

A Better Tokyo Dome? A Note on the Mitsui Fudosan Tender Offer Bid for Tokyo Dome Corporation

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I Introduction

Tokyo Dome, home to the Yomiuri Giants baseball team, is one of the only large scale air inflated sports facilities in the world (Viquez, 2020). Conveniently located in the heart of the Suidobashi district in central Tokyo, the 57,000-capacity stadium stands as the centerpiece of Tokyo Dome City, a 130,000 square meter sports and entertainment complex owned and operated by the Tokyo Dome Corporation. Tokyo Dome Corp. was established under its former corporate name, Korakuen Stadium Corporation, and first listed on the Tokyo Stock Exchange in 1949. The Korakuen Stadium opened its gates to the public in 1937 and served as the home field to Korakuen Baseball club and eventually the Giants until it was replaced by the newly constructed Tokyo Dome in 1988. Seeking to realize their vision of integrating sports and entertainment, Korakuen Stadium Corp. launched a project in the 1950s to build the Korakuen Amusement Park in the area adjacent to the stadium. This laid the groundwork for a more ambitious integration of sports and entertainment, evident today in Tokyo Dome City. Along with its iconic Dome, the Tokyo Dome City complex has expanded to include other sports facilities, event halls, food and retail

outlets, a hotel and spa, an amusement park, and the Japanese Baseball Hall of Fame (Tokyo Dome, 2020b). Tokyo Dome City represents the culmination of a long term transformation from its precursor, the historic Korakuen Stadium and its surrounding facilities.

In November of 2020, Mitsui Fudosan, a major real estate development company, announced its tender offer bid (TOB) for Tokyo Dome Corp., the parent company of Tokyo Dome City and other sports facilities, shopping centers and hotels in Japan. The business media portrayed this as a friendly or “white-knight” bid by Mitsui Fudosan to fend off increasingly aggressive activist overtures by Oasis Management Company (Oasis), a Hong Kong based fund. This paper provides preliminary empirical evidence on how the market perceived and reacted to the TOB for Tokyo Dome Corp. To this end, we employed an event study to gauge the impact of the TOB announcement on stock prices of both the acquirer and target. We then turn to an Economic Value Added (EVA) analysis which provides a practical framework grounded in finance theory to assess whether the claims of operational mismanagement made by Oasis are supported by historical financial data.

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II The Tender Offer Bid for Tokyo Dome Corporation

The Mitsui Fudosan TOB for Tokyo Dome corporation was announced on 27 November 2020. The tender offer commenced 29 November 2020 and ended 18 January 2021 in accordance with the duration guidelines set by the Securities and Exchange Act of 1971 stipulating the offer be set at 20 to 60 days from the public notice of the offer (Komoto, 2000). Based on the terms of the TOB, Mitsui Fudosan would purchase all tendered shares of Tokyo Dome Corp. at 1,300 yen per share, subject to the condition of the minimum purchase requirement of 61,805,100, representing two-thirds of the voting rights of the firm, being met. At the close of the TOB, the final tally of shares tendered stood at 78,737,609 shares or 85 percent of the shares outstanding (Tokyo Dome, 2021).

On 30 January 2020, nearly a year prior to the settlement of the Mitsui Fudosan TOB, Oasis

Management holding a 9.61 percent stake in the share of Tokyo Dome Corp., submitted a preliminary proposal to purchase all of Tokyo Dome Corp. shares at 1,300 yen per share. Shortly thereafter, Oasis publicly released a comprehensive plan to renovate the aging stadium and its adjacent entertainment and hotel facilities. Titled “A Better Tokyo Dome,” the plan criticized areas that Oasis perceived as mismanaged opportunities for revenue and growth. The aged Dome offered room for improvement including digital infrastructure to boost sponsorship revenues as well as the potential sale of naming rights (Oasis, 2020). Meetings between Tokyo Dome Corp. and Oasis over the following months failed to reach a mutually agreeable outcome. The timeline of the events are summarized in Table 1.

