

# 以博弈論分析零團費旅行團

## Analysing zero-fee tours through game theory

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(編按：多年來一直困擾著中國內地出境旅遊的問題，一般都稱為「零團費」。可是，這個名稱其實並不正確，而且引起了不少誤解。所謂「零團費」，並不是說團員不用付出分毫團費，而是說內地組團社不付任何接待費給外遊目的地的地接社，因而產生了種種問題。由二零零九年五月一日起在內地實施的《旅行社條例》中，有些條文正是針對這個「零團費」問題的。)

(Editor's note: The problem that has haunted Chinese outbound tourism for so many years is generally referred to as "zero-fee tour", which is actually a misnomer and has caused much misunderstanding. By "zero-fee", it does not mean the tour participants need not pay any tour fees; rather it means the Chinese tour operator does not pay any reception fees to the ground receiving agent at the outbound destination, thus giving rise to various kinds of problems. The Regulation on Travel Agencies, which took effect from 1 May 2009 on the mainland, includes some provisions aimed at tackling such a problem.)

### 甚麼是博弈論？

今年四月，約翰·納什教授(Professor John Nash)自美國來港訪問，他此行大受歡迎，十分成功。納什教授一九九四年獲頒諾貝爾經濟學獎，好萊塢的奧斯卡得獎大片《美麗心靈》(A Beautiful Mind，港譯《有你終生美麗》)也以他為男主角的原型人物。他對當代經濟理論的最大貢獻，是他完善了博弈論。

博弈論探索的是有多方參與的決策過程，並且解釋「均衡狀態」(在均衡狀態下，所有參與者都無法藉單方面行動而增加所獲利益)。換言之，博弈論把決策過程比擬成一個個遊戲，遊戲中參與者的決定互相影響，結果是參與者在追求一己的最大利益時，因為要顧及其他參與者的決定，所以往往要稍為犧牲自身利益。

博弈論的主要理論前提是，參與決策過程的各方都理性自主，博弈按時間順序展開，參與各方都可獲相關訊息等。博弈論的考慮角度具戰略視野，分析體系實事求是，數學評價模型和工具都夠強大，並已廣獲證實，兼且應用於許多微觀經濟學領域之中，尤其是互爭短長的企業間以及企業與客戶間的產品定價問題。

### 零團費旅行團的特徵及弊病

本文作者最近在一篇論文中，以博弈論探討所謂零團費中國內地出境團的內在機理。過去

### What is game theory?

In April this year Professor John Nash, a Nobel laureate of economics in 1994 and the prototype of the Oscar-winning Hollywood blockbuster *A Beautiful Mind*, made a successful and warmly received trip to Hong Kong from America. The greatest contribution of Professor Nash to modern economic theories lies in his perfection of game theory.

**Game theory deals with the science of decision-making by multiple players, and accounts for the status of equilibrium where no involved players can make unilateral choices to become better off in terms of the benefits realised.** In other words, game theory is concerned with game-analysed scenarios in which the decisions of all related players are mutually influencing, so that the individual maximum benefits of one player of the game are usually trimmed to accommodate consideration of the judgments of other players.

The major underlying conditions of game theory are the rationality and autonomy possessed by the players in decision-making, the temporal sequence of the game, and the availability of relevant information to the players, etc. **With its strategic perspective, realistic analytical system and powerful mathematical evaluation models and tools, game theory has been widely validated and applied in many microeconomic fields, particularly in the issues of pricing schemes among competing enterprises and between enterprises and customers.**

### Features and negative impacts of zero-fee tours

Recently the authors have utilised game theory in a research paper to investigate the underlying dynamics of the so-called zero-fee Chinese outbound tours. Such tours have been observed to be parasitic phenomena associated with the booming Chinese outbound tourism in the past 15 years.

