THE EMERGENCE OF HOTEL/LODGING REAL ESTATE RESEARCH

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**Abstract**  
Research related to the real estate aspects of hotels and other lodging forms is an understudied but emerging area of academic study. Real estate education and research in most collegiate real estate programs historically have focused on the traditional forms of real estate (i.e., office buildings, retail centers, industrial buildings, apartment complexes, and other housing forms); rarely is the study of hotels and other lodging forms addressed. Nevertheless, hotels and other lodging properties (e.g., motels) constitute a major, albeit specialized, real estate property type that is under researched in most university real estate programs. In this paper, we provide a more comprehensive perspective from which real estate faculty may think about hotel/lodging real estate.

Research related to the real estate aspect of hotels is an understudied but emerging area of academic literature in the field of nonresidential real estate. Brueggeman and Fisher (2005) classify nonresidential real estate into sub-categories such as commercial (office, retail), industrial, hotel/motel, recreational, and institutional (hospitals, government agencies, and universities). Yet, real estate education and research in most collegiate real estate programs focuses on the traditional forms of real estate, such as office buildings, retail centers, industrial buildings, and apartment complexes, but not hotels and other lodging forms. Nevertheless, recent statistics from the American Hotel & Lodging Association (2013) indicate that there are approximately five million hotel rooms and 50,000 hotels in the United States that generate annual revenues of $155 billion. Thus, while hotels and other lodging properties (e.g., motels) constitute a major property type, they are under researched (and perhaps less understood) in most university real estate programs. Why is this?

One possible answer is that most real estate faculty in the U.S. teach within the finance departments of business schools that do little research or teaching about hotels and
lodging other than to mention that hotels and other lodging is a form of real property like apartments, but with units leased on a daily basis. While real estate academic associations (e.g., ARES and AREUEA) and their journals have historically paid little attention to hotels and other lodging forms, other faculty with their own academic associations (e.g., ICHRIE) and journals, often affiliated with schools of hospitality management, have both researched and taught students about the real estate aspects of hotels and lodging.

The recent increased interest in collaborative research by these two historically separate real estate faculty groups indicates that the differences and similarities between hotel/lodging real estate and “core real estate” investments (e.g., residential, office, industrial, and retail) should be looked at more closely. In this paper, we offer a more comprehensive perspective from which business school real estate faculty can think about hotel/lodging real estate, as well as provide a review of the hotel/lodging literature, data availability, and future directions for new collaborative hotel/lodging real estate research.¹

**HOW DO HOTEL/LODGING REAL ESTATE INVESTMENTS DIFFER FROM CORE REAL ESTATE INVESTMENTS?**

Hotels constitute a unique investment asset class as they are an operating business, with both housing and retail activities (such as food and beverage, accommodations, health spa, banqueting facilities, and recreational amenities) “housed” within a real estate investment. While hotels are composed of an investment in land, buildings, fixtures, equipment, and even furniture, they also require investments in inventories, working capital, labor, specialized management expertise, and ongoing marketing that make them more akin to a retail type business. Thus, in many ways, a hotel has much more in common with traditional retail property investments and other small businesses than with residential property investments, even though the hotel business involves accommodating residents, usually for a short term. Besides the hybrid nature of hotel/lodging real estate investment (residential and retail), six additional characteristics of hotel/lodging real estate businesses and investment should be discussed to facilitate comparison with core real estate investments.

**STRUCTURE AND PLAYERS IN HOTEL/LODGING INVESTMENTS**

In addition to the hotel industry being both large and fragmented, there are four ways that hotels typically combine their inherent business operations with investment in real property. A large number of hotels are independently owned and operated. In these cases, an individual, family or partnership, small company, or large investment company or fund may build or purchase one or more hotel assets to operate the enterprise on their own. These hotels may be financed with a traditional mortgage through a financial institution with the equity capital (historically approximately 25%–30%) provided by private investment. If these single property purchases or developments are small (50–100 guest rooms), they tend to be in second-tier cities, peripheral locations, and are typically individually or family owned. However, at the
other extreme of the independently owned and operated spectrum may be an iconic luxury hotel, such as the Biltmore in Arizona, which remained family owned from the 1920s until the 1970s. It then went through subsequent ownership changes that included real estate investment trusts (REITs), investment corporations, high net worth (HNW) individuals, and finally an investment fund operated by the Government of Singapore.