In August 2020, Tokyo Dome Corp. management under increasing pressure from Oasis began soliciting business proposals including price and number shares to be purchased. Mitsui Fudosan proposed to purchase all outstanding Tokyo Dome Corp. shares and separately arranged

Table 1 *Timeline of Events*

January 30	Oasis approaches Tokyo Dome with preliminary offer of 1,300 yen per share
January 31	Oasis proposes “A Better Tokyo Dome”
February	Oasis and Tokyo Dome meet
June	Oasis and Tokyo Dome meet
July	Tokyo Dome, Yomiuri Shimbun, Yomiuri Giants hold joint press conference
August	Tokyo Dome reviews various proposals for TOB including Mitsui Fudosan
October 19	OASIS calls for an extraordinary general meeting (EGM) of shareholders to remove three Directors: T. Nagaoka, N. Mori, T. Akiyama
November 10	Announces EGM for December 17
November 12	Mitsui Fudosan proposes TOB at 1,200 yen with Yomiuri Shimbun Holdings
November 18	Revised proposal to 1,250 yen
November 24	Final proposal at 1,300 yen
November 26	Tokyo Dome accepts November 24 proposal at 1,300 yen
November 27	Officially Announce TOB for Tokyo Dome

Note: compiled by authors from press release (Tokyo Dome, 2020a).

to sell 20 percent of the acquired firm to the Yomiuri Shimbun Group, the owner of the Yomiuri Giants. This agreement effectively made Tokyo Dome Corp. a jointly operated subsidiary of a newly forged alliance between Yomiuri Shimbun and Mitsui Fudosan. By integrating the operations of the Yomiuri Giants baseball team with that of the stadium facilities, and leveraging Mitsui Fudosan's know-how in real estate development, they expected to capitalize on the potential synergy effects from "improving customer satisfaction and profitability" (Tokyo Dome, 2020a, p.13). Mitsui Fudosan's earlier development projects - the Mitsui Fudosan Sport Academy and Tokyo Midtown Hibiya project - afforded them unique insights into the development of "neighborhoods" centered around sports and entertainment. Coupled with the support of the Giants, one of the most marketable brands in Japanese professional sports, the acquisition and partnership presented an opportunity and challenge like no other.

The effort to modernize the 32 year old Dome would require significant investments to upgrade physical and digital infrastructure in order to improve the fan experience and profitability. The installing of LED sponsorship signage, implementing of new digital technology for large scale displays, and enhancing the viewing environment in hospitality areas should help boost revenue growth. The introduction of mobile order systems for food and beverage service, and high density Wi-Fi and 5G communications infrastructure should lay the foundation for greater opportunities for digital fan engagement (Tokyo Dome, 2020a).

The plan outlined in the Tokyo Dome Corp. press release of 27 November 2020 for renovating the Dome facilities is consistent with the Oasis business proposal (2020) with stadium naming rights standing out as the one major exception. Oasis (2020) estimated that the Tokyo Dome naming rights could generate an increase of 0.6 billion yen in annual profits. Oasis

envisioned a long term naming rights deal of 10 years or more, packaged together with exclusive benefits including hospitality related privileges such as tickets and premium seating, and additional opportunities to promote the products and services of the sponsoring company.

III Event Study

To assess the extent to which the news of the November 2020 TOB for Tokyo Dome Corp. is reflected in the market, we undertook an event study (Weston et al., 1998). The market model to obtain the abnormal returns is specified in equation (1) as

$$R_t = \beta_0 + \beta_M R_{Mt} + u_t \quad (1)$$

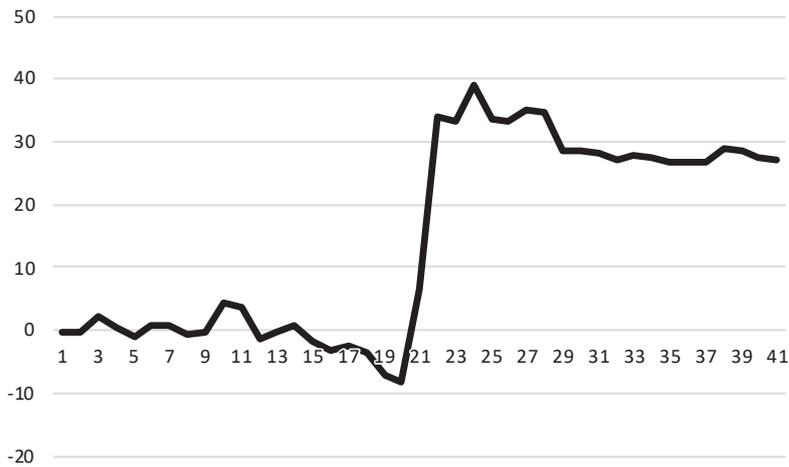
where R_t is the daily return for Tokyo Dome Corp. or Mitsui Fudosan, R_M is the proxy for the market, and u_t the error term for the t th observation. The TOPIX index was used as the proxy for the market. We estimated the market model over a sample ranging from 120 days prior to the event window from $t = -141$ days to $t = -21$ days for an estimation period of 6 months (assuming 20 trading days per month). The market betas for Tokyo Dome Corp. and Mitsui Fudosan were estimated at 1.42 ($p < 0.01$) and 1.64 ($p < 0.01$) with an adjusted R^2 of 0.46 and 0.53 respectively. The abnormal returns, AR_t , were then calculated (equation 2) for the period 20 days before and after the official announcement of the tender offer bid on 27 November 2020 ($t = -20$ to $t = +20$), giving us an event window of 41 days.

