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Real Estate Investment Trusts and Calendar Anomalies: Revisited

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Initial research on calendar anomalies has shown their existence for real estate investment trusts (REITs) and for the general stock market. Recent studies of the general stock market, however, have shown that these anomalies have disappeared or been reversed over time. The present research updates existing REIT calendar anomaly research through the use of value-weighted and equal-weighted REIT indices and the decomposition of income and capital returns. From 1994 to 2002, the presence of calendar anomalies is sensitive to the use of REIT index type as well as the dividend yield and capital yield components. The use of the value-weighted index eliminates the appearance of calendar anomalies in REITs.

Keywords

real estate investment trusts (REITs); calendar anomalies; day-of-the-week effect; January effect; turn-of-the-month effect; pre-holiday effect

Introduction

Prior research has shown that real estate investment trusts (REITs) have exhibited the same size and calendar anomalies prevailing in the general stock market. Colwell and Park (1990) and McIntosh et al. (1991) identify the size effect in REITs while Friday and Peterson (1997), Redman et al. (1997), and Friday and Higgins (2000) find the presence of calendar anomalies. Recent studies of the size and calendar anomalies in the general stock market, however, have shown that these anomalies have either disappeared or been reversed. Dimson and Marsh (1999) reveal that the historical size premium of 6% has been replaced by a size discount of around 6% in the U.K. Kamara (1997), Brusa et al. (2000), and Mehdian and Perry (2001) have documented the disappearance of the traditional negative returns on Monday in the U.S. while Steeley (2001) provides a similar finding for the U.K.

Dimson and Marsh (1999) suggest that publicity surrounding the presence of a market anomaly could lead to its disappearance. Greater market depth and the presence of institutional investors and traders across markets reduce the likelihood of persistent calendar anomalies as markets become more efficient. Han et al. (2005) argue this point with regard to REITs and the day-of-the-week effect and show that the day-of-the-week effect in REITs may now be similar to the effect found for stocks in general due to structural market changes allowing for greater institutional ownership of REITs. Hence, this study builds on the study of Han et al. (2005) and extends existing REIT research that was primarily focused on REIT performance prior to the expansion and maturation of the REIT market after changes in the five-or-fewer rule increased institutional investment options in REITs. For example, Redman et al. (1997), using data from the 1987 to 1993 period prior to the substantial growth in REIT market capitalization, document the existence of calendar anomalies for REITs when using an equal-value REIT index as the base return measure. Using data from a similar pre-REIT market expansion time period, Friday and Peterson (1997) and Friday and Higgins (2000) confirm these results with respect to the day-of-the-week effect and January effect.

Specifically, the present study re-examines the day-of-the-week effect, the January effect, the turn-of-the-month effect, and the pre-holiday effect using data from January 1994 to December 2002 which corresponds with the modern REIT investment market. The study examines both value- and equal-weighted total REIT indices and decomposes total returns into capital and dividend returns. The use of the REIT value-weighted index measure provides an important differentiation from prior studies as it offers a better measure of overall REIT returns as an investment class. REIT equal-

weighted indices are unable to account for the large disparities in firm size that is typical for REITs as the performance of smaller REITs is weighted the same as the performance of REITs that have larger portfolios and market capitalizations and are more desirable for institutional investors. The use of REIT specific indices also addresses the intra-industry differences in performance and return volatility that have impacted some prior studies. Study results indicate that the appearance of calendar anomalies is sensitive to the REIT index used and to the decomposition of returns into capital and dividend yield components. There is no appearance of calendar anomalies when modeled using the REIT value-weighted index. This contrasts with prior REIT research, but is supportive of current non-REIT studies that question the persistence of calendar anomalies for stocks in general.

