

The effects of SARS on China's tourism enterprises

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SUMMARY

Tourism businesses are operating in an increasingly turbulent environment and are being forced to react to extreme circumstances that are outside of their control. This paper examines the affects of SARS on tourism enterprises in China through a national survey of hotels, travel agencies and other tourism-related businesses. While all types of enterprises were adversely affected, it is shown that differences existed according to the types of tourism enterprises. In particular, those located close to centers with SARS concentrations suffered most, large multi-national enterprises were impacted more than smaller establishments and some attractions, particularly those in the periphery of major urban centres, benefited somewhat from the redirection of demand. The fiscal responses introduced by government to assist the industry were generally well received. There was strong agreement that the tourism market recovered rapidly following SARS and that those that had precautionary measures in place, particularly the large multi-national enterprises, recovered most quickly. Strong opinions existed on the need for governments and enterprises to set up precautionary management systems to prepare for tourism crises. There was also substantial agreement that sudden crises that affect the tourism industry will become more frequent in the future, indicating recognition that the operating environment is becoming more turbulent. Nevertheless, most respondents were optimistic about their future operating environment.

Key words:

SARS; Chinese tourism enterprises; crisis management

INTRODUCTION

Tourism enterprises are operating in an increasingly turbulent environment and are being forced to react to extreme circumstances that are outside of their control. Wars, terrorist actions, tsunamis, hurricanes, earthquakes and health epidemics in both people and animals are examples of such events.

SARS (Severe Acute Respiratory Syndrome), a kind of pneumonia, was one such recent occurrence. It first appeared in November 2002 in southern China. It spread quickly through respiration in close contact with carriers until on March.15th, 2003, the World Health Organization (WHO) issued a warning suggesting that

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tourists should not travel to countries or regions that reported SARS cases. The effects of SARS on tourism were global, if uneven, and a number of countries were impacted in many ways: medically, politically and economically. Keil and Harris Ali (2006), for example, argued that infectious diseases are not simply problems of developing countries and that increased connectivity and globalization calls for a rethinking and diversification of health governance.

There is a substantial and growing literature on crisis management in tourism (for example, Faulkner 2001; Fink 1986; Mitroff 1988; Heath 1998; Glæßer 2003; Beirman 2003). The implications of public health crises for international tourism has received considerable attention, including aids, foot and mouth disease (Cohen 1998; Frisby 2002; Butler and Airey 2004) and SARS globally (Drache and Feldman 2003) as well as in China (Zhang and Wei 2003; Mason, Grabowski and Wei 2005; He and Li 2004; Li, Li and Zhang 2003; Ma and Wang 2003; Shu and He 2003; Pan and Qiu 2003; Huang and Huang 2003; Wang 2003; Ji and Zhou 2003). In order to meet the challenges of the SARS crisis, the Chinese government and tourism enterprises took a variety of actions to stimulate the market.

The remediation strategies that contributed to the recovery have been examined for China (Gu and Wall, in press) and elsewhere (Wall 2005). However, apart from anecdotal information and studies based on small samples (Lo, Cheung and Law 2006), little is known about how specific tourism enterprises were affected by and responded to SARS itself as well as the measures that were taken to stimulate tourism, and how these varied with location and among tourism enterprises of different types. In this paper, these concerns are addressed through an analysis and reporting of the results of a national survey of tourism enterprises undertaken in China in 2004.

In particular, the following topics will be examined: the short-term impacts of SARS on the running of tourism enterprises, the efficiency of remedial measures taken by government during the SARS period, the existence of systems to respond to emergencies prior to the onset of SARS, recovery measures taken by tourism enterprises in response to SARS, lessons learned from the crisis by government and enterprises, and anticipation of future crises.

Furthermore, differences among types and sizes of tourism enterprises, and between locations with and without reported SARS will also be explored.

Information on the impacts of SARS on Chinese tourism, such as changes in occupancy rates in hotels of different types and differential effects in numbers of tourists and their expenditures in different locations, has been reported elsewhere on the basis of analyses of official statistics (Gu and Wall, in press) and will not be presented in detail here. However, in order to provide context, some brief comments will be made.

