

# **U.S. REIT FIRMS AND U.S. C-CORPORATIONS IN THE HOSPITALITY INDUSTRY: A RETURN ANALYSIS**

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## **ABSTRACT**

*This study examines the return performance of U.S. firms in the hospitality industry by comparing C-Corporation and REIT return measures. These returns are then broken down based on their component parts using a 3-factor DuPont identity approach. Each return component is then tested to determine any significant difference between C-Corp and REIT groups. Results indicate no significant difference in the component return measures of profit margin, asset turnover and equity multiplier for the two types of firms in the same industry suggesting a firms asset type is a more significant factor than C-Corp versus REIT status in determining a firms return.*

## **INTRODUCTION**

REITs were originally created and defined as “an unincorporated association with multiple trustees as managers and having transferable shares of beneficial interest” in the 1960’s. They have evolved significantly since that inception causing the number of REITs to grow from 2 in 1962 to 221 in 2019 and total capitalization over that same time period to grow from \$42 million to approximately \$1 trillion. A real estate investment trust (REIT) is a closed-end investment company that owns assets related to real estate such as buildings, land and real estate securities. REITs sell on the major stock market exchanges just like common stock.

REITs as they are currently operating began in the early 1990’s. Ironically, the first REITs were regional retail mall REITs and now many of the “brick and mortar” retail businesses are closing down and doing more of their sales online. Many of these retail mall REITs are closing or being repurposed. Other types of REITs rapidly emerged. In the late 1990’s hotel REIT acquisition activity lead to the consolidation of the U.S. hospitality industry which has resulted in a larger number of hotel rooms being controlled by fewer companies. As hospitality REITs purchased properties aggressively hotel C-corporations also began to expand into operation of hotel properties that were under the ownership of REITs which allowed the non-REIT hotel corporations to expand the number of hotels they operate without the cost of property acquisition.

This study examines the relative return performance of REIT and non-REIT firms in the hospitality industry. Return measures and related factors examined are return on equity, return on assets, profit margin, asset turnover and leverage.

## COMPARISON OF REITS AND C-CORPORATIONS

In many ways REITs and C-Corporations are similar, but there some significant ways in which they differ. One possible difference between the two could be the type of assets they hold. REITs are required to hold a very large percentage of their assets in the form of real estate while C-Corporations are not subject to such a restriction. This study uses a data set comprised of equity REITs and C-Corporations in the U.S. hospitality industry so the nature of their real estate assets is very similar which mitigates the possibility of a significantly different asset base. The essential elements for a firm to qualify as a REIT are the following.

- Be an entity that would be taxable as a corporation but for its REIT status
- Be managed by a board of directors or trustees
- Have shares that are fully transferrable
- Have a minimum of 100 shareholders after its first year as a REIT
- Have no more than 50% of its shares held by five or fewer individuals during the last half of the taxable year
- Invest at least 75% of its total assets in real estate assets and cash
- Derive at least 75% of its gross income from real estate related sources, including rents from real property and interest on mortgages financing real property
- Derive at least 95% of its gross income from such real estate sources and dividends or interest from any source
- Have no more than 25% of its assets consist of non-qualifying securities or stock in taxable REIT subsidiaries
- Pay out dividends of at least 90 percent of taxable earnings.

## LITERATURE REVIEW

Prior research has been done which evaluates REIT performance and REIT versus non-REIT investment. Oak and Dalbor (2008) evaluated the impact of dividend policy on institutional holdings for REIT versus non-REIT hotel corporations and found that institutions tend to prefer REIT's over non-REITS for their portfolio holdings of hotel REIT's. Institutional holdings were found to be larger for hotel REIT's than for non-REIT hotel corporations. Additionally, they found that there is a significant difference between hotel REIT's paying out more than 90 percent of their earnings as dividends versus those paying out only 90 percent

Hotel corporations commonly use acquisitions as a means of expansion. Such acquisitions could increase or decrease firm value. Bebchuk, Cohen and Ferrell (2006) noted that this change in value may depend of the CEO's motivations. Another common method of expansion is to use a franchising model. Dogru (2017a) reviewed the two primary reasons that hotel corporations have expanded through franchising: capital scarcity and agency theory. The capital scarcity theory is straightforward. The hotel corporation does not need a large capital expenditure to grow when they just franchise their name and brand recognition to the franchisee. The agency theory explanation suggests that firms may choose to franchise rather than own the expansion hotel due

to the high monitoring costs for general managers of the firm when the corporation owns the hotel expansion hotel. This monitoring dilemma is not as critical today due to the technology that enables the immediate access to performance data as well as customer feedback through email and social media platforms.

