

ECONOMIC CONTRIBUTIONS OF TOURISM EVENTS: A MIXED-METHODS ANALYSIS OF TOMOHON INTERNATIONAL FLOWER FESTIVAL IMPACT ON LOCAL ECONOMY

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ABSTRACT

Tourism festivals are being utilized to develop local economies in developing countries, but it remains unclear whether they are effective. We conducted several pieces of research to gain a deeper understanding of this. We examined the Tomohon International Flower Festival (TIFF) and its economic impact in Tomohon. We engaged with 312 residents, business owners and tourists through the festival. For further detailed information, we conducted face-to-face interviews with 24 respondents. The study reveals that TIFF was highly beneficial to the economy. On average, the businesses made 67.4% more money, and the locals made 34.7% more. Temporary employment was approximately 1,847, and residents filled 78.9 percent of them. The average rental equilibrium in the city center was 2.8 times higher than at the outskirts (Gini coefficient = 0.487). We identified three significant factors which contribute to the degree to which the festival will generate economic benefits: the siting of the event facilities relative to the festival location, the compatibility of the festival with the local business sector and the quality of the local businesses. This paper demonstrates that tourism events can deliver numerous benefits; however, these are unevenly distributed and can exacerbate existing inequalities between regions and sectors. The results suggest that planners should design festivals to ensure that the benefits of the festivals are distributed to all members of the community. The policy demonstrates how to invite everyone to the festival simultaneously, upgrade facilities in a remote location, and provide more growth opportunities, which is essential for contributing more to the local economy.

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INTRODUCTIONS

Tourism festivals are now viewed as a valuable means of reviving local economies, even when normal businesses are struggling. They promote a destination, attract visitors and provide employment. (Getz & Page, 2024). Studies of various festivals reveal that they can generate substantial revenue. The amount depends on the size of the festival, the number of staff required, and local conditions. (Liang et al., 2025; Weber & Hsu, 2021) In Indonesia, festival tourism is part of a broader plan to promote the creative economy. However, the few well-designed studies demonstrate the economic benefits for the area. (Baixinho et al., 2020).

Tomohon city in North Sulawesi province is a hub for numerous festivals. It is also known as the City of Flowers, due to its favorable climate, which is high in altitude, ideal for growing flowers. The city uses its natural beauty with the Tomohon International Flower Festival (TIFF). The festival began in 2008 and has since evolved into an international event (Tomohon City Government, 2025). More than 85,000 people are coming every year, according to the Indonesian National Tourism Calendar (Indonesian Ministry of Tourism, 2025). Although the festival is a popular and significant event, no economic benefits have been observed by local farmers in any studies conducted regarding this massive event.

Current research on the monetary effect of festivals provides mixed results. Some case studies indicate festivals can receive more than triple or quintuple the amount spent on them. Other research shows minor improvements. (Baldi et al., 2022; Montero & Yang, 2022; Snowball & Antrobus, 2021) particularly in terms of costs, such as transportation expenses or lost opportunities. (Dwyer et al., 2020) New findings also value the distribution of benefits. They claim that festivals can, and may, benefit some people more than others, while excluding vulnerable groups (Davies et al., 2025; Quinn et al., 2021)

This research makes a significant contribution to the festival tourism literature in three key ways. First, much of the economic research on festivals has been conducted in developed countries. Due to the limited number of studies from developing countries, the results were less robust and lacked local specificity, such as consideration of the informal economy and poor infrastructure. (Wen et al., 2021) Second, researchers are mainly relying on numbers (i.e., input-output and CGE models) rather than people's experiences, and how online platforms transform the experiences of participation, access, and perceived value. (Jeong & Shin, 2020) Third, although the distribution of benefits from festivals across a host community becomes an essential aspect of equitable development, there is a lack of studies on its spatial distribution across different neighborhoods or administrative areas, as well as across various social groups in society. (Son et al., 2022; Vaughan et al., 2021)

The study asks:

RQ1: How much revenue does TIFF generate for Tomohon's local economy?

RQ2: How do the local businesses and residents spend that money?

RQ3: What is the view of people and groups on the economic impacts?

RQ4: What is the perception of local people regarding the effect of the festival on the economy?

There are some main takeaways from this study. It provides an excellent indication of the economic impact of festivals in Indonesia. It illustrates that the effects change with location, which is something previous studies have not taken into account. It also helps us understand how tourism events are interconnected with the local economy and how this is either exacerbating or lowering existing inequalities. Finally, the findings will help planners and policy-makers to design festivals in a manner that delivers economic benefits for all.

Literature Review and Theoretical Framework

Festival Tourism and Economic Development

Event tourism is primarily characterized by activities connected with the periodic celebration of cultural, artistic, or natural themes, and in principle, it is a subcategory of festival tourism. (Getz, 2020) Various theoretical constructions provide the economic motivations for the development of festivals. The theory of Keynesian multipliers suggests that expenditure on festivals passes through local financial systems, producing secondary and tertiary effects beyond the initial expenditure. (Dwyer et al., 2020). Input-output models are a way to systematize these interactions, calculating total

contributions to the economy in terms of direct, indirect, and induced impacts. (Pedauga et al., 2022; Tyrrell & Johnston, 2001)

People have varying views on the impact of festivals on individuals. Aha Akhundova (2024) stated that festivals are the primary driving force of tourism in most cases, but this is contingent upon the circumstances and the number of visitors the festival attracts. (Akhundova, 2024) Mishra (2025) has demonstrated that festivals in urban areas generate more revenue than those in rural areas. (Mishra, 2025) However, local participation in rural festivals can be beneficial, as they remain grounded in the local community and are based on the close ties that small communities share. These differences depend on the size of the festival, the homogeneity of the people and how the researchers measure the impact of each of these festivals on people. Digital technology can address new issues and enhance the understanding of people's thoughts and feelings related to festivals at different places. (Chen & Yu, 2025)

Recent scholarship on the economics of festivals suggests that we need to examine the diffusion of people and public funds used to organize festivals. They go on to generate an argument. (Zhai et al., 2023) That substitution is a typical outcome of tourism, including festivals. Substitutive effects are likely to be most evident in destinations incapable of absorbing significant numbers of visitors, resulting in negative overall economic impacts. Ormerod and Wood (2021) also note that the rules for paying for local events often overlook opportunity costs. (Ormerod & Wood, 2021) In turn, the current process of spending on festivals leaves little room for more equitable or environmentally friendly projects. The findings of this paper suggest that attention should be given to the use of counterfactual thinking and strategic relational analysis in evaluating the effects of festivals.