Data and Methodology

The data are retrieved from the Center for Research in Security Prices (CRSP) files designated as REITs with the assigned SIC code 6798 or share codes 18 in CRSP (ordinary common shares, REITs) or 48 in CRSP (shares of beneficial interest, REITs). From these REIT stocks, value- (with daily rebalancing) and equal-weighted REIT daily total return indices are created from January 1994 to December 2002, a total of 2,267 daily observations. Unlike general stocks, dividends are an important component of REIT stock returns. Consequently, the value- and equal-weighted REIT daily total return indices are decomposed into the value- and equal-weighted REIT daily dividend yield indices and the value- and equal-weighted REIT daily capital yield indices.

Following Redman et al. (1997), this study uses regressions with dummy variables to test for the calendar anomalies. To examine the day-of-the-week effect, the following regression with dummy variables representing the days of the week is used:

$$R_t = a_1 + a_2 D_{2t} + a_3 D_{3t} + a_4 D_{4t} + a_5 D_{5t} + e_t \quad (1)$$

where: R_t = rate of return on day t ,
 $D_{2t} \dots D_{5t} = 1$ if day t is Tuesday ... Friday and 0 otherwise,
 e_t = error term.

The intercept, a_1 , is the average return on Monday. If the intercept is positive and significant, this indicates that the average return on Monday is significantly greater than zero. The coefficients a_2 to a_5 compare the average return on Monday with the average return on Tuesday to Friday. If a_2 is positive and significant, this suggests that the average return on Tuesday is significantly higher than the average return on Monday. Similar

interpretation is applied to a_3 , a_4 , and a_5 . The t -statistics in a_1 to a_5 are adjusted for autocorrelation and heteroscedasticity up to 8 lags using the Newey-West (1987) approach. The F -value from Eq. (1) measures the overall equality of a_1 to a_5 . If the F -value is significant, this indicates that returns are not equal across the days of the week. The same analysis is conducted for the capital yield and dividend yield return series.

To examine the January effect, the regression below with dummy variables representing the months of the year is used:

$$R_t = a_1 + a_2 D_{2t} + \dots + a_{12} D_{12t} + e_t \quad (2)$$

where R_t = rate of return on day t ,
 $D_{2t} \dots D_{12t} = 1$ if day t is in February ... December and 0 otherwise,
 e_t = error term.

The intercept, a_1 , is the average return in January. If the intercept is positive and significant, this indicates that the average return in January is significantly greater than zero. The coefficients a_2 to a_{12} compare the average return in January with the average return in February to December. If a_2 is positive and significant, this suggests that the average return in February is significantly higher than the average return in January. Similar interpretation is applied to a_3 to a_{12} . The t -statistics in a_1 to a_{12} are the Newey-West (1987) t -statistics adjusted for autocorrelation and heteroscedasticity up to 8 lags. The F -value from Eq. (2) measures the overall equality of a_1 to a_{12} . If the F -value is significant, this indicates that returns are not equal across the months of the year. The same analysis is conducted for the capital yield and dividend yield return series.

To examine the turn-of-the-month effect, the following regression with dummy variables representing the turn-of-the-month trading days (defined in Ogden (1990) as the last trading day of the previous month and the first three trading days of the current month) is used:

$$R_t = a_1 + a_2 D_{2t} + e_t \quad (3)$$

where: R_t = rate of return on day t ,
 $D_{2t} = 1$ if day t is a turn-of-the-month trading day and 0 otherwise,
 e_t = error term.

The intercept, a_1 , is the average return in non-turn-of-the-month trading days. If the intercept is positive and significant, this indicates that the average return in non-turn-of-the-month trading days is significantly greater than zero. The coefficients a_2 compare the average return in non-turn-of-the-month trading days with the average return in turn-of-the-month trading

days. If a_2 is positive and significant, this suggests that the average return in turn-of-the-month trading days is significantly higher than the average return in non-turn-of-the-month trading days, and hence the presence of the turn-of-the-month effect. The t -statistics in a_1 and a_2 are adjusted for autocorrelation and heteroscedasticity up to 8 lags using the Newey-West (1987) approach. The same analysis is conducted for the capital yield and dividend yield return series.