$$AR_t = R_t - (\hat{\beta}_0 + \hat{\beta}_M R_{Mt}) \quad (2)$$

$$CAR_t = \sum_{t=-20}^{t=+20} AR_t \quad (3)$$

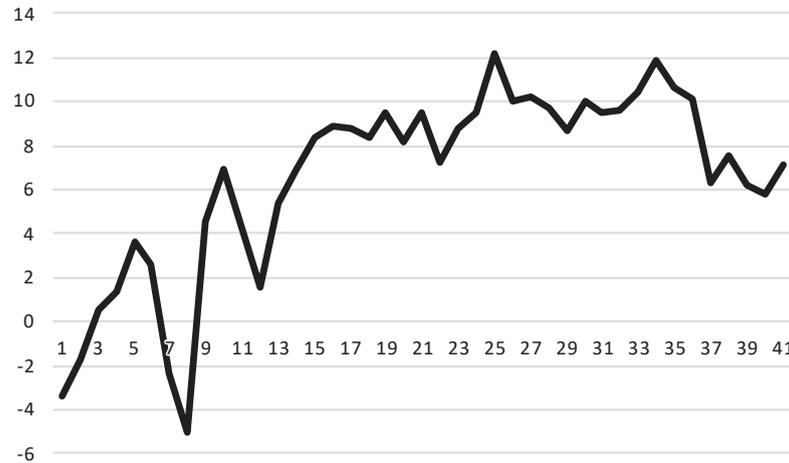
The cumulative abnormal returns (CAR) for Tokyo Dome Corp. (equation 3) over the 41 day event window are plotted in Figure 1. We ob-

Figure 1 CAR for Tokyo Dome ($t = -20$ to $t = +20$)



Note: announcement date is $t=21$ on timeline in the figure.

Figure 2 CAR for Mitsui Fudosan ($t = -20$ to $t = +20$)



Note: announcement date is $t=21$ on timeline in the figure.

serve a statistically significant spike in the CAR for Tokyo Dome Corp. at the announcement date of 27 November ($t=0$) suggesting the market reacted positively to the information of the TOB. The abnormal returns are reported for $t = -15$ to $t = +5$ in Table 2.

Interestingly, we did not observe an equivalent jump in the CAR for the bidder, Mitsui Fudosan, on the official announcement date (Figure 2). The abnormal return, however, was positive and statistically significant on 10 November ($t = -12$) when Tokyo Dome Corp. officially announced opposition to the Oasis proposal to re-

move its Directors (Table 2). The general pattern and trends observed for the CAR for both Tokyo Dome Corp. and Mitsui Fudosan were consistent with preliminary evidence provided by Komoto (2000) for a sample of 40 acquired companies and 24 acquirers in the 1990s and Iwai (2012) using a slightly updated data set of 298 target companies. These findings are also consistent with empirical research for the US market as summarized in Weston et al. (1998) and Gaughn (1999).