Independently owned and operated hotels can be distinguished from the other three types of hotels that enter into a management contract and/or franchise agreement with a third party to manage the day-to-day hotel and retail operations, as well as provide name recognition. For example, the family-owned, independent owner-operator of small hotels may decide to expand the business and build or invest in a larger full-service hotel property (200–300 rooms). As is often the case, they may not want to manage this larger more complicated property on their own. Instead they can choose one of the following three alternatives. Their first choice is that they can sign a contract with a branded “Type One” (recognizable name) management company such as Marriott or Hilton and pay them a management fee for operating the hotel, as well as a franchise fee for marketing and promoting the hotel through the brand’s global distribution system (GDS). In this arrangement, the owner has the benefit of day-to-day operations being delegated to the management company and name recognition through the brand, for which the owner has to pay a fee and sign a contract and agreement for an established number of years.

Their second choice is that they can sign only a franchise agreement with a recognizable brand name such as Marriott or Hilton, pay them the required fee (i.e., franchise fee) for marketing, but retain their own management (self-managed). Their third choice is to sign a management contract with a non-branded management company (e.g., Hostmark, Interstate Hotels, and White Lodging) and keep the hotel without a brand/franchise. There are several reasons the owner might wish to do this: (1) the hotel may be in a location that does not require name recognition but just good management and (2) it might be an iconic type hotel, like the Biltmore, which is a brand in itself. (In the specific case of the Biltmore, it is part of Hilton’s Waldorf Astoria Resort, a collection of luxury resorts, but displays the “Arizona Biltmore” name prominently in its marketing.)

It is important to note that the separation of ownership from management in the hotel industry has highlighted issues associated with the problem of agency and the fiduciary responsibility of the manager to the owner. This has also resulted in the emergence of the hotel asset management profession to represent the interests of the hotel property owner.

**DIVERSITY OF OWNERSHIP AND INVESTMENT OBJECTIVES**

Hotel/lodging investors are a diverse group with investment objectives that include (1) return expectations, (2) investment time horizon, type, and size of hotel assets, (3) portfolio philosophy, (4) risk tolerance, and (5) geographic preference. In general, hotel/lodging investors can be divided into four categories:
1. **Private Hotel Investment**: Individual owners (e.g., entrepreneurs and HNWs) and private investment groups (e.g., private equity funds and private hotel companies).

2. **Public Hotel Investment**: REITs and publically-owned hotel companies.

3. **Institutional and Governmental Hotel Investment**: Pension funds, insurance companies, and international sovereign wealth funds.

4. **Lenders**: Reluctant owners through foreclosure. They typically keep hotels in their real estate owned (REO) portfolio for a short term, but often engage asset managers to oversee their investment until disposition.

**LEASE TERMS, RISK-RETURN PROFILE, AND COST OF CAPITAL**

Hotels are considered non-core real estate investments characterized either as value-added or opportunistic real estate from both the equity investor and lender perspectives. The reason for this classification is that a hotel investment cash flow stream is more volatile due to the more frequent renovation required, as well as more property management expertise required relative to core real estate (i.e., apartments, retail, office, and industrial). Another factor that contributes to greater investment risk with hotels versus core real estate is that hotel lease contracts are very seasonal and short-term—frequently a room for a night. In other words, rents are typically marked to market on a daily basis. This fact means that when market demand declines, occupancy rates can quickly plummet; when market demand increases, guest room prices may quickly increase.

Another factor that contributes to the high risk associated with hotel investments is that it takes approximately three years to “ramp up” a new hotel to achieve stabilized occupancy and cash flow. During this time, the food and beverage departments of full-service hotels are a necessary amenity while also being a low return, high-risk operation. In addition, changes in market customer trends and the threat of functional obsolescence requires management vigilance and capital expenditures due to hotel room stays being short (often 2–3 days) and external events that affect travel (like 9/11) are a constant threat to guest room demand.

When these business risks are coupled with high operating costs and financial leverage, the risk of financial distress and insolvency is considerable. Thus, the weighted average cost of capital tends to be higher with hotel/lodging investments than core real estate investments. Furthermore, even with recent financial innovations through equity (REIT) and debt (CMBS) securitization, hotel real estate investment still remains a very illiquid investment.