To examine the pre-holiday effect, the following regression with dummy variables representing the pre-holiday trading days (defined in Ariel (1990) as the day before the scheduled market closing due to holidays) is used:

$$R_t = a_1 + a_2 D_{2t} + e_t \quad (4)$$

where: R_t = rate of return on day t ,

$D_{2t} = 1$ if day t is a pre-holiday trading day and 0 otherwise,

e_t = error term.

The intercept, a_1 , is the average return in non-pre-holiday trading days. If the intercept is positive and significant, this indicates that the average return in non-pre-holiday trading days is significantly greater than zero. The coefficients a_2 compare the average return in non-pre-holiday trading days with the average return in pre-holiday trading days. If a_2 is positive and significant, this suggests that the average return in pre-holiday trading days is significantly higher than the average return in non-pre-holiday trading days, and hence the presence of the pre-holiday effect. The t -statistics in a_1 and a_2 are the Newey-West (1987) t -statistics adjusted for autocorrelation and heteroscedasticity up to 8 lags. The same analysis is conducted for the capital yield and dividend yield return series.

Results by Calendar Anomaly

Day-of-the-week effect

The day-of-the-week comparisons are provided in Table 1. Value-weighted results are provided in Panel A and equal-weighted results are provided in Panel B. With the REIT value-weighted index, the average return on Monday, measured by the constant, is positive but not statistically significant. This contrasts with the traditional day-of-the-week calendar anomaly which postulates a negative return for Mondays, but is consistent with recent research on the general stock market. The average return on Friday is 0.0858% higher than the Monday return and is significant at the 1% level. The insignificant F -value, however, indicates that the daily returns cannot be statistically distinguished across the days of the week, and hence no

evidence of the day-of-the-week effect in the REIT value-weighted total return index.

For the REIT equal-weighted index in Panel B, the average return on Monday is again positive and not statistically significant. The average return on Friday is 0.1396% higher than Monday and is again statistically significant at the 1% level. The significant *F*-value suggests the presence of the day-of-the-week effect in REITs when measured using an equal-weighted index. The capital yield and dividend yield series also show the day-of-the-week effect.

Table 1: The day-of-the-week effect in REITs, 1994 to 2002

| | Total returns | Capital yields | Dividend yields |
|---------------------------------------|------------------|------------------|------------------|
| Panel A: REITs value-weighted | | | |
| Constant | 0.0291 (0.86) | -0.0002 (-0.01) | 0.0293 (5.21)*** |
| Tue | 0.0426 (1.09) | 0.0419 (1.08) | 0.0008 (0.11) |
| Wed | 0.0147 (0.42) | -0.0137 (-0.39) | 0.0285 (3.62)*** |
| Thu | 0.0105 (0.26) | 0.0122 (0.31) | -0.0017 (-0.24) |
| Fri | 0.0858 (2.17)*** | 0.0934 (2.37)** | -0.0076(-1.08) |
| <i>F</i> -value | 1.37 | 2.15* | 7.56*** |
| Panel B: REITs equal -weighted | | | |
| Constant | 0.0185 (0.69) | -0.0069 (-0.46) | 0.0254 (2.08)** |
| Tue | 0.0200 (0.63) | 0.0126 (0.72) | 0.0074 (0.51) |
| Wed | 0.0378 (1.32) | 0.0078 (0.49) | 0.0300 (2.24)** |
| Thu | 0.0415 (1.41) | 0.0370 (1.85)* | 0.0045 (0.24) |
| Fri | 0.1396 (4.57)*** | 0.0816 (4.77)*** | 0.0580 (4.13)*** |
| <i>F</i> -value | 5.22*** | 5.41*** | 3.88*** |

***, **, * indicate statistical significance at the 0.01, 0.05, and 0.10 levels, respectively. The *t*-statistics in parentheses are the Newey-West (1987) *t*-statistics adjusted for auto-correlation and heteroscedasticity up to 8 lags.