Normally a tour operator has to pay a reception fee to the ground receiving agent at the destination in order for the latter to provide reception

十五年來，這些旅行團依附於蓬勃發展的中國內地出境遊而出現。

在正常情況下，組團社需要付接待費給目的地的接待社，接待社才會為團隊提供接待服務。但在零團費模式中，負責招徠內地出境旅客的內地組團社卻不付接待費給境外地接社，於是團隊的利潤就要從旅客的購物和娛樂活動開支中賺取。因此，零團費旅行團有三大特徵：一是在客源地以極低團費去招徠內地出境旅客，二是行程中滿是自費項目及購物安排，三是旅客對旅程深感不滿，甚至認為一無是處。

泰國是內地旅客首個獲准前赴的旅遊目的地之一，因而泰國旅行團最早出現零團費。其後內地出境遊不住發展，零團費模式也就蔓延至其他目的地。二零零零年初有一個極端的個案，個案中的內地旅客每人只花了人民幣八十八元，就參加了泰國六天全包團。結果團員參加了二十四項自費活動，四次被當地導遊棄團，返國後差點不夠錢由機場回家。

這種旅行團必須斷然處置和遏止，原因在於可能帶來的惡果非常巨大。首先是內地出境旅客直接受到傷害，出門旅遊本想調劑身心，但卻變成痛苦經歷。其次是媒體的負面報導會使目的地的形象大受打擊，使推廣活動難有顯著效果。最後是零團費模式最終會窒礙旅行社行業的長遠健康發展，因為人人只顧割價求售，那就誰都不願費心去開發和提升產品，結果就是行業的整體競爭力徘徊於基本水平。

### 為甚麼零團費旅行團可以存在？

在上述論文中，作者以博弈論檢驗以下博弈中的二元關係，藉以探尋零團費模式賴以存在的隱含因素。這些二元關係包括：一、內地出境旅客與內地組團社的關係，二、內地出境組團社與地接社的關係，三、內地出境旅客與地接社的關係。研究發現，零團費這一獨特的定價策略之所以能長期針對內地出境旅客，是因為有九個因素在起作用。

就旅客與組團社的關係而言，以下三個因素使組團社在定價博弈中對旅客取得優勢地

services. For zero-fee Chinese outbound tours, however, the ground receiving agents at the destination are not paid any reception fees by the Chinese tour operators which solicit Chinese outbound tourists, and the profits of such tours are realised through shopping and entertainment expenditures of the tourists. **Zero-fee tours are thus characterised by three major features: spectacularly cheap rack prices to attract Chinese outbound customers at the places of origin, intensive schedules of self-paid itineraries and shopping visits during the trip, and dissatisfying and even disastrous travel experiences of the tourists.**

The zero-fee practices were first spotted in Chinese outbound tours to Thailand, one of the earliest destinations visited by Chinese tourists, and have since spread to other destinations as Chinese outbound tourism expands. In an extreme case in early 2000, each member of a mainland tour group paid only 88 yuan to join a six-day, all-inclusive tour to Thailand, and attended 24 self-paid activities during the trip, was dumped four times by the local guides and came back with barely enough cash to go home from the airport.

Such tours must be effectively tackled and curbed because of the enormous negative consequences that may arouse. Firstly, there is direct harm to Chinese outbound tourists, who experience trauma rather than refreshment from the tour. Secondly, the negative media exposure of such tours could deal a great blow to the destination image of the visited localities, offsetting the effects of promotional campaigns. Lastly, **the zero-fee mode ultimately hampers the long-term development of the travel agency industry, as all the parties involved are indulging themselves in vicious price wars, with no willingness to expend efforts on product renovation and sophistication. The general competitiveness of the industry will therefore linger at a very primitive level.**

### Why can zero-fee tours exist?

In the research paper the binary relationships of the following “games” were examined through game theory elaborations to explore the underlying factors sustaining the viability of zero-fee Chinese outbound tours: (1) the relationship between the Chinese outbound tourist and the Chinese outbound tour operator, (2) the relationship between the Chinese outbound tour operator and the ground receiving agent and (3) the relationship between the tourist and the ground receiving agent. It was found out that altogether nine factors contribute to the stability of the zero-fee mode as a special pricing scheme targeted at Chinese outbound tourists.

For the Chinese outbound tourist and outbound tour operator relationship, “imperfect information possessed by the tourist on the outbound destination”, “ambiguity in clauses in the tour contract” and “ineffective complaint handling and arbitration systems” render an advantageous position of the outbound operator over the tourist.