Most people have so far focused on the social impact of festivals, which can have a profound effect on society as a whole. As is evident from recent research, it is not just a question of how much money festivals make, but also who gains influence and advantages. They are not only held by the elite of the country and region, but also by the impoverished people in the cities. Subramaniam et al. (2022) concluded that tourist growth overwhelmingly benefits large and expensive companies, resulting in unfair outcomes. (Subramaniam, 2025) Also, Chaitanya and Swain (2025) State that festival tourism earnings primarily benefit large companies, leaving smaller and informal businesses. These results support an examination of festivals from a fairness perspective. (Chaitanya & Swain, 2025)

A highly relevant dimension of distribution is that of spatial inequality. Festivals Edinburgh (2023) has recorded a significant geographic concentration of festival benefits within Edinburgh, with businesses in the central area accounting for 73 percent of festival visitor spend, despite comprising only 34 percent of businesses. (Festivals Edinburgh, 2023) Peripheral regions had minimal economic stimulus and, in some cases, had negative consequences due to congestion and resource diversion.

Differences in the benefits in the form of money obtained from festivals are more noticeable now. Doe et al. (2022) found that during festivals, the majority of the revenue is received by hotels and restaurants, leaving little for shops and cultural businesses. (Doe & Preko, 2025) Chaitanya and Swain (2025) indicate that while festivals primarily benefit larger hospitality ventures, creative and smaller informal operators do not reap much benefit. (Chaitanya & Swain, 2025)

Peer groups are also a relevant factor, and larger businesses have a greater ability to exploit opportunities that present themselves during festivals or special days, resulting from better marketing, larger capacity, and greater access to information. (Rogerson et al., 2021)

Employment Dimensions

Festivals create new jobs and support the local economy. In addition, they provide jobs directly by conducting the event and providing services, and also indirectly through the supply chain. (Baum, 2019) However, the quality of the employment is very different. Yemoh and Yemoh (2021) noted that problems related to seasonal employment exacerbate the difficulties faced by workers, particularly in developing economies. (Yemoh & Yemoh, 2021)

Particular attention needs to be paid to festival jobs in relation to gender. Some studies have found a fairly even gender balance in labor participation at festivals. (Almathami et al., 2022) While others have found a lack of gender balance, with women being overrepresented in lower-paid service positions. (Dashper & Finkel, 2020)

Local employment content—the share of festival employment filled by residents of the host community—is an alternative key indicator, and the higher the local content, the greater the benefits to the local community. (Pereira et al., 2021; Quinn, 2024)

Theoretical Framework

This study is based on three related schools of thought. First, an economically based theory posits that festivals serve as export activities, generating external income for local economies and promoting economic growth. (Tyrrell & Johnston, 2001) Second, stakeholder theory emphasizes the idea that festivals deliver benefits to various stakeholder groups, including residents, businesses, governments, and visitors, and that the goals of these stakeholders may overlap or conflict with one another. (Getz & Page, 2024) Third, spatial-economic frameworks accentuate the role of geographical determinants that shape the distribution of economic activity, including distance, agglomeration, and infrastructure. (Krugman, 1991)

Using these angles, we hypothesize the following claims: (H1) TIFF has positive considerable economic impacts on Tomohon local economic clusters; (H2) Spatial distribution of economic gains are skewed with central areas taking disproportionate gains; (H3) Impact is conditional on business sector, size, and location; (H4) Employment creation has inclusive features in terms of local participation and gender.

METHODOLOGY

Research Design

This study employed a convergent parallel mixed-methods design to collect and analyze data both quantitatively and qualitatively. It then brought these together to provide a comprehensive picture of TIFF's economic contributions. (Creswell & Plano Clark, 2018) Mixed methods are ideal for studying the impacts of festivals, as they enable us to measure total economic effects, while also attempting to understand how benefits are distributed and perceived. (Mair et al., 2021) The quantitative portion assessed the magnitude of the economic impacts generated, the number of jobs created and the issues determining the sharing of benefits. The qualitative part examined what stakeholders think, how impacts actually occur, and what is essential about the surrounding conditions. We combined the results in the interpretation stage, which provided a qualitative perception of the quantitative patterns. (Fetters et al., 2013)

Tomohon City is located in the Minahasa Highlands of North Sulawesi, Indonesia, and has a population of roughly 98,000. The local economy has become based on agriculture (particularly horticulture), small-scale manufacturing, and an increasingly important tourism industry. TIFF is celebrated every August for five days and includes floral shows, cultural performances, food exhibits, and business conferences. The new exhibition, held in 2025, from which the data were collected, had an estimated 85,300 visitors, of whom 2,400 were international tourists.

Quantitative Component

Selection and Collection of Data.

Three types of respondents were sampled, namely: (1) residents (n=150), (2) business owners (n=112), and (3) festival visitors (n=50). Resident sampling on a stratified random basis using three spatial areas by distance from the main venues of the festivals, namely Zone 1 (0-2 km), Zone 2 (2-5 km), and (>5 km). Business Sampling involving schools of thought was used, specifically purposive sampling, to provide representation by sector, including accommodation, food services, retail, transport, and cultural services. Visitor sampling was conducted using systematic random selection at the festival venues.

Structured questionnaires were used for face-to-face interviews conducted during the festival season (August 15-19, 2024, and 1 week after the festivals, August 8-12, 2025), which measured both the immediate and short-term impacts. Questionnaires were formulated using known, proven instruments for assessing festival impact (Dwyer et al., 2020; Tyrrell & Johnston, 2021) and modified according to local context through expert consultation and pilot test (response of 30 people).

Measurement

Key variables included: (1) revenue change - the percentage change in business revenue during festival period as compared to a normal non-festival; (2) income change - the percentage change in income for the households living near the sites involved in festival activities income generators and other activities generating revenue; (3) employment generation - the amounts of jobs generated temporarily, disaggregated by local / non-local or male / female categories; (4) visitor expenditure - the total spending of visitors during festivals across the expenditure categories (accommodation, food, transportation, shopping, entertainment); (5) spatial zone - this is a categorical variable representing.

