

the magnitude of those registered in response to consumer boycotts (Pruitt and Friedman, 1986) over the same event horizon (event days $t = 0$ and 1).

Table 4 Market value reductions resulting from various samples of hospitality homicides

Sample	Mean cumulative abnormal return (t = 0 and 1)	Mean company market value	Mean hospitality homicide value reduction
Full sample	-0.68%*	\$18,331,279,410	(\$124,652,700)
Restaurant sample	-1.10%**	\$28,987,577,730	(\$318,863,300)
Random attack sample	-1.45%**	\$20,591,620,690	(\$298,578,500)

*Significant at the 5 percent level, two-tailed test.

**Significant at the 1 percent level, two-tailed test.

8. Conclusions

This study has presented an analysis of the stock price impacts of 73 hospitality homicides over the years from 2001 to 2015. Using the well-established “event study” methodology—which adjusts for changes in the overall stock market and risk levels of each individual hospitality firm—the study documents both statistically and economically significant reductions in stock prices for some, but not all, hospitality sector companies around the time of the fatal attacks. Specifically, whereas no evidence is presented in the study that attacks targeting hotels, motels, cruise ships, theaters, or casinos result in reductions in stock prices for the parent companies, restaurants experience share price losses similar to those previously observed in response to product recall announcements.

Further bifurcation of the sample into “random” homicides (where there was no prior relationship between the killer and the murdered individuals or the targeted establishment) or “affiliated” homicides (homicides where there was a prior relationship) demonstrate striking evidence that stock market participants respond much more negatively to random attacks. Indeed, the stock price reductions following random attacks are virtually identical to those previously associated with major consumer boycotts.

Multiple regressions of the firm-specific stock price declines and select homicide-specific variables further clarify the importance of the random nature of the homicides as the main driver in the observed results. Given that mean equity reductions observed in this analysis to the studied homicides ranged between \$125 million and \$319 million—depending upon the specific sample studied—it is clear that the impact of the events extends far beyond those directly affected by the tragedies.¹⁵

As noted in the introduction, since hospitality sector businesses are inherently “soft” targets, striking an appropriate balance between the security measures necessary to minimize the likelihood of an attack—in conjunction with the losses likely to accrue to the enterprise should one occur—and the losses in revenue virtually certain to arise from designing and building more secure, but far less inviting (“fortress”) properties will prove difficult. In an article in *The New York Times* (Hsu 2017) Mac Segal—a security consultant for executive protection company AS Solution—discusses the steps hotel chains may eventually be forced to make in the wake of the Las Vegas Mandalay Bay tragedy. Noting

¹⁵ It must be emphasized that, despite the magnitude of the economic carnage associated with the 73 studied homicides, there can be no equivalence between the mere monetary losses experienced by hospitality sector shareholders and the human tragedies experienced by the families and friends of those killed, injured, and/or psychologically scarred by the senseless attacks.

