

## Reply to referee 1

### *Referee1:*

**1. On Page 14, in Equation (4), the authors design a market model to estimate the expected return of stocks. It includes a lagged market benchmark  $-1$ . I suggest that the authors add a brief explanation on the selection of lag length. In the paragraph above on Page 14, the test windows for the event study are set up as  $[-3, 3]$ . So it seems natural to select the lag length as three. The authors can briefly explain why the final model is chosen as one-lagged.**

**Answer:** Here we would like to take this opportunity to give more detailed explanation about "the lagged term of the market benchmark" and "the lagged effect of the announcement". They are actually two different types of lagged effects involved in event study.

#### 1) the lagged term of the market benchmark

At Line 2 of Page 15, our manuscript explains that " $R_{m,t-1}$  is a **lagged term of the market benchmark** to capture the event impacts that have not yet been fully reflected in the stock price on date  $t$ ."

Because it is possible that a semi-strong market does not reflect the full effect of inflow information in a highly efficient and timely way, we added a lagged term of the market benchmark to reflect this general market pattern, accounting for non-synchronous trading (Binder, 1985). This modified event study model has also been adopted in existing literature, for example, Hartley (2012). Meanwhile, MacKinlay (1997) indicates that, generally, the gains from employing multifactor models for event studies are limited, because the marginal explanatory power of additional factors is small. Consistent with the findings in MacKinlay (1997), our test results show that all coefficients of the lagged term of the market benchmark was insignificant.

#### 2) the lagged effect of the announcement

If a market can not reflect the event information in a timely way, for example, the market investors need more time to analyze the expected impacts, there could be **lagged effects of an announcement. Setting  $[0, 1]$ ,  $[0, 2]$  or  $[0, 3]$  type of test windows are to capture the lagged effects of the announcement.**

Even though some existing studies select a test window of  $[-3, 3]$ , we did not adopt this type of test window in this study. Following a short window test approach, we focus on the abnormal returns **on the event date only**, i.e. a ONE-DAY window.

The reasons for adopting this short window method are:

A) The short window test represents the "cleanest evidence on market efficiency" (Tomlin, 2009; Fama, 1991) because it can capture the majority of the stock market reactions, while reduce the potential confounding events interfering

with the market's response.

B) Before the announcement of smoking bans, the investors have well studied the potential impacts on the casino, though they weren't sure whether the Macao government eventually would adopt the smoking ban or not.

In short, in this study we used short window (a ONE-DAY window) test approach, focusing on the abnormal returns **on the event date only**. Together, the one-day lagged term of the market return in this study is well justified.

Hope our discussion above has been sufficient to address your concern.

**Reference:**

Binder, J. J. (1985). On the use of the multivariate regression model in event studies. *Journal of Accounting Research*, 370-383.

Fama, E. F. (1991). Efficient capital markets: II. *The Journal of Finance*, 46(5), 1575-1617.

MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of Economic Literature*, , 13-39.

Hartley, J. (2012). Health Care Reform and Health Care Stocks: Evidence from the Affordable Care Act Supreme Court Ruling. *Becker Friedman Institute for Research in Economics Working Paper*, (2012-009).

Tomlin, J. T. (2009). The impact of smoking bans on the hospitality industry: New evidence from stock market returns. *The BE Journal of Economic Analysis & Policy*, 9(1)

**2. The paper introduces the data on Page 17. But it does not tell us at which stock exchange venue the five firms other than Melco Crown go public. Since the authors use Hang Seng Index, I assume the five firms are listed at Hong Kong.**

**Answer:** Yes, the five casino firms operating in Macau are all listed on Hong Kong Stock Exchange. Thank you for pointing this out and we will clarify this in our final manuscript.

**3. In addition, the authors mentioned they use "NASDAQ index" (Page 18). It is ambiguous and confusing because NASDAQ has diverse indices. So the study needs to specify the exact name of the selected stock index.**

**Answer:** Yes, it is necessary and useful to specify the exact name of the selected stock index. We will indicate **NASDAQ Composite Index (CCMP)** in in our final manuscript.

***4. In Table 2 (Page 17), the authors provide summarized values about the returns and market values across the six firms. I suggest the authors provide descriptive statistics about the outstanding shares and stock prices for six firms as well, which can give more information on the six firms.***

**Answer:** Yes, we can provided those information as appendix in our final modified manuscript.