

## RESILIENCE OF PHILIPPINE TOURISM TO SPORADIC INDUSTRY SHOCKS

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### ABSTRACT

*The study addresses the issue of resilience of the Philippine tourism industry to both natural and anthropogenic calamities. It attempts to identify factors that contribute to this resilience using a historico-analytic approach by data mining through past records of tourism performance. The study uses the records of the Department of Tourism (DOT) of the Philippines and the National Disaster Risk Reduction Management (NDRRMC). The results show that the tourism industry's resilience to sporadic natural disaster is quicker than anthropogenic disaster. Proper implementation of security service by the Philippine government should be enacted.*

**Keywords:** *Philippine tourism, terrorism, historico-analytic, anthropogenic disaster*

### 1.0 Introduction

Philippine tourism industry accounts for 19.7% of the country's gross domestic product (GDP) in 2016 and, as such, deserves attention. The vigour and vitality of the tourism industry, however, is determined not only by the quality of tourism destinations and the national strategies adopted for tourism promotion but also by exogenous factors that are often beyond the control of government such as the occurrence of natural and anthropogenic calamities. The industry resilience is measured against its ability to withstand and/or bounce base from temporary setbacks such as these.

Santana – Gallego et al. (2016) expounded on the effects of terrorism, crime and corruption on tourism and showed that the negative effects of these on tourism tended to be felt for a longer period when they become persistent. Sporadic bursts of violence on a non-regular basis have transit impact on tourism. La Grave (2016) provided a more thought-provoking question: "How Long Do Tourists Stay

Away from a Location After it has been Attacked?”. By carefully analyzing past terrorist activities in selected countries, the author concluded that an average tourist stays away from the location for a period of four months. Celebrado (2013) made an incisive analysis on terrorism in the Philippines as this impact on the socio-economic development of the country e.g the quality of education (Tan and Decena, 2017).

While man-made or anthropogenic disasters do have transient effects on local tourism, the intensity, damage and casualty of natural calamities (Lapinig and Bolante, 2017) also contributes negatively to the influx of tourist arrival. Pierre et. al. (2014) demonstrated that natural calamities have a far more fleeting effect on tourism in the sense that either these are completely ignored by tourists or they trek back to the tourist destination a mere month after the calamity e.g the earthquake in Bohol in 2013 (Padua, et al. 2017). In this paper, the researchers address the issue of resilience of the Philippine tourism industry to both natural and anthropogenic calamities. Further, the researchers attempt to identify factors that contribute to this resilience.

## 2.0 Conceptual Framework

The study rests on the idea that the effect of sporadic or transient shocks to the tourism industry performance is proportional to the frequency and magnitude of those shocks. Figure 1 illustrates the conceptual paradigm of the study:



Figure 1. Schematic Diagram of the Study.

The Tourism Industry Performance indicator is the number of tourist arrivals. The three-month average tourist arrivals prior to an event is a measure of the industry performance. Resilience is defined in terms of the number of months needed to reach the pre-shock levels of tourist arrival: the shorter it is, the more resilient is the tourism industry. In particular, if the resilience is zero, i.e. no lag time to reach the pre-shock performance level, then the industry is not affected by the event at all.

Given a sporadic shock, two (2) components of the shock were considered: its frequency and its magnitude. The researchers define a shock as a strictly sporadic shock if it happens 50% or less of the time over a 10-year period; otherwise, the shock is a regular occurring shock or non-sporadic shock. In terms of magnitude, the shock is of low-intensity if it involves no loss of life but only damage to physical properties. Otherwise, the shock is of high intensity.

### 3.0 Research Design and Method

The study is mainly descriptive for describing the status of tourism industry performance in the Philippines under condition of transient shocks. The approach, however, is historico-analytic by which the researchers analyze past records of tourism performance at selected time points in the past. Data were obtained from the records of the Department of Tourism (DOT) of the Philippines and the National Disaster Risk Reduction Management (NDRRMC) as far back on the year 2013.

Each industry shock noted is analyzed in terms of: (a) pre-shock tourist arrivals, (b) frequency and magnitude of the shock, (c) post-shock tourist arrivals, and (d) resilience measure as previously described.

### 4.0 Results and Discussion

The industry shocks are analyzed in chronological order. The side tables presented summarize the information needed for appropriate interpretation.

Table 1. Typhoon Yolanda

<p>Date: November 2013  Shock Classification: Natural Calamity  Pre-Shock Arrivals Average: 382, 022  Frequency of Shock: Often or Regular  Magnitude of Shock: High Intensity  Post-Shock Tourists Arrivals: 361,271  Resilience: 1 month</p>
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Table 1 shows the parameters for analysis of Typhoon Yolanda. Super-typhoon Yolanda was a category IV tropical depression which devastated Tacloban City leaving the city in ruins. The super-typhoon claim the lives of over 6,300 individuals across the country. Since

tropical depressions are regularly occurring phenomenon in the country, the level of preparations was rather low so that everyone was caught by surprise. Prior to the calamity, average tourist arrivals posted a hefty 382, 022 tourists which took a dive to 361,271 after the incident. One month after the event, however, the influx of tourist arrivals went back to normal.