When analyzing hotel REITs versus hotel C-corporations Dogru (2017b) found significant differences with respect to cash, capital expenditures, acquisition expenditures and total assets with all being higher for REITs than for non-REITs except capital expenditures which was higher for non-REIT's. There was no significant difference found by Dogru (2017b) between REITs and non-REIT's with respect to leverage or market value. A significant difference was found between REITs and C-corporations with respect to EBITDA. Although non-REITs may have an incentive to use more debt due the tax-deductibility of the interest cost, REITs have very limited ability to retain any earnings due to the legal requirement that most earnings must be paid as dividends and therefore debt is used by REITs to acquire capital despite the deductibility of interest.

The relationship between REIT ownership and property level performance has also been examined. Howton, Howton, Lee and Luo (2012) found that REIT ownership has a positive impact on performance at the property level using operating margin as the performance measure. Their findings indicate a 3.1 percent higher operating margin for REIT hotels than for non-REIT hotels analyzed. Analyzing lagged operating margin they also find that REIT ownership has a positive impact on future property level performance of hotel properties.

A study by Gentry, Kemsley and Mayer (2003) found that investors capitalize the impact of substantial taxes into the share price of REIT stocks. This study used data from a time period when the required distribution rate for REITs was 95 percent. The REIT Modernization Act of 1999 reduced this distribution requirement to 90 percent of taxable income and allowed REITs to own taxable subsidiaries that conduct some previously prohibited activities.

## METHODS

The return data for this study come from the S&P Capital IQ database and include 10 years of quarterly return data for 18 U.S. Hospitality firms from 2008 through 2017 including 9 REITs and 9 C-corporations. The limited size of this set is due to the fact that there are relatively few firms of significant size that own the majority of hotel and lodging properties. This includes both REIT and C-Corporation data for firms in the industry. This study uses a data set comprised of equity REITs and C-Corporations in the U.S. hospitality industry so the nature of their assets is very similar which mitigates the possibility of a significantly different asset base. Since the primary purpose is to examine REIT and Non-REIT firms in the hospitality industry with respect to return measures the first two variables examined are Return on Equity and Return on Assets.

Further, these returns are analyzed using a DuPont analysis approach to compare cost control effectiveness, asset use efficiency and leverage between REITs and C-corporations. Returns are evaluated using the individual components of the DuPont identity. Profit Margin is used as a measure of cost control effectiveness, Asset Turnover is used a measure of asset use efficiency and the Equity Multiplier is used as a measure of leverage. Dogru (2017b) evaluated

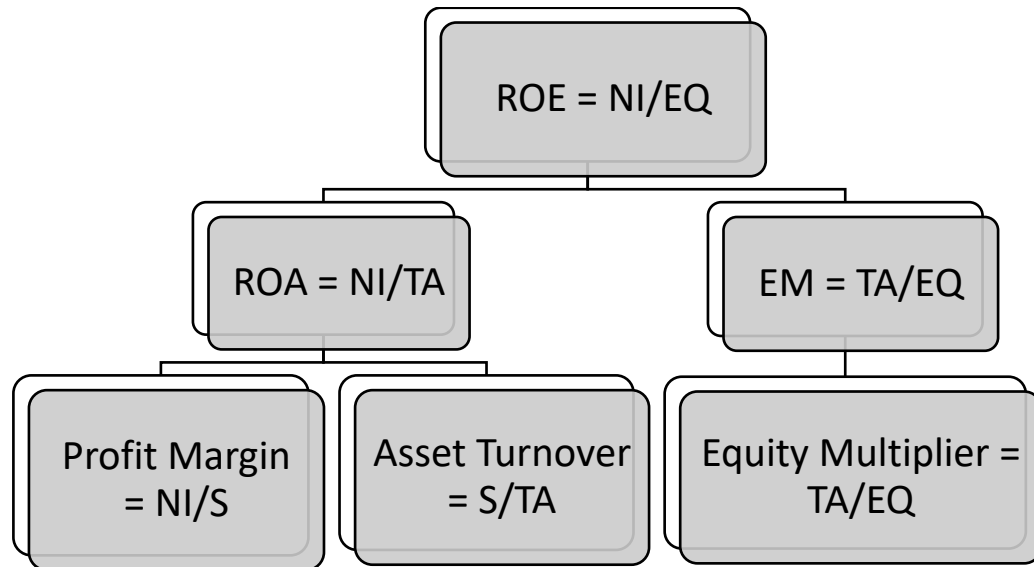
differences between REITs and C-corporations but did not specifically address the cost control, asset use efficiency and leverage components of the DuPont Identity.