Fortunately, the potential for high returns is why knowledgeable investors develop and invest in hotel/lodging real estate. During a period of growth and revenue expansion, hotels with high operating costs and financial leverage can multiply good profitability into great investment returns. Even more so than core real estate investment returns, hotel returns have historically depended more on capital appreciation than net operating income (NOI). As a result, timing the business cycle is also an important factor in successful hotel investments and is thus closely monitored.
DEBT FINANCING AND SPECULATIVE RISK

A unique characteristic of hotel/lodging real estate (with the exception of timeshares) is the inherent speculative risk related to hotel rooms that cannot be preleased. Consequently, market and feasibility studies need to be conducted by specialized consultants who understand the unique dynamics of the hotel/lodging industry. Along with management contracts, franchise agreements become an important part of the loan documentation for hotel/lodging financing. While the loan/value (or loan/cost) percentage required by lenders varies based on the lender’s sentiments towards the hotel industry, hotel investment typically involves a 65% to 70% debt financing. In the “go-go” development periods of the late 1980s and early 2000s, it reached as high as 95% to 100%. Historically, hotel investors have relied on commercial banks, savings and loan institutions (until their demise in the early 1990s), and life insurance companies for their construction loan financing. With the growth of debt securitization in the mid-1990s, investment banks and conduit lenders have been (except for during the 2007–2009 financial crises) an alternative source of debt financing.

MARKET SEGMENTATION OF THE HOTEL/LODGING PRODUCT

While the physical hotel/lodging product is defined by its geographic location, size (number of rooms), facilities, and amenities, these are merely a reflection of the market the hotel is intended to serve. In addition, hotel/lodging investors need to also take into account two broad market segments: transient and destination customer markets. Transient hotels target the needs of travelers transiting to a final destination. These hotels are typically located near transportation arteries and hubs, such as interstate highways, airports or railway stations. On the other hand, destination hotels serve the needs of terminal visitors who travel to a destination for an express purpose, such as leisure, business, meeting or convention. These types of hotels tend to be located in resort, urban or suburban areas.

As hotel/lodging companies seek to increase their market presence, these two markets have been further segmented into hotel products to suit customer price points and lifestyles. These segments are often classified as luxury, upscale, midscale, and economy. As approximately 70% of the hotel/lodging industry in the U.S. is franchised, most of the major hotel companies in the U.S. such as Marriott, Hilton, Starwood, and Intercontinental have brand representation in some or all of these markets. New lodging concepts are evolving over time to keep pace with changes in customer taste and changes in travel. Most notably, the introduction of all-suite and extended stay concepts in the mid-1990s was followed by the growth of boutique hotels since 2000 that reflect the millennium generation’s aspiration to associate themselves with hotel products that fit their lifestyle and self-concept.

Hotel research indicates that branded hotels competing in a given price range are of similar quality and as such, the rent paid is similar for brands of similar quality, especially if hotel agglomeration exists. This situation is not necessarily the case for other types of real estate where quality is defined in terms of A, B, or C, and brokers often disagree regarding the quality of the same building.
Hotel/lodging cash flow volatility is also a function of which of the three types of clientele demand a particular hotel at a given location: (1) leisure, (2) business, or (3) meeting/convention attendees, where demand from the latter two clienteles is relatively more predictable than leisure clientele demand. The cash flow of a hotel located in the central business district near a convention center is thus more likely to have less variability in cash flow given the mix of its clientele.

VALUATION OF HOTEL/LODGING REAL ESTATE

As noted previously, hotels are businesses housed in real estate. As such, it is difficult to disentangle the real estate from the business operating on the real estate because most hotels are managed by brands or independent operators rather than by their owners. While lenders perceive brand operators as less risky relative to independent or owner operators, an onerous management agreement might negatively affect the value of the hotel when it is sold.

HOTEL/LODGING REAL ESTATE LITERATURE AND RESEARCH TOPICS OF INTEREST

LODGING REITs

One area where hospitality real estate scholars have focused their attention is on real estate investment trusts, or REITs. A REIT is defined according to the Internal Revenue Code, Section 856 as, “any corporation, trust or association that acts as an investment agent specializing in real estate and real estate mortgages” (CCH, 2008 p. 681). REITs must distribute at least 90% of their income to shareholders (U.S. SEC, 2013) and typically own and operate income-producing commercial real estate. One advantage of the REIT designation is that REITs avoid paying a corporate tax; therefore, there is no double taxation on owner income as there would be in other organizations (CCH, 2008). Lodging REITs own thousands of hotels, indicating that they are a common form of ownership in the hospitality industry (Liu, 2010). REITs deserve attention in hotel real estate research because they can help us to better understand the value of hotel properties and related investment trends.