We also undertook an event study for Nippon TV Holdings since it controls the broadcasting

Table 2 Abnormal Returns (t=-15 to t=+5)

Time	Tokyo Dome		Mitsui Fudosan	
	Abnormal Return	t-statistic	Abnormal Return	t-statistic
t = -15	1.69	1.00	-0.98	0.57
t = -14	-0.002	0.001	-4.97	2.92*
t = -13	-1.49	0.88	-2.61	1.53
t = -12	0.46	0.27	9.50	5.59*
t = -11	4.51	2.68*	2.36	1.39
t = -10	-0.76	0.45	-2.67	1.56
t = -9	-4.93	2.92*	-2.65	1.55
t = -8	0.96	0.57	3.82	2.25
t = -7	1.19	0.71	1.54	0.90
t = -6	-2.57	1.54	1.41	0.83
t = -5	-1.20	0.71	0.50	0.29
t = -4	0.51	0.30	-0.05	0.03
t = -3	-1.07	0.63	-0.44	0.65
t = -2	-3.44	2.04	1.11	-0.73
t = -1	-1.24	0.74	-1.24	0.75
t = 0	14.74	8.75*	1.28	0.75
t = +1	27.67	16.42*	-2.27	1.33
t = +2	-0.93	0.55	1.59	0.93
t = +3	5.94	3.52*	0.64	0.37
t = +4	-5.66	3.36*	2.69	1.58
t = +5	-0.19	0.11	-2.15	1.26

Note: announcement date t=0 is 27 November 2020. *: p<0.01.

rights to the Yomiuri Giants baseball games. While CAR exhibits a negative trend in the event window, we observe an upward spike in abnormal returns on the date of the TOB announcement for Tokyo Dome Corp. and a relatively large positive abnormal return on 10 November as in the case for Mitsui Fudosan (Figure 3).

We also provide preliminary evidence of a time varying market beta especially around the announcement date. A constant correlation bivariate GARCH (1,1) model is estimated to obtain time varying betas (Bollerslev, 1990; Kroner & Sultan, 1993; Engle and Kroner, 1995). The mean equations in the GARCH model are

$$R_{TD,t} = \mu_{TD} + \varepsilon_{TD,t} \tag{4}$$

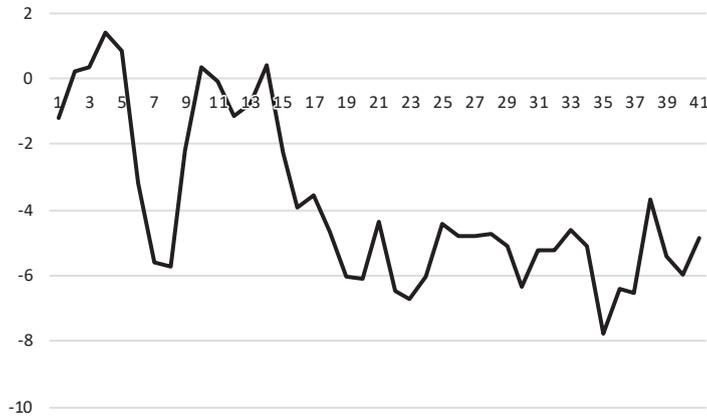
$$R_{MKT,t} = \mu_{MKT} + \varepsilon_{MKT,t} \tag{5}$$

where R_t is the daily return for Tokyo Dome Corp. stock (TD) and the TOPIX index (MKT), μ denotes a constant, and ε is a normally distributed error term. The conditional variance for the Tokyo Dome Corp. (TD) stock returns and TOPIX index (MKT) returns $H_{TD,t}^2$ and $H_{MKT,t}^2$ respectively, are given as

$$H_{TD,t}^2 = \omega_{TD} + \alpha_{TD}\varepsilon_{TD,t-1}^2 + \gamma_{TD}H_{TD,t-1}^2 \tag{6}$$

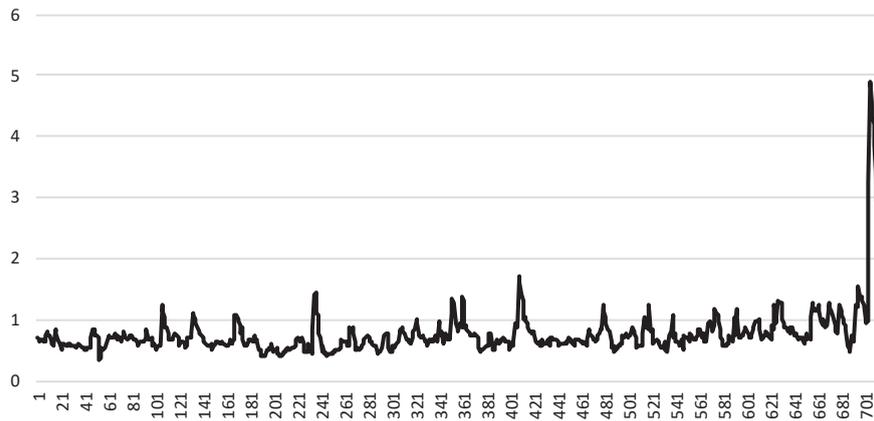
$$H_{MKT,t}^2 = \omega_{MKT} + \alpha_{MKT}\varepsilon_{MKT,t-1}^2 + \gamma_{MKT}H_{MKT,t-1}^2 \tag{7}$$