Analysis

Descriptive statistics were used to characterize respondent profiles and the magnitudes of impact. Multiple regression analysis was used to examine the predictors of business revenue growth, with the independent variables being spatial zone, business sector, business size, and years of operation. The economic impact measurement was conducted using a modified expenditure-based approach, which involved calculating direct visitor expenditures and applying conservative multiplier coefficients (1.6 for direct impacts and 1.3 for indirect impacts) derived from multiplier studies conducted in Indonesia. SPSS version 28.0 program for all quantitative analyses.

Qualitative Component

Principles of sampling and data collection

Semi-structured interviews were held with 24 purposively selected key informants to represent a range of perspectives, including local government officials (n = 4), festival in-accessors (n = 3), business owners (n = 8), community leaders (n = 4), and residents (n = 5). Interviews lasted from 45 to 90 minutes. The interview guide covered issues of perceived economic impacts, mechanisms of benefit distribution, challenges, opportunities, and sustainability issues.

Analysis

The interviews were transcribed and coded using thematic analysis, following Braun and Clarke's (2021) six-phase coding method: familiarization, initial coding, developing themes, reviewing themes, defining themes, and producing the report. NVivo 14 software was used to code and organise themes. Two of the researchers independently coded a subset of transcripts to establish inter-coder reliability (Cohen's Kappa learning discrepancy as a measure of reliability [Cousins, 1992], $k = 0.82$), with differences unresolved by discussion.

Integration

How integration was achieved by comparing and synthesizing quantitative and qualitative data. Numbers and patterns (for example, uneven use of utilities from place to place) were studied and connected to what we found out from our interviews (ex., why they used it that way, in other words, what was the reason for these patterns, like differences in infrastructure, in how they get information, and so on). We examined the numbers closely, and the interviews either matched or did not match, providing a comprehensive picture of the situation.

Validity and Reliability

The reliability of the survey instruments was measured using a standard test, and all the multi-item scales achieved a reliability coefficient above 0.75. The validity of the notions was assessed through a confirmatory factor analysis, which yielded good results (Cf. AI = 0.94, RMSEA = 0.06). In the qualitative portion, I employed member checking by presenting sample results to participants and asking them if they reflected their thoughts. I also triangulated information from various sources and combined them, and I also had a critical journal that allowed me to identify my own biases. I adhered to standard quality guidelines for mixed methods research to ensure the integration of both quantitative and qualitative components, as well as to maintain consistency between the two types of data.

Ethical Considerations

The research was approved by the Institutional Review Board of Universitas Kristen Indonesia Tomohon (Protocol broadband #2025-08-TIFF). Everyone who participated in the study was informed about

the study's purpose and what would happen. They also learnt about their rights and responsibilities and gave their consent. We did not identify individuals or compromise their data security or privacy. Nobody was forced to stay; anyone could drop out of the study at any time without incurring any penalties.

RESULT AND DISCUSSIONS

This section presents the results of the quantitative and qualitative research thematically, shedding light on the findings that address the research questions. First, we present the backgrounds of the respondents. Then, we discuss why the economic effect is essential, how it is spread across different sectors, and what it means for employment, as well as its implications for various stakeholders.

Disciplinary Background of Respondents

The demographic factors of the respondents and their businesses are shown in Table 1. The sample is representative in terms of location, company type, and background. Companies within the Fund range from new to established, with an average age of nearly 8.7 years. From the demographic side, it was found that 94% of the respondents are representatives of the local community of the source country, which is similar to the average TIFF visitor.

Table 1. Respondent Characteristics

Characteristic	Residents (n=150)	Businesses (n=112)	Visitors (n=50)
Spatial Zone			
Zone 1 (0-2 km)	62 (41.3%)	58 (51.8%)	-
Zone 2 (2-5 km)	54 (36.0%)	38 (33.9%)	-
Zone 3 (>5 km)	34 (22.7%)	16 (14.3%)	-
Business Sector			
Accommodation	-	18 (16.1%)	-
Food Service	-	34 (30.4%)	-
Retail	-	28 (25.0%)	-
Transportation	-	22 (19.6%)	-
Cultural Services	-	10 (8.9%)	-
Gender			
Male	71 (47.3%)	64 (57.1%)	24 (48.0%)
Female	79 (52.7%)	48 (42.9%)	26 (52.0%)
Age Group			
18-30 years	38 (25.3%)	22 (19.6%)	18 (36.0%)
31-45 years	56 (37.3%)	48 (42.9%)	22 (44.0%)
46-60 years	44 (29.3%)	34 (30.4%)	8 (16.0%)
>60 years	12 (8.0%)	8 (7.1%)	2 (4.0%)
Education			
High School	54 (36.0%)	38 (33.9%)	12 (24.0%)
Diploma	32 (21.3%)	28 (25.0%)	14 (28.0%)
Bachelor	52 (34.7%)	38 (33.9%)	20 (40.0%)
Postgraduate	12 (8.0%)	8 (7.1%)	4 (8.0%)

Economic Impact Magnitude

Table 2 illustrates the significant economic impact of the Toronto International Film Festival (TIFF). Other local businesses were doing better, and the sales have increased by about 67.4%. However, there was a significant difference among companies, a spread of 42.8%. On average, traders made 34.7% more from the festival, but not equally.

All visitor spending was studied, and the total direct expenditures in tourism during the five-day festival were approximately IDR 47.3 billion, equivalent to US\$3.15 million. The highest proportions of visitor expenditure were allocated to accommodation and food services, which accounted for 32.4% and 28.7%, respectively. This was then followed by shopping (18.9%), transportation (12.3%), and entertainment (7.7%). Using conservative multiplier coefficients, the total economic impact (direct, indirect, and induced) was estimated at IDR 142.7 billion (~US\$9.51 million), which is approximately 2.8% of Tomohon's annual GDP.