Due to SARS, the number of inbound tourists and international tourists receipts decreased dramatically in 2003. The beginning of that year generally followed the same positive trend as in the previous years: in January, the number of tourists coming to China was 8.5 million, an increase of 14.54% compared to the same period of the preceding year. In February 2003, the number of tourists coming to China was 7.4 million, 3.73% up compared to 2002.

But, starting from the middle of March, along with the development of the disease, the number of tourists to China decreased 6.5% in March 2003 as compared to March 2002. This was the first monthly decrease over the same month in the preceding year in the previous ten years.

The situation was even worse after April. The number of inbound tourists and international tourism receipts decreased sharply after March 2003. They started to increase again in June when SARS was generally under control. Due to SARS, the number of inbound tourists and international tourism receipts of March, June and July 2003 were lower than those of 2002. From July to December 2003, the gaps in the numbers of inbound tourists and international tourism receipts, when compared with 2002, were reduced. Thus, in the short term, there was a massive reduction in both in-bound and domestic tourism and, to a lesser extent, in out-bound tourism. However, within a period of approximately 8 months from the onset of the disease, the crisis had passed, markets had recovered and a "normal" situation prevailed. In contrast to the paper referred to above from which the preceding paragraph has been constructed, this paper is based on the results of an attitudinal survey of enterprise managers and, as such, it complements the other study.

METHODS

In order to investigate the impacts of SARS on tourism enterprises and to examine the consequences of the measures taken to respond to SARS by both government and the enterprises themselves, a survey was conducted of tourism enterprises between June and December 2004. Thus, the survey was undertaken during the recovery and normalization periods.

A questionnaire in two parts and consisting of 31 items was prepared. The first part was designed to examine the impacts of SARS on the short-term running of the enterprise (questions 1-5), attitudes towards actions taken by government to meet the challenges of SARS (questions 6-11), precautions that had been taken by tourism enterprises prior to the onset of SARS (questions 12-14), recovery measures taken after the event (questions 15-21), the knowledge that government and enterprises had obtained as a result of the crisis (questions 22-24), and expectations concerning future crises (questions 25-27).

The questionnaire contained mostly closed questions and responses to attitudinal statements were solicited through Likert scales (5= Totally Agree, 4= Agree, 3= No Comment, 2= Disagree, 1= Totally Disagree). Caution in interpreting results should be exercised for, as in all such cases, it is difficult to present statements in a neutral way so it is possible that some statements led respondents to respond in particular ways. The second part of the questionnaire sought basic information on the characteristics of the tourism enterprises and the people that completed the questionnaires (questions 28-31). This information was obtained to permit analyses of possible differences among enterprises of different types, sizes and locations.

A sample of 1500 tourism enterprises was identified. The hotel sample was randomly selected with the support of the China Tourist Hotel Association according to the guidelines established for hotels by the China National Tourism Administration (CNTA 2004) and questionnaires were mailed to the hotel managers. For others, as no official list was available to use as a sampling frame, the travel agencies and airlines were contacted by mail and through convenience interviews.

Such large national surveys have seldom been used in China and the authors cannot be certain that the samples are random or representative. However, official assistance and endorsement were necessary both in order to obtain a sample and to encourage potential interviewees to respond.

Most potential respondents would not have been familiar with such procedures and, in the absence of official endorsement, may have been skeptical and have reservations about responding. Nevertheless, it was necessary to undertake such a survey to ensure broad spatial coverage over a very large country. Following the making of 250 phone call-backs to remind potential respondents, 246 completed surveys were eventually obtained.

The characteristics of responding enterprises are presented in Table 1. Most responses were obtained from hotels, followed by travel agencies, attractions and others such as tour bus companies. A wide range of sizes was included in the effective sample although most enterprises can be categorized as being of medium size. Most enterprises were located in areas where SARS cases occurred, although some were in SARS hot-spots (such as Beijing) whereas others were in places in which no SARS cases were identified.

Almost all surveys were completed by middle managers or higher. Although it is not claimed that this is a truly representative sample, no obvious response biases were detected and the effective sample included responses from a variety of types of tourism enterprises from throughout the country.

