
The Economic Impact of the Gay Games 11 Hong Kong 2023

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I. Executive Summary

The Hong Kong 2023-Gay Games 11 was the eleventh edition of a worldwide quadrennial sporting and cultural event that captured both Hong Kong’s and the world’s attention for 9 days from 3rd to 11th November 2023. This event attracted an estimated 5,600 visitors (including 2,381 participants) creating an important economic impact on Hong Kong and the region. Furthermore, approximately 29% of those who participated or attended the Gay Games were non-locals.⁴

Overall, almost HKD 200 million of economic impact⁵ was created by Hong Kong 2023-Gay Games 11, an economic impact created by non-local participants and guests, local attendees (through local import substitution – see table below) and investment from private sources by Hong Kong Gay Games organizing committee. The economic impact was felt across many industries, but was particularly prevalent in hotels, restaurants, entertainment, and the retail industry. Using economic modeling, it is estimated that this total spending impact **increased local earnings by HKD 101.5 million and created an employment impact equivalent of 439 full-time jobs**. Overall, this is an impressive economic impact given the size of the attendance and is likely driven by the longer length of stays of attendees and participants.

Non-local visitors spent an average of 8.5 days in the Hong Kong region while attending Hong Kong 2023-Gay Games 11. The table below summarizes the economic impact of the 2023 Gay Games and demonstrates the substantive impact it had on the Hong Kong economy.

Summary Table: Hong Kong 2023 - Gay Games 11 Impact on Output, Income, and Employment					
Source	Direct Spending	Indirect Spending	Total Spending Impact	Earnings Impact	Employment Impact
Non-local Participants	HKD 16,545,445	HKD 19,888,140	HKD 36,433,585	HKD 24,437,238	109.67
Non-local Visitors/Guests	HKD 26,638,167	HKD 32,019,906	HKD 58,658,073	HKD 39,343,953	176.57
Local Import Substitution	HKD 28,341,876	HKD 14,063,239	HKD 42,405,115	HKD 18,378,377	68.69
GGHK Private Investment	HKD 26,588,000	HKD 32,504,495	HKD 59,092,495	HKD 19,344,432	84.26
Total:	HKD 98,113,488	HKD 98,475,780	HKD 196,589,268	HKD 101,504,000	439.19

⁴ Non-local attendees are classified as those residing outside of Hong Kong.

⁵ Appendix Tables 1 and 2 show the 95% confidence interval upper and lower bounds. The total spending impact is between HKD 176 million and HKD 209 million.

II. Introduction

The Gay Games were founded in 1982 by Dr. Tom Waddell. Occurring every four years, the Gay Games have been continuously organized in cities around the world with a large number of athletes and spectators. In recent history, there has been a long string of successes with 10,000 participants in Paris in 2018, 8,000 participants in Cleveland/Akron in 2014 and 9,500 participants in Cologne in 2010. See Appendix B.

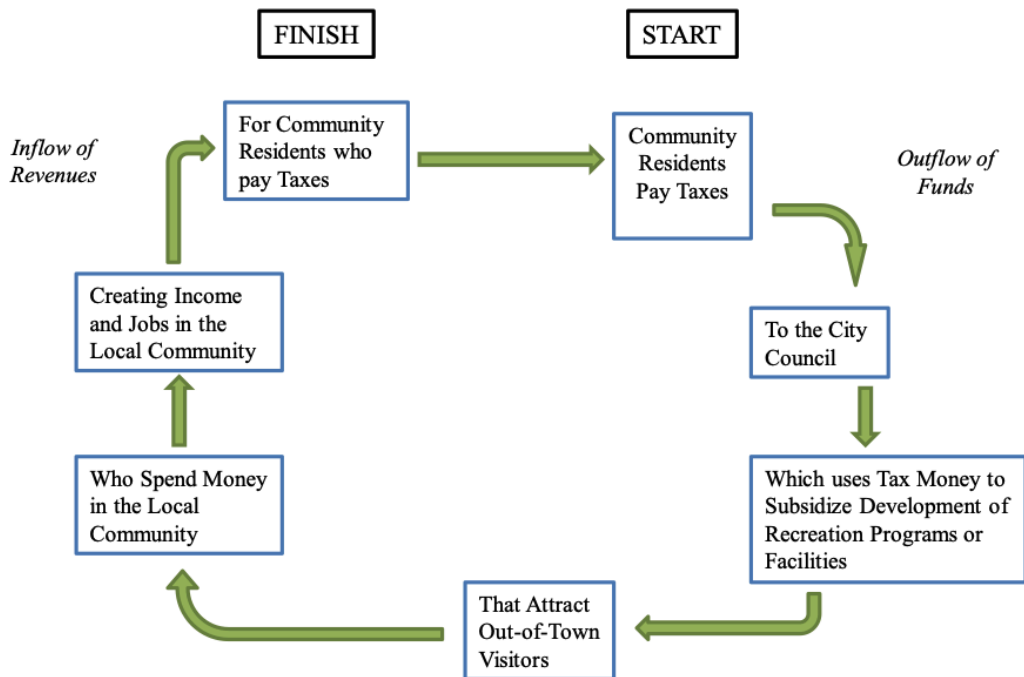
Hong Kong 2023-Gay Games 11 consisted of 9 days of athletic and cultural events for participants of any religion, sexual orientation, gender identity, age, health status or athletic ability, **a truly inclusive event**. The Hong Kong 2023 program included 18 sports with over 500 competitive matches played, including trail running, swimming, fencing, and martial arts, as well as the introduction of unique and emerging sporting events such as dragon boat racing, mahjong and dodgeball. In addition, the program included 2 full nights of gala concerts with over 18 international, regional and local performances, 2 ceremonies and 1 village. These games were co-hosted with Guadalajara and were postponed 1 year due to COVID19.