Table 2. Economic Impact Magnitude Indicators

Impact Indicator	Value	Notes
Business Revenue Increase		
Mean	67.4%	n=112 businesses
Median	58.2%	Reflects the central tendency
Standard Deviation	42.8%	Indicates high variability
Range	8.3% - 187.6%	Min-Max values
Resident Income Increase		
Mean	34.7%	n=89 residents
Median	28.5%	Reflects the central tendency
Standard Deviation	26.3%	Indicates variability
Range	5.2% - 98.4%	Min-Max values
Visitor Expenditure (IDR billion)		
Accommodation	15.3	32.4% of the total
Food Service	13.6	28.7% of the total
Shopping	8.9	18.9% of the total
Transportation	5.8	12.3% of the total
Entertainment	3.7	7.7% of the total
Total Direct Spending	47.3	Five-day period
Economic Impact Estimate (IDR billion)		
Direct Effects	47.3	Visitor spending
Indirect Effects	28.4	Multiplier 1.6
Induced Effects	67.0	Multiplier 1.3
Total Economic Impact	142.7	All effects combined
Economic Impact (USD million)		
Total Economic Impact	9.51	Exchange rate: 1 USD = 15,000 IDR

Spatial Distribution of Economic Benefits

Table 3 proves the extreme inequality of the benefits of the festival in space. Businesses in the vicinity of festival venues (any business within 2km) reported an increase in average revenue of 94.7 per cent, which was close to three times higher than the increase of 33.8 per cent for businesses in Zone 3. This trend was common throughout all areas of business, though at different magnitudes. The Gini coefficient for the distribution of revenue is 0.487, indicating a high level of inequality that approaches the levels typically experienced in income inequality in developing countries.

Qualitative data provided insight into the mechanisms of spatially disseminating inequalities. The owner of one Zone 1 restaurant said that during the festival, the restaurant was full every day. Tourists came from the flower garden to the restaurant, and eight additional people were employed for the entire week. In contrast, a retailer in Zone 3 found that, despite being aware of the festival, visitor numbers were low and benefits were still concentrated in the urban center. The infrastructure gap is also a distance gap, as Zone 1 has better access to roads, signage, and public facilities.

Table 3. Spatial Distribution of Economic Benefits by Zone and Sector

Spatial Zone	n	Mean Revenue Increase (%)	Median Revenue Increase (%)	Std. Deviation
Zone 1 (0-2 km)	58	94.7	86.2	38.4

Accommodation	12	112.3	105.7	42.1
Food Service	18	98.6	91.3	36.8
Retail	14	87.4	82.6	34.2
Transportation	10	82.1	77.8	31.5
Cultural Services	4	78.5	74.2	28.7
Zone 2 (2-5 km)	38	56.3	52.1	28.7
Accommodation	4	68.2	64.5	32.4
Food Service	12	62.4	58.7	28.9
Retail	10	51.8	48.3	26.3
Transportation	8	48.7	45.2	24.1
Cultural Services	4	45.3	42.1	21.8
Zone 3 (>5 km)	16	33.8	30.4	18.9
Accommodation	2	42.1	38.9	22.3
Food Service	4	38.6	35.2	19.7
Retail	4	31.2	28.7	17.4
Transportation	4	28.4	26.1	15.8
Cultural Services	2	24.7	22.8	13.2
Statistical Measures				
Gini Coefficient	-	0.487	-	-
Zone 1/Zone 3 Ratio	-	2.80	-	-

Employment Generation and Characteristics

Table 4 summarizes the results implied by employment generation. TIFF's work created approximately 1,847 temporary jobs during the festival and in the run-up to the festival. Notably, 78.9% of These Positions remained with local Tomohon residents, indicating significant local employment content. The gender breakdown was pretty equal, with 52.3% of the population working being male, and 47.7% female. However, the division of labor was still evident, as women were isolated into food service and cultural performance.

Nevertheless, signs of the quality of employment are a cause for concern. Mean wage for temporary employment for festival (IDR125,000/day or ca. USD8.33) was less than the minimum wage in North Sulawesi (IDR3,310,723/month or ca. IDR152,000/day based on 22 working days). Only 23.4 percent of temporary jobs had written contracts, and only 12.7 percent had social security coverage. The average period of employment was 8.3 days, providing little security of income.

Qualitative interviews identified some of the opportunities and challenges. One female food vendor stated, "Festival work is important because it provides income for my family." I can earn in one week what it would typically take a month." However, the community leader warned, 'The work is piece rate and low-waged.' They help, but do not transform economic conditions. We are looking for employment opportunities throughout the year."

Table 4. Employment Generation and Characteristics

Employment Indicator	Number/Value	Notes
Total Temporary Jobs Created	1,847	Five-day festival + preparation
Local Employment Content		
Residents	1,457 (78.9%)	Tomohon residents
Non-local workers	390 (21.1%)	From other regions
Gender Distribution		
Male	966 (52.3%)	Relatively balanced
Female	881 (47.7%)	Relatively balanced
Sectoral Distribution		
Event organization	124 (6.7%)	Planning, coordination
Accommodation	287 (15.5%)	Hotels, homestays

Food service	542 (29.3%)	Restaurants, street vendors
Retail	318 (17.2%)	Shops, stalls
Transportation	246 (13.3%)	Drivers, guides
Cultural performance	198 (10.7%)	Dancers, musicians
Other services	132 (7.1%)	Security, cleaning
Employment Quality		
Average wage (IDR/day)	125,000	Below minimum wage
Average wage (USD/day)	8.33	Exchange rate: 15,000 IDR/USD
Written contracts (%)	23.4%	Mostly informal arrangements
Social security coverage (%)	12.7%	Limited social protection
Average duration (days)	8.3	Short-term nature
Skills Level		
Unskilled	1,124 (60.9%)	No special skills required
Semi-skilled	548 (29.7%)	Some training/experience
Skilled	175 (9.5%)	Professional expertise

Predictors of Economic Impact: Regression Analysis

Table 5 presents the results of a multiple regression analysis examining predictors of businesses' revenue growth. The model exhibited high explanatory power, accounting for 64.3% of the variance in revenue change ($R^2 = 0.643$, $F(7,104) = 26.84$, $p < 0.001$). Spatial zone had become the most significant predictor. When compared to Zone 3 (reference category), Zone 1 had a 58.7% higher increase in revenue ($\beta = 0.512$, $p < 0.001$). Zone 2 was, however, associated with a 21.4% higher increase ($\beta = 0.186$, $p < 0.01$). Furthermore, the business sector strongly predicted the result, with the accommodation sector ($\beta = 0.243$, $p < 0.001$) and the food-service sector ($\beta = 0.198$, $p < 0.01$) achieving higher returns than the retail sector (reference group).

