0.2%	0.0%	0.0%	0.0%	0.0%	0.7



Table 2. International tourism consumption as a percentage, 2006.

Inbound tourism: tourism expenditure on final consumption Products	
A. Specific products	73.7%
A.1 Characteristic products	73.7%
1 – Accommodation services	23.1%
1.1 Hotels and other lodging services	23.1%
1.2 Second homes services on own account of for free	x
2 – Food and beverage serving services	10.1%
3 – Passenger transport services	19.1%
3.1 Interurban railway	5.3%
3.2 Road	0.2%
3.3 Water	0.0%
3.4 Air	13.1%
3.5 Supporting services	0.4%
3.6 Transport equipment rental	0.0%
3.7 Maintenance and repair services	0.1%
4 – Travel agency, tour operator and tourist guide services	2.5%
4.1 Travel agency	0.5%
4.2 Tour operator	1.9%
4.3 Tourist information and tourist guide	0.0%
5 – Cultural services	4.9%
5.1 Performing arts	3.7%
5.2 Museum and other cultural services	1.2%
6 – Recreation and other entertainment services	8.2%
6.1 Sports and recreational sport services	2.9%
6.2 Other amusement and recreational services	5.3%
7 – Miscellaneous tourism services	5.9%
7.1 Financial and insurance services	4.6%
7.2 Other good rental services	1.3%
7.3 Other tourism services	0.0%
B. Non-specific products	26.3%
<b>Total</b>	<b>100.0%</b>

## Findings

The World Bank Development Indicators database for Kazakhstan (World Bank, 2012) showed that after the release of *Borat* international arrivals increased from 3,468,000 in 2006 to 3,876,000 in 2007. This represents an 11.8% increase in tourists. International tourist expenditure increased from US\$973 million (KZT 122,685 million) in 2006 to US\$1,213 million (KZT 148,658 million) in 2007. However, it is unrealistic to assume that all the additional increases in tourism expenditure can be attributed to the film. Marketing strategies undertaken by Visit Kazakhstan and the Kazakhstan Tourism Association possibly contributed to the growth in tourism arrivals. For instance, the Kazakh Government set up a tourism development project to run from 2006 to 2008, with a pilot project focusing on the Almaty region in 2005. The Kazakhstan Tourism Association, established in 1999 is a non-commercial,

non-governmental organization representing the tourism and hospitality industry. It undertakes promotion and advertising, representing Kazakhstan at the World Travel Market in London and ITB in Berlin annually. It is possible that these efforts were also producing results during the strong growth in arrivals between 2006 and 2007.

There is a need to separate out the serendipitous and general film tourist from the specific film tourist – the *Borat* tourist (Macionis, 2004; Ryan *et al.*, 2009). According to the UNWTO (2012), in 2007 tourism expenditure for personal/leisure tourists to Kazakhstan was 84% of total expenditure. Thus, business tourists' expenditure is excluded from the economic analysis on the assumption the film did not drive business visitation. The increase in tourism expenditure from 2006 to 2007 for leisure tourists to Kazakhstan is 18.0% (21.4% x 84%).

Yet, attributing the 18% increase for all leisure tourists is again too strong an assumption. Following the conversion study literature (cited above), the 18.0% increase in tourism expenditure can be thought of as the gross conversion rate. Tourism expenditure needs to be adjusted downwards to take into account the extent to which the film motivated visitation and the fact some leisure tourists had already booked their trip to Kazakhstan before the film was released. Unfortunately, there were no tourist surveys that sought to capture the extent to which the film *Borat* motivated tourists to visit Kazakhstan. Taking an average of four studies, covering 36 different marketing campaigns (Kuentzel, 1993; Messmer and Johnson, 1993; Kaplanidou and Vogt, 2003; Pratt *et al.*, 2009), the average gross conversion rate overstates visits by a factor of 2.8. The net contribution of *Borat* to Kazakhstan in 2007 is estimated to be a 6.42% increase (18.0/2.8). International tourist expenditure is estimated to increase by US\$62.5 million (KZT 7,876 million) to US\$1,035 million (KZT 130,561 million). As the film was released in 2006, the data for the tourism-augmented SAM have been adjusted to reflect 2006 values. Based on the increase in international tourist arrivals in Kazakhstan and the resultant increase in tourism expenditure, the scenario that will be simulated in this macroeconomic model is of a 6.42% increase in tourism expenditure.