To properly estimate the economic impact of Hong Kong 2023-Gay Games 11, data was collected from post-event surveys that were sent via email to all registered participants. The results were then compiled in order to determine the economic impact. Furthermore, **an economic methodology consisting of input-output multipliers** was utilized to calculate both the **direct and indirect impact of the Gay Games (see Appendix A)**. First, the direct economic effect was calculated by measuring the amount of cash flow coming from non-local participants. Secondly, the indirect economic effect of these non-local participants was calculated using the direct cash flow and input-output multipliers. This same methodology was used to calculate the direct and indirect economic effects for event guests. Thirdly, in addition to non-local participants, this study takes into consideration the cash flow that remains from local participants spending their money inside Hong Kong and the local area, rather than having traveled to another city to participate in this event (for example, if Hong Kong had not hosted Gay Games 11). Fourthly, unlike previous games the Hong Kong Games were funded by private sources and spent locally. Together these **four sources of economic impact** were used to calculate the

economic impact for Hong Kong 2023, the eleventh edition of the Gay Games. A detailed explanation of this process can be found in the Appendix A.

How Spending Affects the Local Economy

Lastly, it is important to consider how **spending affects a local economy**. The following diagram displays how sporting events affect the greater area of the organizing city. John L. Crompton proposed the following diagram in his book *Measuring the Economic Impact of Visitors to Sports Tournaments and Special Events*.⁶ This diagram details how the money spent by all participants generates increased revenue for local business owners, who then **create new jobs within the community**. These new jobs then create **increased tax revenue** for the local government as the new employees pay taxes on their wages and businesses pay taxes on their revenues.



⁶ Crompton, John.L., *Measuring the Economic Impact of Visitors to Sports Tournaments and Special Events*, Ch. 2 "Understanding the Principles of Economic Impact Studies". Ashburn, VA: National Recreation and Park Association.

III. Economic Impact Analysis

After the completion of Hong Kong 2023-Gay Games 11, a post-event survey was distributed to all participants to gather the necessary data needed to complete the economic analysis. The survey consisted of a series of questions inquiring about the amount spent in certain industries, as well as the amount spent by their guests. The advantage of sending the survey shortly after the event helped participants to report accurately their level of spending. In total, 578 participants (roughly 27% of all participants) responded to the survey. The survey takers were predominantly non-local (approximately 60 percent) while registration suggests that 71 percent were residents of Hong Kong.

Table 1 details the overall results from Hong Kong 2023-Gay Games 11. The largest source of economic impact was from local participants in the form of local import substitution. Instead of calculating what local participants actually spent (which can't be included) it calculates how much spending was kept in Hong Kong by keeping residents from leaving to go to the games. Non-local guests were the second largest driver of economic activity, spending approximately HKD 26.6 million. This direct spending by non-local guests resulted in an estimated indirect spending of almost HKD 32 million. Therefore, together the total spending impact from non-local guests is HKD 58 million. The third largest source was spending from the Hong Kong Gay Games which was sourced by private investment. They spent HKD 26.5million resulting in a total spending impact of HKD 59 million. The fourth largest driver was that of non-local participants who had HKD 16.5 million in direct spending, which led to HKD 19.8 million in indirect spending. The total spending impact for the games by all sources is almost HKD 200 million. Furthermore, this event led to an increase in local wage earnings of roughly HKD 101 million, which resulted in the equivalent of 439 full-time jobs.