The data were coded and analyzed using SPSS11.0 software. Percentages, means (M) and standard deviations (S.D) of responses to the attitudinal statements were calculated initially. Possible differences between industry types, sizes of enterprises, and locations were then examined using one-way ANOVA.

Also relationships between variables were examined through the calculation on Pearson correlation coefficients. However, the results of the latter analyses are not presented here in detail for few significant differences were found.

Table 1
CHARACTERISTICS OF RESPONDING ENTERPRISES

| | | Frequency | Percentage % | Efficient percentage % |
|---|----------------------------|-----------|--------------|------------------------|
| Types of enterprises | Independent hotels | 89 | 36.2 | 37.2 |
| | Domestic hotel groups | 29 | 11.8 | 12.1 |
| | International hotel groups | 14 | 5.7 | 5.9 |
| | Travel agencies | 54 | 22.0 | 22.6 |
| | Tourism attraction sites | 17 | 6.9 | 7.1 |
| | Other | 36 | 14.6 | 15.1 |
| | Total | 239 | 97.2 | 100.0 |
| | Missing data | 7 | 2.8 | |
| Sizes of enterprises | Large enterprises | 36 | 14.6 | 15.3 |
| | Medium enterprises | 125 | 50.8 | 53.2 |
| | Small enterprises | 74 | 30.1 | 31.5 |
| | Total | 235 | 95.5 | 100.0 |
| | Missing data | 11 | 4.5 | |
| Locations of enterprises | Severe epidemic areas | 43 | 17.5 | 18.0 |
| | Epidemic areas | 108 | 43.9 | 45.2 |
| | Non-epidemic areas | 88 | 35.8 | 36.8 |
| | Total | 239 | 97.2 | 100.0 |
| | Missing data | 7 | 2.8 | |
| Positions of people completing questionnaires | High-level managers | 93 | 37.8 | 39.9 |
| | Medium-level managers | 107 | 43.5 | 45.9 |
| | Common managers | 33 | 13.4 | 14.2 |
| | Total | 233 | 94.7 | 100.0 |
| | Missing data | 13 | 5.3 | |

RESULTS

General survey results are presented in Table 2 in the forms of percentages, means and standard deviations. It is noteworthy that virtually all means exceed 3 (no comment) and tend towards "agree" or "strongly agree", perhaps partially reflecting a cultural tendency to conform.

Furthermore, standard deviations are not large and do not vary greatly among the questions.

The questions are grouped under six headings reflecting the topics identified towards the end of the introduction. Each of these topics will be considered in turn.