While the results generally confirm the work of Redman et al. (1997) for the equal-weighted performance measure, the results contrast with those found by Friday and Higgins (2000) showing a Monday effect. Differences in the timeframe being evaluated and the type of index used to evaluate the day-of-the-week effect impact the appearance of the day-of-the-week effect. With the lack of a statistical difference between daily returns using the value-weighted REIT total return index, there is doubt as to the robustness of a long-term day-of-the-week impact on investors holding a broad portfolio of REITs. These findings also support the findings of Han et al. (2005) which evaluated institutional ownerships and the day-of-the-week effect in REITs. Given the results from the equal-weighted measures, which again generate a Friday effect, one could argue that there is a systematic impact for specific smaller REIT stocks as information is processed prior to the weekend.

January effect

The January effect comparisons are provided in Table 2. The results from the value-weighted index measures are contrary to prior research by Redman et al. (1997) and Friday and Peterson (1997). Using the REIT value-weighted index (Panel A), the average return in January, measured by the constant, is positive, but not statistically significant. The average return in October is 0.1302% lower than the average return in January and is significant at the 10% level. The average return in December, however, is 0.1568% higher than the average return in January and is significant at the 5% level while the statistically significant *F*-value allows rejection of equality of returns across the months of the year. Given that all REITs must pay out 90% of net income in the form of dividends on a calendar year basis, the results, for REITs, however, are assuring given that the value-weighted REIT represents more complete market returns. A fuller evaluation of the January effect is provided by the value-weighted capital yield and dividend yield measures. The capital yield results, which are the results that would be driven by the tax-effect explanation of the January effect, indicate no January effect for REITs. The dividend yield results show four months with statistically higher returns when compared to January. As might be expected with a high dividend stock like REITs, these are the quarter ending months of March, June, September, and December. The source of the unusually high total return in December is the excess dividend yield return that accounts for one-third of the total return for the period. Given that the capital yield return for December is not statistically significant, the importance of the excess dividend return in creating the excess total return for the period is apparent.

The results from the equal-weighted index measures (Panel B), however, are similar to Redman et al. (1997) and Friday and Peterson (1997). Using the REIT equal-weighted index, the average return in January, measured by the constant, is positive and statistically significant at the 1% level while the average relative monthly returns for the other months are negative with the exception of December, which while not negative, is not statistically different from zero. Looking at the equal-weighted capital yield returns, the January effect persists as all subsequent months have negative relative returns. Since the data are derived from the equal-weighted index, it might be concluded that poor performing smaller REIT stocks are sold near yearend with the impact on a specific stock as postulated under the tax-loss hypothesis. It is also important to note that the equal-weighted dividend yield index does not evidence the quarterly pattern shown with the value-weighted dividend index.