One way in which lodging REITs have received research attention is through their performance against REITs in other sectors. Using the Jensen Index to measure performance, Kim, Mattila, and Gu (2002) found that lodging REITs underperformed REITs in the office, industrial, and diversified sectors and also underperformed in terms of stock performance relative to REITs in the office, industrial, residential, and diversified sectors. Jackson (2008a) also showed that lodging REITs underperformed their counterparts from other sectors, such as retail and specialty REITs. The relative performance of lodging REITs is a concern because they are also the most volatile type of REITs (Ro and Ziobrowski, 2009). The underperformance of lodging REITs and their volatility has led to calls from Liu (2010) to ask for more research regarding lodging REITs, and to compare their performance against other ownership structures in the hotel industry to determine whether they are an effective means of hotel ownership and investment.
HOTEL INVESTMENT

In concert with Ro and Ziobrowski (2009), who state that lodging REITs are the most volatile form of that investment vehicle, Rushmore, Ciraldo, and Tarras (2002) also claim that investing in the hotel industry is a high-risk use of capital. The reason for their assertion is that the hotel REIT investor is exposed to volatile real property values and also a highly-specialized, management-intensive going-concern. In fact, hotels perform more like operating businesses than real property investments (Quan, Li, and Sehgal, 2002). However, investors are drawn to hotels due to the high potential gains, as well as the perceived status and glamour that are associated with the industry (Rushmore, Ciraldo, and Tarras, 2002).

Newell and Seabrook (2006) posit that there are three levels of concern that determine an investor’s decision to invest in a hotel property. Level 1 factors are financial and locational factors, which are the two most important considerations in hotel investment. Level 2 are economic factors and diversification of the investment, which are the next two important considerations for investment. Finally, and least important to the investment decision is Level 3, which are the relationships that the investor has with the asset manager or stakeholder alignment. Taking the point of view of the hotel company investing in or developing hotels, Johnson and Venetti (2005) also suggest that strategic planning and satisfying guest needs are important considerations for investing in new hotel properties, especially when expanding to international locations. Additionally, Johnson and Venetti (2005) state that because hotel companies do not ship products to international locations, but rather invest in real property in those locations, that foreign direct investment and local joint ventures are a popular means of investment organization.

HOTEL DEVELOPMENT

A related topic to purchasing/investing in hotels from a company’s vantage point is that of developing such properties. Recent research has focused on a litany of issues regarding hotel development in international markets, especially in Asia (Kong and Cheung, 2007). Research has focused on the cross-cultural differences between how stakeholders are viewed (Lam and Han, 2005), hotel distributions (Begin, 2000), equity ownership (Wong, Luk, and Li, 2005), management of joint ventures (Kivela and Leung, 2005), and the differences of rating hotels and profit (Pine and Philips, 2005). Other researchers have examined areas beyond Asia, including Europe (Johnson and Venetti, 2005) and the Caribbean (Cervino and Cubillo, 2005).

Another topic that has received recent research attention regarding hotel development is that of environmentally sustainable development. Hotels, due to the nature of their facilities and business, create a larger environmental footprint than other buildings of similar sizes (Rada, 1996). Fairmont Hotels and Resorts pioneered the Green Partnership Program in 1990, which led to the opening of the company’s first LEED Gold Certified hotel in 2010 with the Fairmont Pittsburgh (Market Wired, 2010). Reducing the amount of energy and water consumed in a hotel and also effectively managing the amount of waste produced are the three most popular sustainable initiatives for hotels (Bohanowicz, 2006). Effectively developing hotels like the
Fairmont Pittsburgh, which would be considered “green” by consumers, could be seen as a response by the industry to meet the increased demand for resource-efficient facilities from consumers (Bohdanowicz, Simanic, and Martinac, 2005).