The overall total economic impact of the Hong Kong 2023-Gay Games 11 was smaller than the previous Gay Games, due to the correspondingly smaller number of attendees following the pandemic. However, the spending per person was quite substantive. This is attributed to the fact that the Gay Games attracts visitors who stay for an average of 8.5 days. This length of stay is similar to the other two important multi day sporting events in the world (the Olympics and the World Cup) where attendees will stay for extended times.

TABLE 1

Table 1: Hong Kong 2023 - Gay Games 11 Impact on Output, Income, and Employment					
Source	Direct Spending	Indirect Spending	Total Spending Impact	Earnings Impact	Employment Impact
Non-local Participants	HKD 16,545,445	HKD 19,888,140	HKD 36,433,585	HKD 24,437,238	109.67
Non-local Visitors/Guests	HKD 26,638,167	HKD 32,019,906	HKD 58,658,073	HKD 39,343,953	176.57
Local Import Substitution	HKD 28,341,876	HKD 14,063,239	HKD 42,405,115	HKD 18,378,377	68.69
GGHK Private Investment	HKD 26,588,000	HKD 32,504,495	HKD 59,092,495	HKD 19,344,432	84.26
Total:	HKD 98,113,488	HKD 98,475,780	HKD 196,589,268	HKD 101,504,000	439.19

In order to better understand which industries were most affected by Hong Kong 2023-Gay Games 11, Table 2 displays the average conditional expenditure of non-local participants, as well as the percent of non-local participants who said they spent money in the industry.⁷ The largest expenditures of non-local participants and guests by industry were hotels, restaurants, entertainment, and retail shopping. The industries most affected are not surprising, given the average length of stay was 8.5 days (the mode being 10, as well) and Hong Kong's robust restaurant, entertainment and retail sectors.

TABLE 2

Table 2: Non-Local Participant Conditional Average Expenditure		
	% who said yes	Conditional Average
Hotels	81%	HKD 13,933
Restaurants	94%	HKD 7,166
Entertainment	68%	HKD 2,124
Retail	70%	HKD 6,185
Grocery/Drug Stores	82%	HKD 1,346
Public transportation	95%	HKD 1,384

footnotes:

These estimates are the amount conditional on having spent money in the industry.

Lastly, one may wonder whether local attendees help the economic impact of the event. Typically, local residents' spending is not included in economic impact studies because researchers do not know if local attendees would have simply spent their money locally at another time of the year, so there is not any “new” money added. However, for important events such as the Gay Games we can determine whether the event kept local money in the local economy. Table 3 presents the overall summary of the import substitution calculation. These

⁷ These calculated averages are conditional upon an individual spending money in that industry.

results are gathered from the question on the post event survey which asks *whether or not a local attendee would have participated/attended in the games if the event were held outside of the Hong Kong area*. Of the local participants, approximately 45.82% responded that they would indeed have traveled outside Hong Kong to have participated in the Gay Games. Thus, had Hong Kong not hosted this event, these local participants would have taken their total spending of HKD 42.4 million out of Hong Kong and spent it in another location.

TABLE 3

Table 3: Summary of the Import Substitution Effect							
Category	Average	% Yes	Direct Spending	Indirect Spending	Total Spending Impact	Earnings Impact	Employment Impact
Import Substitution	HKD 15,489.85	45.82%	HKD 28,341,876	HKD 14,063,239	HKD 42,405,115	HKD 18,378,377	68.69