Table 2: The January effect in REITs, 1994 to 2002

| | Total returns | Capital yields | Dividend yields |
|--------------------------------------|--------------------|--------------------|-------------------|
| Panel A: REITs value-weighted | | | |
| Constant | 0.0465 (1.31) | 0.0404 (1.05) | 0.0061 (0.35) |
| Feb | -0.0115 (-0.22) | -0.0341 (-0.63) | 0.0226 (1.22) |
| Mar | 0.0107 (0.18) | -0.0242 (-0.41) | 0.0348 (1.84)* |
| Apr | 0.0534 (0.72) | 0.0339 (0.45) | 0.0195 (1.06) |
| May | 0.0604 (1.17) | 0.0413 (0.78) | 0.0190 (1.03) |
| Jun | 0.0581 (1.01) | 0.0225 (0.39) | 0.0356 (1.74)* |
| Jul | -0.0389 (-0.42) | -0.0614 (-0.67) | 0.0225 (1.21) |
| Aug | -0.0684 (-0.97) | -0.0879 (-1.26) | 0.0194 (1.05) |
| Sep | 0.0359 (0.39) | -0.0182 (-0.20) | 0.0541 (2.76)*** |
| Oct | -0.1302 (-1.65)* | -0.1539 (-1.95)* | 0.0237 (1.27) |
| Nov | 0.0502 (0.94) | 0.0209 (0.38) | 0.0293 (1.54) |
| Dec | 0.1568 (2.33)*** | 0.1084 (1.62) | 0.0484 (2.30)** |
| F-value | 2.66*** | 2.36*** | 3.19*** |
| Panel B: REITs equal-weighted | | | |
| Constant | 0.1407 (4.05)*** | 0.0683 (3.50)*** | 0.0724 (4.70)*** |
| Feb | -0.0916 (-2.06)** | -0.0528 (-2.09)** | -0.0388 (-2.00)** |
| Mar | -0.0666 (-1.35) | -0.0531 (-1.93)* | -0.0135 (-0.60) |
| Apr | -0.0426 (-0.73) | -0.0280 (-0.84) | -0.0146 (-0.57) |
| May | -0.0170 (-0.37) | -0.0118 (-0.46) | -0.0052 (-0.26) |
| Jun | -0.0332 (-0.71) | -0.0361 (-1.39) | 0.0029 (0.14) |
| Jul | -0.1340 (-1.82)* | -0.0753 (-1.93)* | -0.0587 (-1.68)* |
| Aug | -0.1539 (-2.52)** | -0.0924 (-2.63)*** | -0.0615 (-2.33)** |
| Sep | -0.0632 (-0.86) | -0.0492 (-1.22) | -0.0140 (-0.41) |
| Oct | -0.2067 (-2.63)*** | -0.1196 (-2.65)*** | -0.0872 (-2.58)** |
| Nov | -0.0944 (-2.03)** | -0.0278 (-0.66) | -0.0666 (-1.91)* |
| Dec | 0.0253 (0.46) | -0.0133 (-0.45) | 0.0386 (1.40) |
| F-value | 3.52*** | 2.65*** | 3.73*** |

***, **, * indicate statistical significance at the 0.01, 0.05, and 0.10 levels, respectively. The *t*-statistics in parentheses are the Newey-West (1987) *t*-statistics adjusted for auto-correlation and heteroscedasticity up to 8 lags.

Turn-of-the-month effect

The turn-of-the-month results are shown in Table 3. For the value-weighted total return index (Panel A), the average non-turn-of-the-month return, measured by the constant, is positive and statistically significant. The average turn-of-the-month return is higher than the average non-turn-of-the-month return, but is not statistically significant. This result contrasts with prior research as there is no statistically significant turn-of-the-month effect for the value-weighted index. The value-weighted capital yield measure, however, indicates a turn-of-the-month effect as the turn-of-the-month coefficient is positive and statistically significant implying that stock prices tend to be higher around the turn-of-the-month days when the impact of

dividend returns are eliminated. The dividend yield measure, on the other hand, tends to be higher around the non-turn-of-the-month trading days. So, while the use of the aggregate return index does not support a turn-of-the-month effect, the more specific capital and dividend yield measures detail the turn-of-the-month pattern.

For the REIT equal-weighted index (Panel B), both the non-turn-of-the-month returns and the turn-of-the-month returns are positive and statistically significant with the average turn-of-the-month return significantly higher than the average non-turn-of-the-month return supporting a turn-of-the-month effect in the REIT equal-weighted index is ambiguous. As was the case with the value-weighted index, the source of the high total return around the turn-of-the-month trading days is 60% from capital yield and 40% from dividend yield and the turn-of-the-month effect is evidence by the capital yield return data. Concurrently, total return for the non-turn-of-the-month trading days is generated primarily by dividend yield that accounts for 74% of total non-turn-of-the-month returns. Hence, the turn-of-the-month returns for both the value- and equal- weighted REIT indices are influenced by capital returns as would be expected under Ogden's (1990) liquidity trading hypothesis.