Table 2
THE IMPACTS OF SARS ON TOURISM ENTERPRISES

| | Questions | Number of responses | | |
|--|--|---------------------|------|-------|
| | | M | S.D. | |
| Short-term impacts on the running of enterprises | 1. Incomes and profits decreased a lot because of SARS | 244 | 4.46 | 0.761 |
| | 2. The number of international tourists decreased a lot because of SARS | 239 | 4.52 | 0.732 |
| | 3. The number of domestic tourists decreased a lot because of SARS | 245 | 4.36 | 0.758 |
| | 4. The number of local visitors decreased a lot because of SARS. | 242 | 4.04 | 0.993 |
| | 5. SARS had many negative impacts on images of local tourism safety. | 240 | 3.95 | 1.026 |
| Efficiency of remedial measures taken by government during the SARS period | 6. I think that, during the SARS period, tax reduction and exemption policies of the government were highly efficient ways to enable enterprises to tackle the crisis. | 243 | 3.88 | 1.037 |
| | 7. I think that during SARS period, fiscal subsidy policies of the government were highly efficient ways to enable enterprises to tackle the crisis. | 243 | 3.85 | 0.982 |
| | 8. I think that during the SARS period, the other government policies removing burdens on enterprises were highly efficient ways to enable enterprises to tackle the crisis. | 245 | 3.73 | 0.933 |
| | 9. I think that, during the SARS period, government took highly effective marketing measures to restore the tourism of market. | 245 | 3.66 | 0.938 |
| | 10. I think that, during SARS period, government information dissemination and media publications were highly effective. | 244 | 3.86 | 0.840 |
| | 11. I think that, during the SARS period, government and enterprises cooperated well to tackle the crisis. | 246 | 3.64 | 0.887 |
| Systems in place to meet emergencies prior to the onset of SARS | 12. Your enterprises had set up an integrated management systems to address emergencies before SARS occurred. | 242 | 3.46 | 1.116 |
| | 13. Your enterprises had specified management organizations and personnel to manage crisis before SARS happened | 242 | 3.46 | 1.116 |
| | 14. Your enterprise had a crisis management training system for all staff before the onset of SARS. | 244 | 3.46 | 1.105 |
| Recovery measures made by tourism enterprises in response to SARS | 15. Local tourism markets recovered promptly after SARS. | 245 | 3.89 | .903 |
| | 16. Enterprises restored the market through price reductions after SARS. | 244 | 2.68 | .991 |
| | 17. Enterprises restored the market through advertising after SARS. | 241 | 3.11 | .949 |
| | 18. Enterprises kept in operation through reducing costs after SARS. | 243 | 3.26 | 1.026 |
| | 19. Enterprises kept in operation through developing new products after SARS. | 238 | 3.31 | 0.912 |
| | 20. Enterprises kept in operation through exploring new markets after SARS. | 242 | 3.26 | 0.909 |
| Lessons learned by government and enterprises | 21. Enterprises kept in operation through changing products or collaborating with other enterprises after SARS. | 238 | 2.24 | 0.883 |
| | 22. National government set corresponding precautions for tourism crisis after SARS. | 241 | 3.87 | 0.804 |
| | 23. Local government set corresponding precautions for tourism crisis after SARS. | 241 | 3.78 | 0.787 |
| Anticipation of future crises | 24. Enterprises set up new crisis management precautions because of SARS. | 240 | 3.90 | 0.814 |
| | 25. I think that sudden tourism crises will be more frequent in the future. | 242 | 3.23 | 0.995 |
| | 26. I think it is very necessary for governments and enterprises to set up precautionary management systems for tourism crisis. | 241 | 4.50 | 0.571 |
| | 27. I am very confident about the future of the tourism market tourism enterprises. | 242 | 4.37 | 0.606 |

Short-term impacts on the running of tourism enterprises

Four of the five questions in this section were concerned with the volume of travel, both international and domestic, and associated incomes and profits. The fifth question concerned perceptions of safety. The responses elicited the strongest agreement scores and the smallest standard deviations of all but the last (anticipation of future crises) section. This suggests, as one might expect, widespread recognition of a pronounced market decline, especially in international visitors that induced a large decrease in incomes and profits. Negative impacts on images of safety also were given a high score. The results confirm that the SARS crisis resulted in far-reaching negative consequences on tourism enterprises.

Differences in impacts in association with enterprise characteristics

Table 3
ONE-WAY ANOVA ANALYSIS OF IMPACTS ON DIFFERENT ENTERPRISES

| Impacts of SARS | Enterprise Types | Types of enterprises | | Sizes of enterprises | | Locations of enterprises | |
|---|------------------|----------------------|--------|----------------------|-------|--------------------------|--------|
| | | F | Sig. | F | Sig. | F | Sig. |
| 1. The incomes and profits decreased a lot because of SARS | | 0.883 | 0.493 | 0.847 | 0.43 | 0.812 | 0.445 |
| 2. The number of international tourists decreased a lot because of SARS | | 2,431 | 0.036* | 1,538 | 0.217 | 1,869 | 0.157 |
| 3. The number of domestic tourists decreased a lot because of SARS | | 1,738 | 0.127 | 0.496 | 0.609 | 1,106 | 0.333 |
| 4. The number of local tourists decreased a lot because of SARS | | 1,618 | 0.156 | 1,291 | 0.277 | 3,142 | 0.045* |

* Significant at the 0.05 level.