The variable of business size (measured by employee number) was positively related to an increase in revenue ($\beta = 0.167$, $p < .05$), indicating that larger businesses were better positioned to capitalize on the opportunities presented by the festivals. Operational age had a small yet significant positive impact ($\beta = 0.124$, $p < 0.05$). This may be due to established customer bases and operational experience. Furthermore, the more festivals a person has previously attended, the greater the gains they experienced ($\beta = 0.156$, $p < 0.05$), which suggests a possible learning effect.

These results support Hypothesis 2 for spatial inequality and Hypothesis 3 for sectoral and size-based heterogeneity in impact. According to their estimates, the positive effect of festivals is concentrated among firms with the best locations, a higher scale, and experience.

Table 5. Multiple Regression Analysis: Factors That Determine Revenue Growth of a Business

Predictor Variable	B (Unstandardized)	SE	β (Standardized)	t-value	p-value
(Constant)	12.34	4.23	-	2.92	0.004
Spatial Zone (ref: Zone 3)					
Zone 1 (0-2 km)	58.72	6.82	0.512***	8.61	<0.001
Zone 2 (2-5 km)	21.38	7.14	0.186**	2.99	0.003
Business Sector (ref: Retail)					
Accommodation	28.46	5.94	0.243***	4.79	<0.001
Food Service	22.73	6.12	0.198**	3.71	<0.001

Transportation	14.82	6.47	0.128*	2.29	0.024
Cultural	11.27	7.23	0.095	1.56	0.122
Services					
Business Size	2.18	0.84	0.167*	2.60	0.011
(employees)					
Years of	0.87	0.38	0.124*	2.29	0.024
Operation					
Prior Festival	15.63	5.87	0.156*	2.66	0.009
Participation					
(yes=1)					
Model Statistics					
R ²	0.643	-	-	-	-
Adjusted R ²	0.619	-	-	-	-
F-statistic	26.84	-	-	-	-
Sig.	<0.001	-	-	-	-

Note: Dependent variable: Percentage revenue increase during festival period. n=112. ***p<0.001, **p<0.01, *p<0.05

Qualitative Findings: Stakeholder Perceptions and Experiences

Thematic analysis of the interview data revealed five major themes related to the economic contributions of festivals and their distribution:

Theme 1:

Ordinary benefits and spatial injustice.

Stakeholders concluded that the benefits of the festival are not distributed equally among different locations. The festival does bring money into the region, but we need to examine who is actually benefiting from it. "The pull-down for the central part is great, and for the periphery it is not," one person said. In the center, the shop owners saw many customers, but those at the edges had almost no change.

Infrastructure assists in sharing the benefits. The center features good roads, adequate parking, clear signage, and public facilities, making it easy for visitors to reach and stay for an extended period. A shop owner in Zone 2 said, "There is not much transport or info about activities outside of the main venues, therefore tourists stay near the main places".

Theme 2:

Sectoral Variation and Business Capacity

One Tourism states that hotels and restaurants were the primary beneficiaries, as tourists spent the most there. Still, size was significant in all industries. Bigger, older companies can advertise, create a website, and attract more customers. Small shop owners protested that, "Big businesses have websites, and use social media & hire tour operators." We rely on people who walk through the door, and the number of people who do is limited.

Information regarding festival planning and visitor profiles was also differentially accessible. The business, having connections with festival organizers or government officials, was informed at the initial stages, thereby preparing for them. Smaller, less formal operators also had less time to learn about the festival details, so they were less able to capitalize on the opportunities.

Theme 3:

Employment Opportunities and Precarity

Residents also generally welcomed the job opportunities created by the festival, especially in an environment in which there were few opportunities in the formal sector. I, a female food vendor, said that this work is important to my family. The income helps to pay school fees and household expenses."* However, stakeholders were also aware of employment precarity. Temporary, low-wage, short-duration jobs with no social protection provide limited economic security.

Mixed evaluations were given to the gender dimensions. Some of the respondents mentioned relatively equal participation. In contrast, others referred to the persistence of segregation as women are concentrated into food preparation and cultural performance situations, paying less than transportation or technical jobs to which men are often dedicated.

Theme 4:

Multiplier Effects and Connectivity.

Characterized by stakeholders, different pathways for the circulation of festival impacts through the local economy. Business owners have complained that there was an increase in purchases from local suppliers during the festival. A restaurant owner said, "We are buying so much more vegetables, fish and spices from local farmers and markets." The festival has various advantages. It does introduce some leakage, however, in particular of specialized inputs from beyond Tomohon.

Festival workers said they used festival money to purchase local commodities, such as food, clothes, and other items (secondary economic activity). However, some of the expenditure leaks out of the local economy, particularly for durable goods that are not locally available.

Theme 5:

Sustainability Issues and Future Trends

We see the festival generating revenue, but stakeholders have concerns about how the festival impacts the planet and its future. They asked if the good parts of the festival would last for long and not just a few days. "This festival only takes people's money for a couple of days a year," said the community leader. We need to grow the economy in a way that is sustainable.

We asked one question: how can we devise a way to spread the benefits throughout the year to more people? These are some of our recommendations to help the festival improve:

- (1) Develop improved roads and facilities outside the prime area to allow the visitors to disperse.
- (2) Provide training facilities to small businesses to make use of the opportunities of the festival.
- (3) Develop tourist products that can be sold throughout the year and are related to the name of the festival.
- (4) Ensure that we purchase goods and services from locals for the festival.
- (5) Help the people that become hired for temporary jobs at the festival to get permanent employment in tourism.

Discussion

This study presents in-depth empirical evidence regarding the economic impact of tourism festivals in Indonesia, a sizable overall economic impact, as well as significant distributional disparities. The findings are presented in relation to the current literature, theoretical implications, and practical implications.

Size of Economic Impact and Processes

The multiplier effect, estimated at 3.0 (overall social impact over direct tourism expenditures), agrees with tourism multiplier estimates for Indonesian destinations. (Sastri et al., 2024) However, this figure is conservative compared to some festival studies that have reported multipliers greater than 4.0 (Dwyer et al., 2020) The somewhat moderate multiplier of the impact likely indicates leakage due to imports of specialized goods and services, as well as Tomohon's relatively small economic base, which limits inter-sectoral linkages.