Table 3: The turn-of-the-month effect in REITs, 1994 to 2002

| | Total returns | Capital yields | Dividend yields |
|--------------------------------------|------------------|----------------|-------------------|
| Panel A: REITs value-weighted | | | |
| Constant | 0.0474 (2.55)** | 0.0122 (0.67) | 0.0352 (12.94)*** |
| Turn | 0.0669 (1.55) | 0.0764 (1.82)* | -0.0095 (-1.47) |
| Panel B: REITs equal-weighted | | | |
| Constant | 0.0560 (3.85)*** | 0.0146 (1.68)* | 0.0414 (5.60)*** |
| Turn | 0.0559 (1.66)* | 0.0340 (1.78)* | 0.0219 (1.42) |

***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels, respectively.

The *t*-statistics in parentheses are the Newey-West (1987) *t*-statistics adjusted for autocorrelation and heteroscedasticity up to 8 lags.

Pre-holiday effect

The pre-holiday results are provided in Table 4. Using the REIT value-weighted index (Panel A), the average non-pre-holiday total return, as measured by the constant, is positive and statistically significant at the 1% level. The average pre-holiday return, while higher than the non-pre-holiday return, is not statistically different from zero, and hence, a lack of support for the pre-holiday effect. For the value-weighted capital yield and dividend yield series, the average pre-holiday yield is not statistically higher than the

average non-pre-holiday yield, confirming the lack of a pre-holiday effect in these two series. The positive and statistically significant non-pre-holiday dividend yield measure reflects the impact of dividend payments on total REIT returns and indicates that they are not clustered around pre-holiday dates.

With respect to the REIT equal-weighted total return index (Panel B), the pre-holiday returns are positive and statistically significant and higher than the average non-pre-holiday yields providing evidence of a pre-holiday effect in the REIT equal-weighted index. The results are consistent with prior research by Redman et al. (1997), which shows a pre-holiday effect. Furthermore, both capital yield and dividend yield series have higher pre-holiday yields than non-pre-holiday yields, evidence of a pre-holiday effect in capital yield and dividend yield. The pre-holiday is especially sensitive to index selection.

Table 4: The pre-holiday effect in REITs, 1994 to 2002

| | Total returns | Capital yields | Dividend yields |
|--------------------------------------|------------------|------------------|-------------------|
| Panel A: REITs value-weighted | | | |
| Constant | 0.0578 (3.34)*** | 0.0241 (1.42) | 0.0337 (12.86)*** |
| Pre | 0.0682 (0.99) | 0.0765 (1.13) | -0.0083 (-0.74) |
| Panel B: REITs equal-weighted | | | |
| Constant | 0.0617 (4.34)*** | 0.0182 (2.16)** | 0.0435 (6.30)*** |
| Pre | 0.1461 (2.64)*** | 0.0837 (2.66)*** | 0.0624 (2.45)** |

*** and ** indicate statistical significance at the 0.01 and 0.05 levels, respectively.

The *t*-statistics in parentheses are the Newey-West (1987) *t*-statistics adjusted for autocorrelation and heteroscedasticity up to 8 lags.

Conclusions

Unlike prior calendar anomaly research on REITs by Redman et al. (1997), Friday and Higgins (2000), and Friday and Peterson (1997) showing the existence of the January effect, the turn-of-the-month effect, the day-of-the-week effect, and the pre-holiday effect in REITs, the present study finds that the appearance of any calendar anomalies is index and measure sensitive. The present results provide an important extension to the existing literature through the use of data from the modern REIT period, the use of both REIT value-weighted and equal-weighted indices, and the decomposition of returns by capital and dividend yield. The use of the REIT value-weighted index and decomposed performance measures of dividend yield and capital yield, generally eliminate any statistical appearance of calendar anomalies for REITs, whereas the use of the equal-weighted index, a proxy for smaller

REITs, provides support for the existence of REIT calendar anomalies.