Figure 3 CAR for Nippon TV Holdings ($t = -20$ to $t = +20$)



Note: announcement date is $t=21$ on timeline in the figure.

Figure 4 Fitted Bivariate GARCH (1,1) Market Beta: January 2018 ~ December 2020



$$\begin{bmatrix} H_{TD,t}^2 & H_{TD_MKT,t} \\ H_{MKT_TD,t} & H_{MKT,t}^2 \end{bmatrix} =$$

$$\begin{bmatrix} H_{TD,t} & 0 \\ 0 & H_{MKT,t} \end{bmatrix} \begin{bmatrix} 1 & \rho \\ \rho & 1 \end{bmatrix} \begin{bmatrix} H_{TD,t} & 0 \\ 0 & H_{MKT,t} \end{bmatrix}$$

where the correlation between the returns, ρ , is assumed to be constant. H denotes the conditional standard deviation or covariance depending on the subscripts, α and γ are coefficients, and the constant, ω , is the unconditional variance. The market beta is then obtained as the ratio of the fitted time series of the conditional covariance and conditional market variance

$\frac{\hat{H}_{TD_MKT,t}}{\hat{H}_{MKT,t}^2}$. The fitted market betas are plotted in Figure 4.

The correlation is estimated at 0.42 with $\hat{\alpha}_{MKT} + \hat{\gamma}_{MKT} = 0.88 (<1)$ and $\hat{\alpha}_{TD} + \hat{\gamma}_{TD} = 0.95 (<1)$ indicating some persistence in the volatility. The fitted market beta hovers around one over the sample period ranging from January 2018 to December 2020 (715 observations). The time varying beta, however, jumps on the announcement date of November 27 to 3.25 and then 4.9 the following day. If the ex-post fitted GARCH beta of 3.25 or even 4.9 is used to obtain the abnormal returns for the announcement date, this would not alter our qualitative findings for the event study thus indicating the results are robust to estimates of the market beta. We also note that our findings summarized in Table 2 are robust to the length of the estima-

Table 3 Tokyo Dome Corporation Income Statement and EVA

	2017	2018	2019	2020
Sales (Tokyo Dome: Stadium)	14,069	14,555	14,838	16,073
Sales (Total)	87,761	83,686	87,048	91,557
Cost of Sales	69,441	66,478	69,754	74,039
SGA	5,731	5,819	5,813	5,790
Operating Profit	12,589	11,389	11,481	11,728
Income Before Tax	9,412	11,389	11,481	11,728
Tax	2,777	3,233	3,211	3,363
Net Income	6,635	8,116	6,962	8,002
EVA Spread	1.11%	0.32%	0.48%	0.80%
Economic Value Added	2,729	785	1,187	1,940

Note: Data from Tokyo Dome Corp. Financial Statements and Annual Reports. EVA calculations by authors. Figures in million yen. EVA Spread in percent.

tion period and event window as well as market index. The CAR obtained using the NIKKEI index in place of the TOPIX index is not reported but provides qualitatively similar results.

IV Historical Financial Performance

Tokyo Dome Corp. recorded stable sales, operating profits, and net income from 2017 through 2020 (Table 3). However, the accounting profit generated by Tokyo Dome Corp. does not necessarily translate into a creation of economic value through its operations unless the return exceeds the opportunity cost of capital. Hence, we turn to an economic value added (EVA) analysis to explore the financial performance of Tokyo Dome Corp. prior to the TOB based on historical data.