**As for the outbound tour operator and ground receiving**

位：「旅客所掌握的目的地資料不全面」，「旅遊合同的條款含糊不清」，以及「投訴處理和仲裁機制的成效欠佳」。

至於在組團社與地接社的關係中，組團社的議價能力佔有優勢，原因在於宏觀政策對其有利：「內地出境遊必須以團隊模式運作」，「地接社不得直接染指內地出境遊市場」，以及「內地出境遊產品大同小異」。地接社對內地組團社必須唯命是從，以至於在一些個案中，地接社為了要接待消費力估計會較高的內地團隊，甚至要付款給內地組團社，於是就有了負團費旅行團。

最後，在旅客與地接社的關係中，以下三個因素成為零團費模式的最後一環：「地接社把財務壓力轉移給導遊」，「導遊的言行虛假粗暴」，以及「旅客購買的貨品價高質劣」。這三個因素被媒體廣泛報導後，使公眾極為關注。

### 放寬視野看零團費旅行團

找到了上述九個因素後，難免會產生以下疑問：為甚麼內地旅客那麼容易被低價吸引？為甚麼內地旅客外遊時往往消費得如此闊氣？為甚麼內地旅客對侮辱自己的言行忍氣吞聲？

中國出境遊一九九七年才開始急劇發展，這或可解釋以上疑問。換言之，內地出境旅客的龐大消費力最近才被引爆，於是他們稍事觀光已感滿足，對目的地並不熟悉，而且因離家遠行，心裡不踏實，即使待遇差也能忍則忍。此外，華人的傳統價值觀也在起作用，如對便宜貨趨之若鶩，出遊後要向親友贈送土特產等。事實上，這些獨特的消費文化價值觀使零團費現象僅見於華人社會，如台灣出境團以前也有過同樣問題。

從宏觀層面看，內地當局對開放出境遊市場的態度向來保守，內地出境組團社因而受惠於種種維護措施。由於旅客外遊難免會使外匯流出國境，所以內地出境遊一直受到嚴格控制，以防增長過快。所謂控制，指的是實施「中國公民出國旅遊目的地國家」制度，在多數情況下只准以團隊方式出遊，禁止外資進入內地出境組團社，以配額管理出境旅遊人數等做法。這些控制做法，都已正式列入中國加入世界貿易組織的相關協議

agent interaction, the Chinese tour operator has superior bargaining power because of policy preferences in its favour, such as "group travel as the only permitted tour mode for Chinese outbound tourists", "the prohibition of direct access to the Chinese outbound market by ground receiving agents" and "the considerable level of homogeneity in outbound tourism products in the Chinese market". The ground receiving agents have to be so obedient to the Chinese outbound tour operators that in some cases they even have to pay a certain fee in order to receive Chinese tourists with expected higher purchasing power, hence leading to the occurrences of negative-fee tours.

When it comes to the relationship between the tourist and the ground receiving agent, factors like "transfer of financial burden to the local guide", "deceptive and bullying language and behaviour of the local guide" and "the poor quality and exorbitant prices of purchased items" complete the entire circle of the zero-fee practice. It is these factors that have been most exposed by the mass media and caused deep public concern.

### Contextual explanations of zero-fee tours

The nine factors identified above make it natural to ask the following questions: Why are Chinese tourists so easily attracted by cheap prices? Why do they tend to spend so exuberantly while on an outbound trip? Why are they so tolerant towards insulting language and behaviour against them?

These questions may be explained by the fact that the Chinese outbound market did not enter a grand stage of development until 1997. In other words, the huge purchasing power of the Chinese outbound tourist has not been released until recently, which contributes to their satisfaction with basic sightseeing items, imperfect knowledge about outbound destinations, and submission to poor treatment due to insecurity felt when away from home. Moreover, **traditional Chinese values also function here such as a strong preference for cheap products and spending money on souvenirs and gifts for family members and friends.** Actually, the zero-fee mode has been a Chinese-exclusive phenomenon because of these special consumer cultural values, and it was also recorded in Taiwan outbound tours before.