One-way ANOVA was used to look for differences in the perceptions of impacts by respondents from enterprises with different characteristics. Given the generally high scores and low standard deviations reported in the previous section, few differences were expected: the impacts of SARS were widely dispersed and felt by all those involved in tourism. Only two statistically significant relationships were found and these were at the 0.05 level (Table 3). They suggest that different types of enterprises may have felt the loss of international visitors differently (perhaps because they depended to different degrees on this market) and enterprises in

locations with differing intensities of SARS cases had different experiences in the decline of local tourists. A review of mean scores (not reported here) suggests that, in the former case, differences between types of enterprises were small with the possible exception of attractions that may have suffered less than other types of businesses, particularly the large hotels that cater to a substantial business clientele. Perhaps the decline in long-distance visitors at attractions was partially replaced by an increase in the number of local visitors.

Tourists gave up long-distance travel but turned to nearby tourism attractions. In contrast, hotels guests mainly come from elsewhere so SARS had a large influence on hotels and also upon travel agencies. Although not always statistically significant, enterprises of all types in severe epidemic areas consistently agreed most strongly that they had been negatively impacted.

Reactions to government measures

In order to address the consequences of SARS on the tourism industry, the government implemented many measures that have been examined elsewhere (Gu and Wall, in press). The measures included the provision of information, tax reductions, subsidies and the expansion of existing and new marketing initiatives. Perceptions of respondents concerning the efficiency of the government initiatives constitute a second major theme in the survey.

Mean scores range from 3.88 to 3.64 and small standard deviations indicate broad agreement that the government measure had been effective. Tax reduction and exemption policies, provision of information, fiscal subsidies, other initiatives and marketing were viewed, in order, as being the most effective. The lowest score in this section was for collaboration between the government and private enterprises but it still represents a positive evaluation. The results confirm that the government measures were helpful to tourism enterprises in reducing their costs and stimulating the market.

As above, analyses were undertaken to assess the implication of enterprise characteristics on responses. Few significant differences were found with the possible exception that respondents in areas with high SARS concentrations were less convinced of the effectiveness of government measures, perhaps because their problems were too severe to be rectified by the actions that were taken.

Evaluation of preparatory measures

Three questions were asked of respondents concerning whether or not their enterprise had taken measures to prepare for a crisis prior to the onset of SARS. Specifically, they were asked of they had an integrated management system in place to react to emergencies, if a dedicated organization of personnel existed to manage emergencies, and if crisis management training had been undertaken as a preparatory measure.

The means scores for these items are identical at 3.46. This indicates that most enterprises had specified management organizations and personnel to manage crises and training had occurred so that integrated management systems were widespread in tourism enterprises before the crisis occurred. Although the standard deviations are larger than for questions in the preceding sections, they are still quite small, again suggesting a fairly homogeneous response. Thus, although it is not likely that plans were in place to deal specifically with a health emergency such as SARS, the fact that some prior initiatives to combat emergencies were already in place may have helped to speed the recovery.

In general, the more multinational enterprises had preparatory measures in place and they recovered more quickly.

Tourist attractions were least likely to have taken preparatory measures but, for reasons explained above, they were often less adversely affected. They were also least likely to introduce preparatory measures to address future crises once the event had passed

Recovery

Seven questions concerned aspects of the operation and recovery of enterprises. There was strong agreement that the local tourism market recovered promptly after SARS. Six strategies were identified and there were substantial differences among them in the extent to which enterprises had adopted them according to respondents. In order of frequency of adoption they were: developed new products, reduced costs and explored new products (tied), advertising, price reductions, and changing products and collaborating with other enterprises. However, mean responses for the last two strategies fell below the "no comment" and "disagree" categories suggesting that they were not widely adopted. The relatively high scores for new products and price reductions suggest that enterprises were generally active, even innovative, in responding to the crisis.

Respondents from large enterprises, whose profits generally decreased the most, were most likely to have positive views concerning the government's fiscal measures and of the cooperation between the public and private sector.

Relationships between readiness and recovery

In order to examine if relationships existed between degree of agreement that a prompt recovery occurred in the local market and in preparedness as revealed in the responses to questions 12, 13 and 14, Pearson correlation coefficients were calculated. These were all significant at the 0.01 level. This suggests the importance of preparation and having precautionary systems in place prior to the onset of a crisis.