EVA is defined as net operating profit after tax (NOPAT) less capital times the opportunity cost of capital (Stewart, 1991; Hongo, 2019). The weighted average cost of capital (WACC) is used as a measure of the opportunity cost of capital. Rearranging terms we have

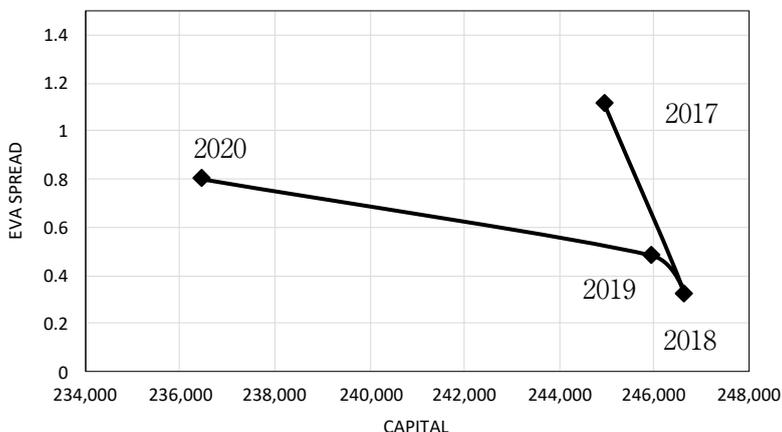
$$EVA = \left[\frac{NOPAT}{Capital} - WACC \right] Capital$$

where *Capital* comprises short-term and long-term debt, and shareholders' equity. The ratio of NOPAT over Capital, $\frac{NOPAT}{Capital}$, is defined as the return on capital (ROC) and the EVA spread is defined as ROC less *WACC* or $\frac{NOPAT}{Capital} - WACC$.

The estimated weighted average cost of capital ranged from a low of 2.51 percent in 2017 to a high of 2.9 percent for 2018 assuming a market risk premium of 4.77 percent (Damodaran, 2021), and a credit risk premium for the cost of debt of 0.578 percent based on the average credit rating of A+ from R&I Credit Ratings and AA- from the Japan Credit Rating Agency. For the market beta we took an average of the fitted GARCH betas over the previous year. As summarized in Table 3, the EVA and EVA spread for Tokyo Dome Corp. was positive suggesting the company created value.

We find EVA was positive from 2017 to 2020 suggesting Tokyo Dome Corp. was creating value prior to the onset of the COVID 19 pandemic (Table 3). However, upon closer inspection of the data, the EVA spread hovers close to zero with a slight reduction in the capital employed in 2020 (Figure 5). Taking 2017 as a benchmark, the diagram reveals Tokyo Dome Corp.

Figure 5 EVA Spread and Capital for Tokyo Dome Corporation



Note: EVA Spread is in percent. Capital is in million yen.

undertook a conservative strategy of enjoying marginal profitability coupled with shrinking capacity. The movement to the left from 2017 to 2020 in Figure 5 is incremental, however, it is not sustainable in the long run thus opening the door for a takeover attempt by Oasis. While our findings indicate that Tokyo Dome Corp. was not necessarily destroying value, it is debatable whether it remained an attractive investment opportunity for potential investors and current shareholders. In this context, the issues raised by Oasis regarding the current management’s ability to maximize operational profitability are not simply unfounded criticisms. Furthermore, one could argue the suggested investments to upgrade the infrastructure of Tokyo Dome are necessary to improve revenue growth and create future economic value.

V Conclusion

This paper is exploratory in nature with the modest objective of illustrating yet another example of the role that financial management and capital markets have to play in the world of professional sports, even in Japan. In this clinical case study, we find the TOB announcement for Tokyo Dome Corp. had a positive impact on stock prices. Based on historical financial data,

we can also argue that the proposal to renovate Tokyo Dome and to seek out a naming rights sponsor were reasonable in the context of creating economic value. In this respect, the Oasis proposal and preliminary bid clearly served as a catalyst triggering discussion on the merits of renovating the aged Tokyo Dome. A state-of-the-art stadium located in central Tokyo would not only transform the consumer-fan experience but would also raise the visibility of Japanese athletics, bringing it to the next level in the world of professional sports.

Acknowledgements

We would like to thank Takato Hiraki, Akito-shi Ito, and Benjamin Lim for helpful comments.

Dedication

This research note is dedicated to the memory of our founding Dean, Professor Noriyoshi Shiraishi, who had a great passion for both sports and applied financial times series econometrics.

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