Averaged over all fully functional capsules, business revenue increased by 67.4%, indicating a strong positive short-term business trend. Nonetheless, we find significant heterogeneity of outcomes, as reflected in the notable standard deviation of 42.8%, which foreshadows the issues of distributional equity discussed below. These results provide support for Hypothesis 1, which posits the existence of significant positive economic impacts, while at the same time adding an element of urgency to the need to examine the question of who is the beneficiary of these policies, and to what extent.

The Spatial Inequality of Distribution of Benefits

The significant finding of the spatial concentration of festival benefits, indicated by revenues of Zone 1 businesses being 2.8 times higher than those of Zone 3, is of both theoretical and practical importance. This pattern is a further extension of the research carried out by Festival Edinburgh (2020) and Power et al. (2022), which documents geographical inequality in festival impacts and shows that such dynamics are operating in emerging economy contexts. (Power, S., Di Domenico, M., & Miller, 2022)

Three major dynamics account for this spatial inequality. First, visitor behavior is likely to be concentrated in areas near festival venues, due to convenience, time constraints, and information limitations. Second, infrastructure inequality (for example, better road access, parking, and signage in central areas) makes it easier for visitors to access and stay longer. Third, self-reinforcing advantages arise from agglomeration effects, whereby the concentration of businesses has its own advantages that will attract more visitors and, as a result, more business.

The Gini coefficient for the distribution of revenue (0.487) is close to the levels typically observed for developing countries in income inequality. This means that equality is not actually achieved, but instead may be heightened by festivals. It proves that the notion that development can be generated simply by festivals is incorrect and that careful planning is necessary to distribute the benefits equitably.

Qualitative data revealed that individuals living on the outskirts possess knowledge of the inequality and are frustrated by it, which could hurt community support for festivals. It was commented by a zoner, three residents: 'The festival is for Tomohon, but it is of great help to the center.' The drawbacks are obvious - traffic, noise - but the good things are few. These thoughts endanger the long-term existence of festivals and the integrity of the community.

Sectoral and Business Level Differences

Regression analysis has confirmed that business sector, size, and previous experience in festivals have a significant predictive relationship to the magnitude of economic impact, which supports Hypothesis 3. Disparities in these two specific sectors, accommodation and food and beverage services, which account for more than 60 percent of total visitor expenditure, are similar to visitor expenditure patterns recorded in the tourism literature (Rogerson et al., 2021)

Bigger businesses generate more revenue from festivals because they can market more effectively, operate with greater flexibility, borrow money to purchase more stock, and have numerous connections that provide valuable information. This means that the profits from festivals do not get shared very well. The small and informal traders, who are already disadvantaged, often get sidelined and end up being standby players.

The last time businesses joined the festivals, it helped them learn new things at work. Firms that understand their business better can predict what people will want, prepare their stores effectively, and market their products more efficiently. This indicates that training programs can also help first responder teams access additional support through such initiatives.

Employment Generation Quantity and Quality

TIFF created 1,847 temporary jobs. Approximately 79% of those jobs were available to people who already lived in the area, so the festival offered employment opportunities to the residents. Occupational jobs are equally distributed between men and women. Men held 52.3% of jobs and women held 47.7%. This is preferable to many jobs in the tourism sector, where one gender typically receives the majority of the jobs (Dashper, 2020). This helps to support Hypothesis 4 to a certain extent.

However, there is evidence on job quality that causes real concerns. Job insecurity is evident in low wages below the minimum wage, poor contracts (incorrect in 23.4% of cases), a low level of social security coverage at 12.7%, and an average of 8.3 days of unemployment. These facts align with the complaints about tourism jobs in developing countries. (Rogerson et al., 2021). They say festivals do not end exploitative work conditions, but rather perpetuate them.

The share of employment in unskilled jobs (60.9% employment) restricts the possibilities of upgrading skills or changing professions. While tourism is an important source of short-term income for vulnerable households during the festival season, it is not a component of the long-term approach to economic mobilization. Although the results of this discovery are still being tentatively interpreted, they also raise doubts about the optimistic narratives on employment generation through festivals, emphasizing the need to consider both the quantity and quality of employment.

Theoretical Implications

The conclusions have implications for festival tourism theory in some ways. First, they find that the growth-through-export assumption from the economic base theory is confirmed at the aggregate level. However, the distributional

implication of the economic base theory is much more complex. Fests produce revenues outside of the community; however, the revenues are not spread evenly, potentially exacerbating inequality.

Second, the findings broaden stakeholder theory by demonstrating that the experiences of different stakeholder groups regarding the effects of festivals differ significantly from one another. Accommodation and food service units, businesses in central areas, and large companies are considered "winners." In contrast, small businesses, the periphery, and the retail sectors experience little or no growth. This heterogeneity suggests that stakeholder analysis needs to disaggregate a large category in order to be meaningful.

Third, the results are broadly consistent with the spatial economy perspective, which argues that location is essential because behaviors, such as activities, tend to cluster. The crowds, infrastructure, and geography had a profound impact on people's experiences of festivals, demonstrating that the way festival planners organize the territory can be an effective mechanism for distributing these benefits.

Practical Implications

The results have several implications for the practical use of this research in the area of festivals and policies. First, spatial inequality requires the use of designed interventions. Ways to do this might be: (1) satellite venues in peripheral areas to spread out visitor flows; (2) infrastructure (roads, signage, public facilities) investment in under-supplied areas; (3) shuttle services between peripheral areas and main venues; (4) marketing peripheral area attractions and businesses to festival visitors.

Second, training and development opportunities offered through festivals can be utilized by small businesses. Such interventions could include marketing, customer service, and financial management training; access to funds to purchase additional stock; advice on organizing festivals and understanding the demographics of festival attendees; and simple web portals where small businesses can collaborate to advertise to targeted visitors.

Third is to make jobs better. We should ensure that people receive the minimum wage, have clear contracts, have access to more social security, and provide opportunities to transition from short-term to long-term employment in the tourism sector. This can be done through teaching skills and helping people find jobs.