Similar analyses were undertaken between market recovery and the various measures undertaken by enterprises. Significant negative relationships were found between market recovery and reducing costs (0.01 significance level) and reducing prices (0.05 significance level) suggesting that they were not viewed

as being effective strategies. In fact, many enterprises did reduce both costs and prices. However, it appears that they did not want to admit to these actions, perhaps feeling that they reflected badly on the image of their enterprise. All other measures showed slightly positive but statistically insignificant relationships with market recovery. However, strong relationships (0.01 level) were found between several pairs of options, for example between product development and market development, and between product development and advertising, in accordance with established marketing guidelines.

Learning from experience

Three questions were posed concerning the extent that respondents' felt that national and local governments and their enterprises had learned from the SARS crisis. High mean scores indicate that respondents believed that all three had learned from the experience and had set precautionary systems to deal with future tourism crises. Indeed, this may well be a reason for the relatively speedy recovery. However, it would be wrong to be complacent for much research on hazards shows that preparatory actions are often taken immediately following a crisis but that memories are often short and preparedness declines with time as other issues come to the forefront.

A further three questions were concerned with expectations concerning future crises. There was substantial agreement that sudden crises that affect the tourism industry will become more frequent in the future, indicating recognition that the operating environment is becoming more turbulent. Even stronger opinions existed on the need for governments and enterprises to set up precautionary management systems to prepare for tourism crises. Nevertheless, there was great confidence in the future of individual enterprises and the tourism market in general. After all, both domestic and international tourism have grown rapidly in China over the last two decades, and the World Tourism Organization is projecting that China will experience continued growth as both a recipient and generator of international tourists. Thus, while the consequences of SARS were massive, they have also been short-term. However, it would still be advisable to be prepared for uncertainties associated with forces exogenous to the tourism industry.

CONCLUSIONS AND IMPLICATIONS

On the basis of a national survey of tourism enterprises in China, the following conclusions can be made:

First, the SARS crisis greatly affected tourism enterprises of all types in the short term. The number of customers from both international and domestic markets plummeted, which resulted in a reduction in revenues and profits.

Second, although all enterprises were impacted substantially, the magnitude of disruption differed somewhat between tourist enterprises of different types. For example, travel agencies were impacted more than tourism attractions, some of the latter taking advantage of the desire of people to escape from congested urban areas. It is likely that the international hotel groups reacted efficiently but their revenues and profits still decreased markedly in the short term because of a substantial decrease in international visitors. Impacts brought about by SARS varied substantially according to their location with respect to incidences of the disease.

Third, respondents generally held positive attitudes towards the measures taken by government to help them, particularly the fiscal policies such as reducing or eliminating taxes and providing subsidies.

Fourth, although operating cost and price reductions were made and were likely the most effective and direct measures to stimulate market recovery, tourism enterprises preferred to compete through non-price measures, such as developing new products, exploring new markets and increasing promotional activities.

Fifth, according to survey results, most enterprises had set up crisis management systems prior to the onset of SARS. It is possible that the understanding of the meaning of "before SARS" by survey respondents was different from what the researchers intended. Nevertheless, it is likely that even temporary measures were important to the recovery of the tourism market after SARS. It supports the need to set up precautionary systems to address crises happen before they happen.

Sixth, national and local governments and the enterprises learned from the crisis and recognized the need to establish precautionary systems. This may also be an important reason for the prompt recovery of the Chinese tourism markets.

It is necessary to treat the results with some caution for the efficacy of the sample cannot be assured. On the other hand, such national surveys have seldom been undertaken in China and most existing published studies concentrate solely on hotels with extremely small samples. Furthermore, the impacts of SARS was not restricted to China but impacted many world cities and the authors plan to undertake comparative studies, particularly between Beijing and Toronto, in search of similarities and differences in impacts and responses.

Although there appeared to be appreciation that tourism enterprises are operating in an increasingly turbulent environment, there was an optimistic attitude towards the future as well as an understanding that steps should be taken to prepare for the future vicissitudes that undoubtedly will be outside of the control of tourism enterprises but will impinge upon their activities and affect their profits.

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