With respect to the day-of-the-week effect, there is little support for the implied negative Monday returns with either REIT value- or equal-weighted indices. This result is similar to the result of Chan et al. (2005), which highlight the impact of institutional ownership and the day-of-the-week effect. REITs do not evidence a January effect as measured by the REIT value-weighted index. Further analysis indicates that monthly returns are affected by quarterly dividend payments. By contrast, the REIT equal-weighted index supports a January effect anomaly. Both the turn-of-the-month effect and the pre-holiday effect exist in the total REIT equal-weighted index but not in the total REIT value-weighted index. The appearance of these effects is sensitive to the decomposition of returns into capital and dividend yields as the turn-of-the-month effect appears with both the value- and equal-weighted capital return indices. Differences in individual REIT size and market value impact the appearance of calendar anomalies as might be expected given existing research on the small firm effect. The results highlight the need to evaluate all REIT anomalies using both REIT value- and equal-weighted indices and provide support for a generally efficient market for the pricing of REIT stocks.

References

- Ariel, Robert A. (1990). High Stock Returns Before Holidays: Existence and Evidence on Possible Causes, *Journal of Finance*, **45**, 1611-1626.
- Brusa, Jorge, Pu Liu, and Craig Schulman (2000). The Weekend Effect, 'Reverse' Weekend Effect, and Firm Size, *Journal of Business Finance and Accounting*, **27**, 555-574.
- Chan, Su Han, Wai-kin Leung, and Ko Wang (2005). Changes in REIT Structure and Stock Performance: Evidence from the Monday Stock Anomaly, *Real Estate Economics*, **33**, 89-120.
- Colwell, Peter F. and Hun Y. Park (1990). Seasonality and Size Effects: The Case of Real-Estate-Related Investment, *Journal of Real Estate Finance and Economics*, **3**, 251-259.
- Dimson, Elroy and Paul Marsh (1999). Murphy's Law and market anomalies, *Journal of Portfolio Management*, **25**(2), 53-69.
- Friday, H. Swint and David R. Peterson (1997). January Return Seasonality in Real Estate Investment Trust: Information vs. Tax-Loss Selling Effects, *Journal of Financial Research*, **20**, 33-51.
- Friday, H. Swint and Eric J. Higgins (2000). The Day of the Week Effect in

Real Estate Investment Trusts, *Journal of Real Estate Portfolio Management*, **6**, 273-282.

Kamara, Avraham (1997). New Evidence on the Monday Seasonal in Stock Returns, *Journal of Business*, **70**, 63-84.

McIntosh, Willard, Youguo Liang, and Daniel L. Tompkins (1991). An Examination of the Small-Firm Effect Within the REIT Industry, *Journal of Real Estate Research*, **6**, 9-17.

Mehdian, Seyed and Mark J. Perry (2001). The Reversal of the Monday Effect: New Evidence from US Equity Markets, *Journal of Business Finance and Accounting*, **28**, 1043-1065.

Newey, Whitney K. and Kenneth D. West (1987). A Simple, Positive Semi-Definite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix, *Econometrica*, **55**, 703-708.

Ogden, Joseph P. (1990). Turn-of-the-Month Evaluation of Liquid Profits and Stock Returns: A Common Explanation of the Monthly and January Effects, *Journal of Finance*, **45**, 1259-1272.

Redman, Arnold L., Herman Manakyan, Kartono Liano (1997). Real Estate Investment Trusts and Calendar Anomalies, *Journal of Real Estate Research*, **14**, 19-28.

Steeley, James M. (2001). A Note on Information Seasonality and the Disappearance of the Weekend Effect in the UK Stock Market, *Journal of Banking and Finance*, **25**, 1941-1956.