Table 2 shows the parameter of a similar natural calamity which struck the island of Bohol with a magnitude 7.2 earthquake a month after Yolanda. Unlike tropical depressions, earthquakes do not occur regularly in the Philippines. This was a high magnitude industry shock claiming the lives of 227 people. Figures reveal a downward trend of

<p>Table 2. Bohol Earthquake</p> <p>Date: October 15, 2015                  Shock Classification: Natural Calamity                  Pre-Shock Arrivals Average:382, 022                  Frequency of Shock: Sporadic                  Magnitude of Shock: High Intensity                  Post-Shock Tourists Arrivals:361, 271                  Resilience: 2 months</p>
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tourist arrivals noted after the shock. However, because of Bohol’s natural allure to foreign tourists, it only took two (2) months to bounce back to pre-shock levels of over 382,002 visitors for this particular destination.

<p>Table 4. Zamboang Siege</p> <p>Date: September 09, 2013                  Shock Classification:Anthropogenic Disaster                  Pre-Shock Arrivals Average: 382,022                  Frequency of Shock:Sporadic                  Magnitude of Shock: High Intensity                  Post-Shock Tourists Arrivals: 328, 114                  Resilience: 3 months</p>
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Table 3 shows a parameter for analysis of an anthropogenic disaster in Zamboanga City. The crisis arose when Moro National Liberation Front (MNLF) forcefully took over the city, hostage residents of several barangays and engaged the Special Operations Group of the Philippine Navy in a fire fight which left about 240 the death. A decrease of 16,

973 tourist arrivals was observed on the tourism industry’s normal performance a month after the conflict took place yet return to its normal state in 3 months.

Table 4 shows a parameter of a comparable anthropogenic disaster in the industry when a local terror group Abu Sayyaf engage in a fire fight with government security forces in the tourist island of Bohol. The incident claiming the lives of 17 people and displaced about 700 civilians cause a travel ban issued by the United

Table 4. Bohol Clash

Date: April 2017  
 Shock Classification: Anthropogenic Disaster  
 Pre-Shock Arrivals Average: 574, 065  
 Frequency of Shock: Sporadic  
 Magnitude of Shock: High Intensity  
 Post-Shock Tourists Arrivals: 565,098  
 Resilience: 3 months

States Embassy on Sunday and the Australian Embassy on its citizens. The setback however took only three months to rebound considering the island is among the top picks of travellers.

Table 5. Mamasapano Encounter

Date: January 25, 2015  
 Shock Classification: Anthropogenic Disaster  
 Pre-Shock Arrivals Average: 487, 654  
 Frequency of Shock: Sporadic  
 Magnitude of Shock: High Intensity  
 Post-Shock Tourists Arrivals: 456, 524  
 Resilience: 5 months

Table 5 shows a parameter of a similar man-made disaster and relevant encounter of government troops, Philippine National Police Special Action Force (PNP SAF) and Moro Islamic Liberation Front (MILF). The clash in Mamasapano, Maguindanao is a high magnitude industry shock killing 44 of the PNP SAF members. Average

tourist arrival is at 487, 654 prior to the anthropogenic industry shock and decline to 456, 524 after the incident. It took five months for the tourism industry to fully recover from such condition.

**Discussion**

The main determinant of tourism industry resilience is the nature of the shock that it experiences. The industry is more resilient to natural calamities than to anthropogenic disaster. In particular, for natural disasters, a rebound period of 2 to 3 months is all it takes for the industry to recover depending on the frequency and magnitude of the shock. Regularly occurring natural disaster of low magnitude (no

lives lost) such as typhoons have no bearing on the industry performance but when the same shocks have high magnitude (lives lost), the industry responds adversely as indicated by a sudden drop in tourist arrivals. Natural disasters which are sporadic (seldom observed), even if with high magnitude, do not significantly affect the resilience of the industry. For instance, earthquake and volcanic eruption are very seldom observed but have high cost to lives and properties, affect the industry performance for a short period of time only.

In contrast, anthropogenic disasters such as terrorism, spate of kidnapping and wide-spread crimes have the general effect of sowing fear and terror among the tourists and, thus, have a far greater impact on industry performance. It takes longer period of time for the industry to recover from such shocks despite attempts for tourism promotion. Tourists, generally, want to be assured of their safety and national government policies in this direction needs to be clear and re-assuring.

## 5.0 Conclusion

The tourism industry is affected with a variety of factors, including the stability of the country; whether such is caused by anthropogenic calamity or a natural catastrophe. The results show that the tourism industry's resilience to sporadic natural disaster is quicker than anthropogenic disaster. Travellers, apart from their interests in tourist attractions, needs a guarantee of security and protection in a destination of interest. Proper implementation of security service by the Philippine government should be enacted.

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