Fourth, through closer integration of the local economy, there is likely to be less leakage of money out of the region and increased value-added. The suggested interventions are attracting first festival suppliers from the local market, supporting local producers to address the demand for festival inputs, and developing local capacities to produce specialty inputs that are currently imported.

Fifth, extending festival benefits in time and space - the development of the festival brand of products that are available throughout the year. As a City of Flowers, Tomohon can expand its agricultural, horticultural, and cultural tourism sectors, among others. Encourage public participation and maintain long-term economic growth, rather than relying on short-term tourism.

1. Conclusion

We examined the impact of the Tomohon International Flower Festival (TIFF) on the Local economy of Tomohon, Indonesia. The festival generated IDR 142.7 billion (approximately \$9.5 million), accounting for approximately 2.8% of the city's annual budget. A vast majority of this cash was from tourists, which increased the income of local firms and generated additional jobs. The study concludes that cultural festivals are an instrument in economic development in developing countries.

However, the study demonstrates that the benefits of the partnerships are not distributed evenly. The map shows that firms within 2 km of the festival sites triumphed three times as often as those away from the sites, and a Gini coefficient of 0.487 suggests that the advantages are concentrated rather than evenly distributed. Sectoral differences revealed that the accommodation and food service sectors received disproportionately large proportions of visitor spending while the

size of the business and prior festival experience as well as the Employment generation, while rejuvenating in terms of quantity (1 847 jobs) as well as local contents (78.9%), presented worrying features from a qualitative point of view, such as wages below minimum wage, little formalization and precarious working conditions.

These findings contribute to the festival tourism literature by demonstrating that, although the economic benefits of tourism events are substantial in terms of aggregate economic gain, the relational dimensions of distributional relationships may perpetuate or exacerbate existing spatial, sectoral, and scale-based inequalities. The study goes beyond the developed country context. It is involved in building a body of knowledge on the impacts of festivals in emerging countries, but using Indonesia as an example. Methodologically, the study can be viewed as a mixed-methods approach, which could aid in determining the magnitude of impact and provide a detailed inquiry into vasculo-centric and distributional mechanisms, as well as the experience of the interested party, with a focus on the importance of integrative study designs.

"And one should allow that there are always limitations." First, the study measured the short-term impacts at and immediately after the festival; longer-term effects are unexplored. Second, while the sample does a reasonable job of representing all those in the supply chain, it may not give a complete picture of stakeholder experiences - particularly those of operators in the informal sector and marginalized groups. Third, the negative estimation of innovation's economic impact, using conservative multiplier coefficients from existing studies, would make the brand-specific primary input decision-making for Tomohon more accurate. Fourth, the research focused on only one festival in one place, which makes it specific and thus limits its generalizability.

Future research can overcome these limitations by incorporating longitudinal research designs over several years, increasing sample sizes to include marginalized stakeholder groups, estimating primary spillovers through the increased use of extensive economic surveys, and conducting multiple studies in festivals/rural areas. Furthermore, considering alternative ways in which benefits can be shared more equitably, such as through infrastructure development, training and full engagement in the planning process, would be insightful in guiding development led by festivals.

Despite these limitations, this study has its own informational and significant aspects that can be useful for festival planning and policy development. Results show that to maximize the contribution of festivals to local economic growth, it is necessary to delve deeper into the distribution dynamics of festival impacts, rather than focusing merely on the aggregate measure of festival impacts. Any such festivals must be managed in a manner that benefits stakeholders beyond the immediate one and also have scope for the development of local areas through conscious interventions, including spatial planning for visitor distribution, building the capacity of SMEs, improving job quality, and fostering economic linkages. With the growing number of tourism festivals as development strategies around the world, the problem of fair distribution of their financial gains is not only an empirical but also an ethical one.

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References

Akhundova, A. (2024). Role of festivals in stimulating the development of event tourism. *Theoretical and Practical Research in Economic Fields (TPREF)*, 15(2 (30)), 277–287.