Table 3 shows that an increase in tourism attributed to *Borat* has a negative net benefit to Kazakhstan residents. Welfare decreases by US\$1.4 million (–0.003%). GDP also decreases by US\$2.8 million (–0.003%) and investment by US\$3.8 million (–0.016%). Household consumption increases by US\$1.5 million (+0.003), as does domestic output by US\$46.9 million (0.039%). The trade balance worsens as total exports decrease by US\$79.1 million (–0.205%) and total imports increase by US\$49.6 million (+0.132). The transition mechanism for the increase in tourism expenditure is primarily through the exchange rate. The increase in tourism demand leads to an appreciation in the exchange rate, which leads to import substitution and the contraction of the other export sectors. This leads to a worsening of the balance of trade. Relative to the general level of prices, the price of foreign exchange decreases by 0.04% and the price of the bundle of tourism goods and services increases by 0.01% resulting in an increase the terms of trade (Table 4). An improvement in the terms of trade means that export prices are increasing faster than import prices. Therefore there will be a fall in exports and an increase in quantity of imports. The terms

Table 3. Economic impact of *Borat* – macroeconomic indicators.

US\$ million	Initial value	<i>Borat</i> effect	Change	% change
Welfare	47,318.9	47,317.5	-1.4	-0.003%
GDP	82,333.7	82,330.9	-2.8	-0.003%
Private consumption	47,318.9	47,320.4	1.5	0.003%
Investment	23,630.3	23,626.6	-3.8	-0.016%
Domestic output	119,828.7	119,875.6	46.9	0.039%
Tourism consumption	973.0	1,101.2	128.2	13.174%
Total exports	38,575.4	38,496.3	-79.1	-0.205%
Total imports	37,495.0	37,544.6	49.6	0.132%

Table 4. Economic impact of *Borat* – price changes.

Price	% change
Price of foreign exchange	-0.036
Tourism price	0.01
Terms of trade	0.046
Return on capital	0.004
Aggregate wage rate	-0.001
Investment price	0.019

of trade are influenced by the exchange rate because a rise in the value of a country's currency lowers the domestic prices for its imports but does not directly affect the commodities it produces, its exports. The return to capital and the price of investment increased while the aggregate wage rate decreased marginally.

Increases in prices attract resources into the tourism-related sectors, increasing the industries' costs and making the destination less competitive. The size of these increased costs depends on the supply of the factors of production and what proportion of the tourism-related industries' total production costs are accounted for by these factors. The accommodation sector has a relatively high capital to labour ratio at 3.1. Resources are drawn away from the export-oriented industries, such as metallic ores and non-metallic minerals and basic metals and fabricated metal products. The increased production costs for these industries result in a loss of production and employment. This is shown in Table 5, which displays the net value added for the sectors. The increases in net value added in the tourism-oriented sectors, such as accommodation, food service, cultural, sports and entertainment and transportation are not large enough to offset the decreases in the metallic ores and non-metallic minerals, basic metals and fabricated metal products and food manufactures sectors. The GDP analysis shows a similar pattern.

Sensitivity analysis was used to assess the robustness of the results. CGE models, at times, have been criticized for borrowing model parameters from other studies or time frames. Important for this study is the price elasticity of tourism demand. The price elasticity of demand for tourism determines

Table 5. Economic impact of *Borat* – net value added.

Sector (US\$ million)	Initial value	<i>Borat</i> effect	Change	% change
Agriculture	4,125.9	4,123.9	-2.0	0.0%
Forestry	59.4	59.4	0.0	-0.1%
Fisheries	200.5	200.7	0.2	0.1%
Metallic ores and non-metallic minerals	11,524.9	11,494.3	-30.6	-0.3%
Food manufactures	4,901.4	4,898.8	-2.6	-0.1%
Beverage and tobacco manufactures	388.7	388.8	0.1	0.0%
Textiles, garments and leather products	1,089.6	1,089.0	-0.5	0.0%
Wood and paper products	439.0	438.6	-0.4	-0.1%
Chemicals and chemical products, petroleum, coal and coke products	1,745.9	1,742.4	-3.5	-0.2%
Rubber and plastic products	91.3	91.2	-0.1	-0.1%
Non-metallic mineral products	292.8	292.4	-0.4	-0.1%
Basic metals and fabricated metal products	7,065.9	7,042.4	-23.6	-0.3%
Machinery, equipment, appliances, parts and supplies	450.2	449.1	-1.0	-0.2%
Transport equipment	465.9	465.8	-0.1	0.0%
Other manufactured products	162.1	161.7	-0.4	-0.3%
Electricity and water	3,793.1	3,790.7	-2.4	-0.1%
Construction	5,349.9	5,346.7	-3.2	-0.1%
Wholesale and retail trade	7,986.9	8,002.9	16.0	0.2%
Transportation	6,814.5	6,821.8	7.4	0.1%
Accommodation	858.6	888.7	30.1	3.5%
Food service	650.2	658.6	8.4	1.3%
Communications	1,067.0	1,070.4	3.5	0.3%
Finance and insurance	2,025.5	2,024.9	-0.7	0.0%
Real estate services	5,091.1	5,090.5	-0.7	0.0%
Business services	3,629.1	3,631.1	1.9	0.1%
Public administration, defence and security	1,777.8	1,778.1	0.3	0.0%
Education	2,729.7	2,728.6	-1.1	0.0%
Health	1,747.1	1,745.8	-1.3	-0.1%
Culture, sports and entertainment	773.6	780.3	6.7	0.9%
Personal, community, social and other services	263.1	263.2	0.0	0.0%