The factors examined are return on assets (ROA), return on equity (ROE), profit margin (PM), asset turnover (AT) and equity multiplier (EM).

$$\text{ROE} = \text{PM} \times \text{AT} \times \text{EM}$$

and

$$\text{ROA} = \text{PM} \times \text{AT}$$



These return measures and their component ratios are evaluated for both the REIT and Non-REIT firms in the hospitality industry. First, the two types of firms are evaluated with respect to ROE and ROA to determine if firm type impacts these return measures. Then, the return measures for each group are broken down into their component parts. The ROA and leverage components of ROE are separated and compared. The ROA is then broken down into profit margin and asset turnover and these two components are compared for the two samples.

## RESULTS

Table 1 below reports the summary statistics for the variables analyzed in this study. The mean, variance and standard deviation is shown for each of the 5 variables. Each of these measures is examined to determine if there is a significant difference between hotel REITs and non-REIT hotel firms for each measure.

**TABLE 1**  
**Summary Statistics for the REIT and C-Corp sample**

		C-Corp	REIT
ROE (Return on Equity)	Mean	6.153	1.482
	Variance	84.95	93.775
	Std. Deviation	9.217	9.684
ROA (Return on Assets)	Mean	2.62	2.393
	Variance	3.137	2.277
	Std. Deviation	1.771	1.509
Profit Margin (NI/S)	Mean	42.541	36.279
	Variance	364.729	267.188
	Std. Deviation	19.099	16.349
Asset Turnover (S/TA)	Mean	.310	.270
	Variance	.027	.014
	Std. Deviation	.164	.118
Equity Multiplier (TA/EQ)	Mean	3.342	13.793
	Variance	10.187	701.867
	Std. Deviation	3.192	26.493

The five variables in the table above are analyzed to determine if they are significantly different for C-Corporations and Real Estate Investment Trusts in the hospitality industry. The following tables report the results for the return measures (Table 2) and their component parts (Table 3).

**TABLE 2**  
**Evaluation of Return Measures**

Return on Equity and Return on Assets

	ROE-C	ROE-R	ROA-C	ROA-R
Mean	6.153	1.482	2.620	3.393
Variance	84.95	93.775	3.137	2.277
N	9	9	9	9
P(T<=t)	.3101		.7734	
T	2.120		2.120	
$\alpha$	.05		.05	

The ROE for the C-Corp and REIT sample had means of 6.153 and 1.482, respectively. The results indicate that there is no significant difference (with  $\alpha = .05$ ) in the ROE for the C-Corp and REIT firms in the sample. With respect to ROA for the two types of firms there was a mean ROE of 2.620 for the C-Corp and 3.393 for the REIT which indicates no significant difference at  $\alpha = .05$ . Together these results indicate no significant difference in the mean return measures for these two groups of firms.

Further analysis in Table 3 below will break down each return measure into its component parts based on a DuPont identity approach.

**TABLE 3**  
**Breakdown of Return Measures into Components**

Profit Margin, Asset Turnover and Leverage

	<b>PM-C</b>	<b>PM-R</b>	<b>AT-C</b>	<b>AT-R</b>	<b>EM-C</b>	<b>EM-R</b>
Mean	42.541	36.279	.310	.270	3.342	13.793
Variance	364.729	267.188	.027	.014	10.187	701.867
N	9	9	9	9	9	9
P(T<=t)	.233		.284		.2738	
T	1.746		1.753		2.306	
$\alpha$	.05				.05	

Each return measure is broken down into its component parts where ROA is composed of profit margin (PM) and asset turnover (AT) while ROE is composed of PM, AT and the equity multiplier (EM). The results indicate that with respect to profit margin C-Corps with a mean of 42.541 and REITs with a mean of 36.279 do not have significantly different profit margins at  $\alpha = .05$ . This suggests that both C-Corps and REIT's are similar with respect to cost management and control.

The mean asset turnover is .310 for C-Corps and .270 for REIT's which indicates that there is no significant difference in the asset turnover for the two firm types at  $\alpha = .05$ . This result suggests that C-Corps and REITs do not differ significantly with respect to their asset use efficiency. The mean equity multiplier is 3.342 for C-Corps and 13.793 for REITs which indicates that there is no significant difference in the equity multiplier for the two firm types at  $\alpha = .05$ . This suggests that C-Corps and REIT's do not differ significantly with respect to their utilization of leverage.

## CONCLUSION

Return performance of firms in the hospitality industry has been compared based on C-Corporation and REIT return measures. These returns were then broken down based on their component parts using a 3-factor DuPont identity approach. Each return component was then tested to determine any significant difference between C-Corp and REIT groups. Results indicate no significant difference in the component return measures of profit margin, asset turnover and equity multiplier for the two types of firms in the same industry suggesting REIT status alone is not a significant factor in determining a firm's return based on these three measures. These results further suggest that further research with a more detailed breakdown of the return components to analyze such factors as tax burden, interest burden and EBIT margin could potentially provide additional insight into the tax and interest implications associated with a C-Corp versus a REIT structure in the hospitality industry.

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