- Almathami, R., Khoo-Lattimore, C., & Yang, E. C. L. (2022). Exploring the challenges for women working in the event and festival sector in the Kingdom of Saudi Arabia. *Tourism Recreation Research*, 47(1), 47–61. <https://doi.org/10.1080/02508281.2020.1821329>
- Baixinho, A., Santos, C., Couto, G., Albergaria, I. S. De, Sampaio, L., Dami, P., Maria, R., & Simas, N. (2020). *Creative Tourism on Islands : A Review of the Literature*. 2000, 1–25.
- Baldi, L., Peri, M., Baldi, G., & Trentinaglia, M. T. (2022). Economic impact of an international musical event in a small destination: what benefits for local and rural development? *Event Management*, 26(2), 419–436.
- Baum, T. (2019). *Tourism employment paradoxes , 1946 – 2095 : a perspective article*.
- Chaitanya, A. . K., & Swain, S. K. (2025). A comprehensive literature review of theoretical and empirical aspects of economic linkages in tourism destinations. October. <https://doi.org/10.1108/TRC-12-2024-0061>
- Chen, Z., & Yu, T. (2025). *Festivals and digitalisation : a critique of the literature*. 6(1), 2–17. <https://doi.org/10.1108/TRC-05-2024-0022>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed.). Sage.
- Dashper, K., & Finkel, R. (2020). “Doing gender” in critical event studies: a dual agenda for research. *International Journal of Event and Festival Management*, 12(1), 70–84. <https://doi.org/10.1108/IJEFM-03-2020-0014>
- Davies, K., Matthews, N., Gouthro, M. B., & Richards, V. (2025). Exploring solutions for inclusivity to UK music festivals for people on low incomes through the lens of social tourism. *International Journal of Event and Festival Management*, 16(4), 530–550. <https://doi.org/10.1108/IJEFM-11-2024-0150>
- Doe, F., & Preko, A. (2025). *Festival tourism and socioeconomic development : case of Kwahu traditional areas of Ghana*. 36(1), 174–192. <https://doi.org/10.1108/IHR-09-2020-0060>
- Dwyer, L., Forsyth, P., & Dwyer, W. (2020). *Tourism economics and policy* (Vol. 5). Channel View Publications.
- Festivals Edinburgh. (2023). *Economic Impact of the Edinburgh Festivals*. June.
- Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving Integration in Mixed Methods Designs—Principles and Practices. *Health Services Research*, 48(6pt2), 2134–2156. <https://doi.org/https://doi.org/10.1111/1475-6773.12117>
- Getz, D. (2020). Event studies. In *The Routledge handbook of events* (pp. 31–56). Routledge.
- Getz, D., & Page, S. J. (2024). *Event Studies: Theory and Management for Planned Events*. Taylor & Francis. <https://books.google.co.id/books?id=677mEAAAQBAJ>
- Jeong, M., & Shin, H. H. (2020). Tourists’ Experiences with Smart Tourism Technology at Smart Destinations and Their Behavior Intentions. *Journal of Travel Research*, 59(8), 1464–1477. <https://doi.org/10.1177/0047287519883034>
- Krugman, P. (1991). Increasing Returns and Economic Geography. *Journal of Political Economy*, 99(3), 483–499. <http://www.jstor.org/stable/2937739>
- Liang, S., Li, J., & Xu, S. (2025). Residents’ perceptions of impacts and support for sports events: A meta-analysis based on social exchange theory and triple bottom line. *Journal of Leisure Research*, 0(0), 1–28. <https://doi.org/10.1080/00222216.2025.2478197>
- Mair, J., Chien, P. M., Kelly, S. J., Derrington, S., Mair, J., Chien, P. M., Kelly, S. J., Derrington, S., Mair, J., Chien, P. M., Kelly, S. J., & Derrington, S. (2021). *Social impacts of mega-events : a systematic narrative review and research agenda and research agenda*. <https://doi.org/10.1080/09669582.2020.1870989>
- Mishra, G. (2025). *EXPLORING THE ROLE OF CULTURAL FESTIVALS IN CONNECTING RURAL AND URBAN TOURISM IN RAJASTHAN*. 13(06), 1256–1267. <https://doi.org/10.21474/IJAR01/21189>
- Montero, E., & Yang, D. (2022). Religious festivals and economic development: Evidence from the timing of mexican saint day festivals. *American Economic Review*, 112(10), 3176–3214.
- Ormerod, N., & Wood, E. H. (2021). *Regional Event Tourism Funding Policies : A Strategic-Relational Critique of Current Practice*. <https://doi.org/10.1177/0047287520913631>
- Pedauga, L. E., Pardo-Fanjul, A., Redondo, J. C., & Izquierdo, J. M. (2022). Assessing the economic contribution of sports tourism events: A regional social accounting matrix analysis approach. *Tourism Economics*, 28(3), 599–620. <https://doi.org/10.1177/1354816620975656>

- Pereira, L., Jer, C., Sempiterno, M., Lopes, R., & Dias, Á. (2021). *Events and Festivals Contribution for Local Sustainability*. 1–8.
- Power, S., Di Domenico, M., & Miller, G. (2022). *ATLAS Annual Conference 2022 Tourism 22 and Beyond - What Matters Now to the Global Tourist? Cork, Ireland 6-9 September, 2022 Abstract Book*.
- Quinn, B. (2024). Can community festivals make urban places more hospitable? *Hospitality & Society*, 14(2), 177–195.
- Quinn, B., Colombo, A., Lindström, K., McGillivray, D., & Smith, A. (2021). Festivals, public space and cultural inclusion: public policy insights. *Journal of Sustainable Tourism*, 29(11–12), 1875–1893. <https://doi.org/10.1080/09669582.2020.1858090>
- Rogerson, J. M., Africa, S., Mashapa, M. M., Africa, S., & Rogerson, C. M. (2021). *Covid- 19 and Local Business Responses : Evidence from South Africa ' s most Tourism-Dependent Locality*. 10(1), 388–405.
- Sastri, R., Li, F., Setiyawan, A., & Monika, A. K. (2024). Measuring the multiplier effect of regional tourism and its spatial distribution in Indonesia before and after the COVID-19. *Kybernetes*, 54(4), 2087–2110. <https://doi.org/10.1108/K-09-2023-1843>
- Snowball, J. D., & Antrobus, G. G. (2021). Festival value in multicultural contexts: City festivals in South Africa. *Tourism Economics*, 27(6), 1256–1275. <https://doi.org/10.1177/1354816620932808>
- Son, I. S., Krolkowski, C., Rentschler, R., & Huang, S. S. (2022). Utilizing events for placemaking of precincts and main streets: Current state and critical success factors. *Event Management*, 26(2), 223–235.
- Subramaniam, Y. (2025). *Tourism and income inequality*. 2(2), 181–194. <https://doi.org/10.1108/JBSED-07-2021-0102>
- Tyrrell, T. J., & Johnston, R. J. (2001). A Framework for Assessing Direct Economic Impacts of Tourist Events: Distinguishing Origins, Destinations, and Causes of Expenditures. *Journal of Travel Research*, 40(1), 94–100. <https://doi.org/10.1177/004728750104000112>
- Vaughan, J., Maund, K., Gajendran, T., Lloyd, J., Smith, C., & Cohen, M. (2021). Determining and representing value in creative placemaking. *Journal of Place Management and Development*, 14(4), 430–445. <https://doi.org/10.1108/JPMD-07-2019-0069>
- Weber, K., & Hsu, C. H. C. (2021). Banding together in a festival context: Examining effects of a joint-stakeholder external service recovery. *Tourism Management*, 83, 104204. <https://doi.org/https://doi.org/10.1016/j.tourman.2020.104204>
- Wen, S., Cai, X., & Li, J. (Justin). (2021). Pro-Poor Tourism and Local Practices: An Empirical Study of an Autonomous County in China. *Sage Open*, 11(2), 21582440211022740. <https://doi.org/10.1177/21582440211022740>
- Yemoh, M., & Yemoh, V. (2021). *Sustainable Strategies to Alleviate the Impact of the Seasonal Employment Scheme on Labour Market and Private Sector Businesses : Evidence from a Low-Middle Income Economy in the Pacific*. 2007, 622–629. <https://doi.org/10.4236/jhrss.2021.94039>
- Zhai, S., Li, R., & Yang, Y. (2023). Studying environmental and economic considerations on tourism activities in achieving sustainable development goals: implications for sustainability. *Environmental Science and Pollution Research*, 30(60), 125774–125789. <https://doi.org/10.1007/s11356-023-30803-2>