IV. Conclusion

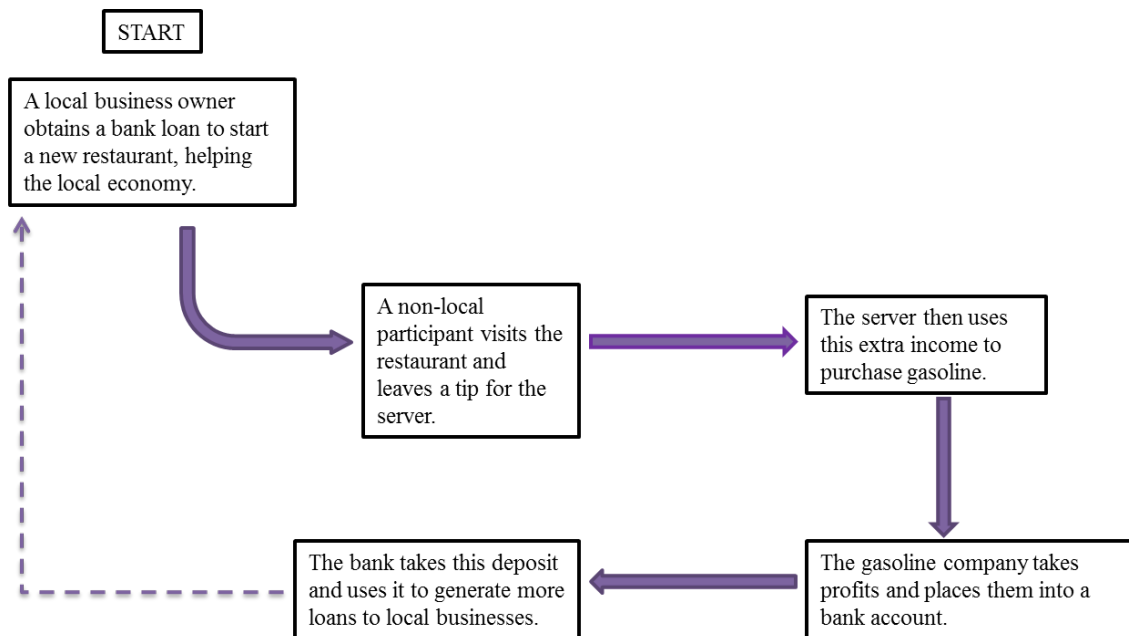
Hong Kong 2023-Gay Games 11 provided an important economic impact for the Hong Kong economy, including higher revenues generated for local businesses and new local jobs. Overall, the Gay Games provided an important positive contribution to the Hong Kong economy across many important industries, including hotel, restaurants, entertainment and retail, which provided spill-over effects throughout the economy. Furthermore, the eleventh edition of the Gay Games held in Hong Kong encouraged local athletes to stay within the local area, rather than having to travel out of town to participate in these competitions. Unlike previous games the HK games were privately funded and operated by volunteers meaning no direct government funding contributed to the economic impact.

Appendix A: Methodology for the Economic Impact Study

The following sections describe in further detail the methodology used in calculating the economic impact of an event such as the Gay Games. First, a detailed discussion of **non-local participants** will be addressed. Next, the detailed approach for calculating "**import substitution effect**" will be discussed.

1: The Input-Output Multiplier Effect

The economic multiplier was used to determine how an extra dollar spent inside an economy from an outside source flows through that economy. An illustrated example may be useful to understand how this multiplier works.



This cycle, known as the **money multiplier effect**, was calculated using an **input-output multiplier model**. Although economic multipliers are commonly used in the United States, as they are calculated by the U.S. Department of Commerce, this is not the case for Hong Kong. After a number of discussions with a variety of experts, examining other local economic impact studies and examining the economic structure and industrial mix of Hong Kong, estimates of the magnitudes of the money multipliers for the Hong Kong economy were calculated. Using these estimates, the author, Shawn Rohlin, finalized the economic multipliers using the results of an

analysis performed to examine Hong Kong's economic structure in comparison to similar large cities in the US (e.g. Chicago). Each sector within the economy has its own individual multiplier.

The **non-local economic impact** was calculated as follows: each non-local participant was asked a series of questions regarding which industries were patronized as well as the approximate total amount spent at each establishment. Using the information gathered from the non-local survey participants, it was possible to calculate what percentage of non-local participants actually spent money in these sectors. This process was performed by multiplying the percentage of non-locals (from the survey results) who spent money in each sector by the total estimated non-local participants. The product is the **total number of non-locals who spent money in each sector**. Next, this number was multiplied by the average conditional expenditure of non-locals (again, from survey results) to obtain the direct impact by non-local visitors. Following the direct impact, the indirect impact was calculated by multiplying the corresponding industry multiplier by the direct impact for each industry. **Totaling the direct and indirect impact yields the total economic impact.**

2: Import Substitution Effect

Should spending by local participants and attendees be calculated and added into the total economic impact?