**At the macro level, the protective measures sheltering the Chinese outbound tour operator can be attributed to the long-term conservative attitudes of the Chinese authorities towards the liberalisation of the Chinese outbound market.** Since outbound travel goes hand in hand with an outflow of foreign exchange held by the tourists, strict control is placed on the Chinese outbound market to curb over-heated growth. Such control, in the forms of the Approved Destination Status system, permission of only group travel in most cases, prohibition of foreign capital in Chinese outbound travel agencies and quota management of outbound tourists, has been further institutionalised in China's World Trade Organisation agreements.


之中。

從微觀層面看，導遊沒有底薪，地接社設定旅客最低購物指標，以至於在極端的個案中，導遊要向地接社「買團」，這些關乎地接社與導遊之間的特定勞資協議，都迫使導遊以不道德乃至違法的方式強迫旅客購物，因而變成零團費經營模式的一員。

### 建議解決措施和總結

本文提出在目的地、個人、業界三個層面上，推行各方配合的措施，以根絕零團費旅行團，或者至少使其不再流行。在目的地層面上，更有效的推廣活動要在客源地和目的地一併推出，使出境旅客具備全面的旅遊知識，尤其是團隊素質和投訴機制的資訊。在旅客個人層面上，內地和目的地的旅遊局和推廣部門可攜手合作，藉著新聞發佈會和贊助活動等多元化活動，向內地出境旅客灌輸正確而理性的消費價值觀，務求他們明白，報團不宜只看價錢。

在業界層面上，政府監管部門和業界組織不妨仿效香港的「優質旅遊服務」計劃，藉以提升業者的營商操守。業者尤須人人瞭解，不顧一切割價求售只是不得已的競爭手法。目前台灣旅遊部門規定，大陸赴台旅遊接待費的最低標準為每人每天八十美元。這方法對有意吸引內地出境旅客的其他目的地而言，或許不無參考之處。最後，目的地導遊的工資結構應加以改革，以期勞資雙方都可獲最大利益之餘，旅客也能持久享受優質的旅遊服務。

據估計，內地出境旅客二零二零年將達一億人次。面對這一重要客源，世界各旅遊目的地無不摩拳擦掌。這個蓬勃增長的市場能否持續發展，與旅遊業界的各方人士利益攸關。因此，**要根治像零團費般的經營手法，所實行的措施務須前後一貫、切實具體而符合國情。** 


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At the micro level, the specific employment arrangements between the ground receiving agents and the local tour guides, such as the lack of any basic salary, the requirement for individual tour members to spend a minimum amount on shopping and in some extreme cases the need for the tourist guides to “buy” the right to receive tour groups, prompt the tour guides to play a part in the zero-fee mode by coercing the tour members into shopping through unethical and even illegal means.

### Suggested solutions and conclusion

**Coordinated measures initiated at destination, individual and industry levels are recommended here, in order to eliminate zero-fee tours or at least to marginalise the popularity of such tours.** At the destination level, more effective campaigns, both at the places of origin and at the destinations, should be launched to provide comprehensive travel knowledge for the outbound tourists, especially information on tour service quality and complaint handling. For the individual outbound tourists, tourism authorities and promotional agencies on the mainland and at the destinations can jointly impart correct and rational consumer values to the tourists through a wide variety of activities like press conferences and sponsored events. It is necessary to educate Chinese outbound tourists to think beyond simply price when making purchasing decisions on outbound tours.

When it comes to the industry level, arrangements similar to the Quality Tourism Services (QTS) Scheme in Hong Kong can be implemented to enhance the awareness of appropriate business ethics among all the industrial participants, which requires the coordinated efforts of both government supervising bodies and industrial associations. Particularly, a consensus should be reached that vicious price wars are the last resort for market competition. The current practice in Taiwan, where a minimum amount for the reception of the mainland tourist (currently at US\$80 per person per day) is officially recommended, may be a useful reference for other outbound destinations welcoming Chinese outbound tourists. Last but not least, salary structures for local tour guides should be reformed to meet the best interests of both the employers and the employees, with an eye on the sustainable service quality offered to the tourists.

Chinese outbound tourism, projected to generate over 100 million tourists by 2020, is becoming a significant travel flow fervently coveted by all destinations around the world. It would be to the benefit of all stakeholders to ensure a sustainable path of development for such a prosperous market. Therefore, **consistent, concrete and context-relevant measures should be guaranteed to minimise such practices as zero-fee tours.** 

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