Article Title
Estimating the effect of racino restaurant sales on slot wagering volume

Citation

Abstract
The purpose of this paper is to estimate the effects of onsite restaurant business volume on slot machine gaming volume at a Midwestern racino property. The results provide management with critical estimates for use in determining the overall value of the restaurant space. Additionally, operators are able to examine whether it makes sense to operate restaurants at a loss, based on the notion that the dining outlets are contributing to gaming volumes.

Methods
Time series multiple regression analysis is used to analyze daily performance data, providing an estimate of the change in the dollar amount of slot wagers resulting from a one-unit increase in the dollar value of restaurant sales.

Results
The theoretical model advanced herein explained 81 percent of the variation in the aggregate, daily dollar value of slot wagers. A one-dollar increase in the variable representing overall restaurant sales produced a $91 increase in slot wagers (or $7.44 in slot win).

Conclusion
With regard to the model effect of SALES, the null hypothesis was rejected. The statistical significance of SALES supported the notion of a positive relationship between restaurant sales and coin-in, within the racino operating environment. While contrary to the findings of Lucas and Brewer (2001), this result was consistent with the bulk of existing studies from similar casino data sets (Lucas and Santos, 2003; Tanford and Lucas, 2011; Tanford and Suh, 2011; Suh et al., 2012). Given the paucity of existing empirical research related to the indirect effects of loss-leader restaurant operations, this study adds a valuable result to the growing stream of research. In general, the results associated with the THU, FRI, and SAT variables were consistent with those produced by previous researchers (Lucas and Santos, 2003; Tanford and Lucas, 2011; Tanford and Suh, 2011; Suh et al., 2012). The weekend days represent increases in available leisure time and are therefore expected to correlate with increases in gaming business volumes. Although not a weekend day *per se*, Thursday has often been associated with coin-in levels in excess of the early-week days such as Monday, Tuesday, and Wednesday (Lucas and Brewer, 2001; Lucas and Santos, 2003; Suh et al., 2012; Tanford and Lucas, 2011). However, all of these same studies included models that produced significant
and positive model effects for the variable representing Sundays. The results of the current study were not consistent with this robust finding. Like weekends, holiday variables represent periods of increased leisure time. Therefore, it would be reasonable to expect increases in gaming activity during these periods. However, in the current study, the following holiday periods failed to produce a significant effect on aggregate daily coin-in: New Year's Day, Martin Luther King Day, Presidents' Day, and Memorial Day. While this outcome confounded the results of the three coin-in models advanced in Lucas and Santos (2003), it was consistent with the coin-in models produced by other researchers (Lucas and Brewer, 2001; Suh et al., 2012; Tanford and Lucas, 2011).