According to Cobb and Olberding, local participants should not be considered in any economic impact analysis.⁸ The reasoning is as follows: if local participants would have spent their income in Hong Kong regardless, then their money is not "new" money. However, had the Gay Games not been held in Hong Kong, these locals could have traveled outside of the city and spent their money in another city. Thus, Hong Kong would not have received this additional income; therefore, this local money should be considered as "new" to the local area.

In order to compute the import substitution effect, the post-event survey asked local participants if they would have traveled outside Hong Kong to attend the Gay Games, and, if yes, approximately how much money they would have spent if the Gay Games had been held in

⁸ Cobb, Steven and Olberding, Douglas J., "The Importance of Import Substitution in Marathon Economic Impact Analysis". *International Journal of Sports Finance*, Vol. 2, 2007, pp. 108-118.

another unspecified location. After obtaining the number of "yes" answers, a percentage of locals who would have ventured outside Hong Kong was multiplied by the total number of locals, resulting in the total number of visitors who engaged in **import substitution**. Next, the direct spending impact was calculated by taking the conditional average obtained from this survey question multiplied by the aggregate number of participants who participated in import substitution. Furthermore, the indirect effect was calculated through the use of the money multiplier method detailed in the previous section.

Appendix Table 1

95% Lower Bound Confident Interval - Hong Kong 2023 - Gay Games 11 Impact on Output, Income, and Employment					
Source	Direct Spending	Indirect Spending	Total Spending Impact	Earnings Impact	Employment Impact
Non-local Participants	HKD 15,242,950	HKD 18,321,580	HKD 33,564,530	HKD 22,494,963	101.18
Non-local Visitors/Guests	HKD 24,541,149	HKD 29,497,744	HKD 54,038,893	HKD 36,216,890	162.90
Local Import Substitution	HKD 24,777,199	HKD 12,294,446	HKD 37,071,645	HKD 16,066,851	60.05
GGHK Private Investment	HKD 26,588,000	HKD 32,504,495	HKD 59,092,495	HKD 19,344,432	84.26
Total:	HKD 91,149,298	HKD 92,618,265	HKD 183,767,563	HKD 94,123,136	408.39

Appendix Table 2

95% Upper Bound Confident Interval - Hong Kong 2023 - Gay Games 11 Impact on Output, Income, and Employment					
Source	Direct Spending	Indirect Spending	Total Spending Impact	Earnings Impact	Employment Impact
Non-local Participants	HKD 17,847,941	HKD 21,454,700	HKD 39,302,641	HKD 26,379,513	118.16
Non-local Visitors/Guests	HKD 28,735,184	HKD 34,542,067	HKD 63,277,252	HKD 42,471,017	190.24
Local Import Substitution	HKD 31,906,554	HKD 15,832,032	HKD 47,738,585	HKD 20,689,903	77.33
GGHK Private Investment	HKD 26,588,000	HKD 32,504,495	HKD 59,092,495	HKD 19,344,432	84.26
Total:	HKD 105,077,679	HKD 104,333,294	HKD 209,410,973	HKD 108,884,865	469.98

Appendix B:

About Hong Kong 2023 – Gay Games 11

Gay Games 11 Hong Kong took place on 3-11 November 2023, the first event of its kind in Asia. The Hong Kong Games featured 18 sporting events, opening & closing ceremonies, festival village, and a variety of arts and culture events. Under the theme “Unity in Diversity”, 2381 participants representing over 40 nationalities and about 700 volunteers participated in the Hong Kong Games. The Hong Kong Games is organized by a volunteer team with core funding support from Marriott Bonvoy and YouTube as Platinum Sponsors, and HSBC, Gilead Sciences and Standard Chartered Bank as Silver Sponsors. More information about the Hong Kong Games may be found here: www.gghk2023.com.

About the Federation of Gay Games

Built upon the principles of Participation, Inclusion, and Personal Best™ since 1982, the Federation of Gay Games is the governing body of the Gay Games, whose mission is to promote equality in sport and culture for all. The Gay Games were conceived by Dr. Tom Waddell, an Olympic decathlete, and was first held in San Francisco in 1982 with 1,350 participants. Subsequent Gay Games have been held in San Francisco (1986; 3,500 participants), Vancouver (1990; 7,300 participants), New York (1994; 12,500 participants), Amsterdam (1998; 13,000 participants), and Sydney (2002; 11,000 participants), Chicago (2006, 11,000 participants), Cologne (2010, 8000 participants), Cleveland (2014, 8000 participants), Paris (2018, 10,317 participants). www.gaygames.org