how sensitive Kazakhstan tourism demand is to changes in the price of tourism. The value of the elasticity was halved and doubled and the model was rerun. Naturally, there was some variation in the results, but qualitatively the findings remained the same. A similar analysis was conducted for the elasticity of substitution between the consumption of domestically produced goods and services and imported goods and services. Again, the results held. In contrast to other research findings, using a similar methodology (Adams and Parmenter, 1995; Zhou *et al*, 1997; Pratt and Blake, 2009), this study finds that the economic benefits associated with the increase in tourism demand to the tourism-oriented sectors does not outweigh the decrease production in the existing export sectors. Copeland (1991) noted in a general equilibrium context that under certain conditions, an increase in international tourists is not always necessarily welfare increasing.

## Conclusion

This paper estimates the economic impact of the film *Borat: Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan* on the economy of Kazakhstan. The film negatively portrayed Kazakhstan as an underdeveloped country with very few appealing tourism characteristics. The official response to the film by Kazakhstan officials was to criticize film maker Sacha Baron Cohen. This only heightened interest in the film, but it had the adverse effect of reinforcing the image of Kazakhstani people as ignorant and parochial. As in Mordue's study (2009), the perception of the destination is fundamentally changed by the film and there is a significant amount of tension and angst among Kazakhs as a result of the 'myths' depicted in it. It could be argued that the adage 'there's no such thing as bad publicity' might be appropriate in this case. Given the advertising and promotion clutter for destinations and the wide range of choices tourists have these days, as Lord Henry Wotton says in Oscar Wilde's *The Picture of Dorian Gray*, '... there is only one thing in the world worse than being talked about, and that is not being talked about'.

The different promotion and marketing initiatives that DMOs can undertake, at least prior to the film's release, as suggested by Hudson and Ritchie (2006), does not apply in this case. *Borat* brought the country international attention. Kazakhstan officials, particularly the National Tourism Organization, might have gone along with Sasha Baron Cohen's 'joke' and used the publicity about Kazakhstan to show potential international tourists the 'real' Kazakhstan. The Kazakhstan Tourism Office realized rather late that they should have been leveraging the exposure of Kazakhstan on the world stage. There are lessons here for other destination marketing organizations that find their destinations shown in less attractive film imagery and themes (Connell, 2012).

There has been little tourism research on film that negatively portrays destinations. Shani *et al* (2009) calls for more research on controversial films that deal specifically with tourists. This research contributes to this area. Tasci (2009) points out that low levels of familiarity with a destination can bring associated stereotypes, prejudices and biases and thus can negatively impact on the destination image, potential tourists' intentions to visit and foster a feeling of social distance towards its inhabitants. However, the increased familiarity brought about by this film, albeit with factually incorrect information, must bring into question those implications. When a film portrays a destination negatively, stereotypes and prejudices may be reinforced. Nevertheless, the film helped to raise awareness of Kazakhstan as a tourist destination and to differentiate it from other Central Asian countries (Connell, 2012). Tourism arrivals increased by approximately 12% in 2007, the year after the release of *Borat*. Estimating the film's economic contribution to the destination is fraught with problems. This study acknowledges that it is difficult to assess precisely to what extent tourists visited Kazakhstan as a result of *Borat*. Some of the consequences of the film and the adverse consequences of increased tourism expenditure might have occurred regardless of the increase in arrivals. This is one of the limitations of the research. Nevertheless, based on several reasonable assumptions and incorporating techniques used in conversion studies (Pratt *et al*, 2009), this paper calculates a 6.4% increase in tourism expenditure due to the film.

Despite the increase in awareness and tourist arrivals, the economic impact

of the film to Kazakhstan is estimated to have decreased GDP by US\$2.78 million and to have provided a net loss to Kazakhstan of US\$1.43 million. While household consumption is estimated to have increased by US\$1.49 million, exports decreased by US\$79.09 million with leakages through imports also increasing by US\$49.60 million. This paper is one of the first pieces of research estimating the economic impact of tourism that demonstrates that, under certain conditions, an increase in tourism expenditure can have an overall detrimental impact on the economy. The general equilibrium approach enables this analysis as it recognizes that resources are finite and there is competition for the factors of production. Additionally, changes in prices affect economic behaviour, so that an appreciation in the exchange rate leads to a contraction of the other export sectors and import substitution. For an economy so heavily dependent on natural resources, such as petroleum, natural gas and minerals, this, along with the decrease in investment, resulted in an overall net loss to the economy. Given the present structure of the economy, Kazakhstan's competitive advantage lies in its metallic and mineral ore deposits. Policy makers need to weigh up these factors when considering which sectors to develop and where to invest in infrastructure. In the case of Kazakhstan, the abundant natural resources in the form of mineral deposits, petroleum and natural gas reserves would seem to imply that the tourism sector will remain in its infancy.

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