HOTEL BRANDING

Not only are where and how to develop a hotel important, but also what type of hotel and what brand of hotel to develop are major concerns. Beyond just the brand, is also the type or category of hotel that is being developed. Mattila, O’Neill, and Hanson (2009) conducted an analysis regarding what hotel types were the most profitable hotels being developed. They found that hotels that did not offer food and beverage facilities, and charged relatively lower prices tended to have a higher net operating income (NOI) than their counterparts. Also, hotels with higher NOIs in the U.S. were typically located in urban or resort areas near the Atlantic or Pacific coasts. Furthermore, there is a general rule of thumb that new hotels stabilize their occupancy within three years of opening, and in fact, O’Neill (2011) found the mean stabilization period to be 3.08 years. Luxury hotels, however, tend to stabilize significantly more slowly than other hotel types, while extended-stay properties stabilize significantly more quickly. Also, hotels in the mid-Atlantic region and close to major airports stabilize their occupancy faster, while hotels in urban areas and the north central region tend to stabilize significantly slower.

The effects of hotel brands reach far and wide in the lodging industry. There is a need for hotel companies and scholars to understand the effects of brands. Hotel brands have standards for their properties that influence the operations of the individual hotels, with tangible requirements (e.g., Westin’s “Heavenly Bed”) and also service requirements (e.g., 24-hour room service at five-star properties). Certain brands even have requirements regarding how developers construct their hotels, such as Fairmont’s “Green Partnership” program. Hotel brands, with their corresponding brand standards, have been demonstrated as a significant determinate of hotel financial performance (Xiao, O’Neill, and Mattila, 2012). Additionally, researchers have found that the relationship between brands, guest satisfaction, and revenue growth is moderated by the extent of franchising within a brand (O’Neill, Mattila, and Xiao, 2006). Finally, hotel brands have been shown to have a significant relationship to a property’s market value, where after controlling for a number of factors related to the size, scope, and quality of hotels, certain brands have a significantly positive effect on hotel sale prices while other brands have a significantly deleterious effect (O’Neill and Xiao, 2006).

HOTEL ASSET MANAGEMENT

As hotel investment has evolved from smaller, single market businesses into larger multiple market businesses, hotel investment projects and strategies have required ever more sophisticated operating management. As a consequence, hotel owners have increasingly relied on hotel management contracts and franchise agreements that have inevitably resulted in much separation of hotel ownership (investment) from both management (business operations) and marketing of hotel services. This separation
inevitably results in a principal-agent relationship, where the agent (manager) works for the principal (owner/investor) and is charged with the fiduciary responsibility of protecting hotel ownership interests. Concurrent with the growth in size and clout of hotel management and franchise companies, hotel ownership is being increasingly consolidated in the hands of sophisticated and demanding institutional investors, such as REITs, pension funds, and private equity. This has resulted in increasing tension and misalignment of the inherent principal-agent relationship between investor owners and their managers and franchisors.

The asset management function has become increasingly important in protecting the financial interests of the owner/investor as a consequence of these dynamics. From their initial role as someone that merely provided operational oversight, the hotel asset management profession has evolved into becoming a strategic partner of hotel owners in all hotel investment decisions. As a consequence, hotel asset management research, while still in an early stage, is expected to grow in importance as hotel asset managers play an ever more important role in creating value for real estate investment through their understanding of both hotel operations and investment, as well as the inherent conflicts in this principle-agent relationship (Singh, Kline, Ma, and Beals, 2012).

**HOTEL VALUATION**

O’Neill and Xiao’s (2006) finding that brand affiliations significantly influence a hotel’s market value is in concert with Rushmore, Ciraldo, and Tarra’s (2002) claim that investing in a lodging property is an investment not only in the real property, but also in the operations of the business. Understanding how a hotel operation is performing has become a popular method for placing a value on a hotel property. O’Neill (2004) developed an automated valuation model (AVM) for hotel properties based primarily on the hotel’s financial performance. The model is used to evaluate the hotel’s size, occupancy, NOI, and average daily rate in addition to a number of other factors in predicting the sale price of a hotel. There are additionally many rules of thumb that are used to aid in the valuation of hotels, like the average daily rate rule-of-thumb (O’Neill, 2003). In fact, Jackson (2008b) recognizes that both formal (theories and models) and informal (rule of thumb) approaches are used to value hotel properties and that these approaches fall into three categories: the cost approach, the sales comparison approach, and the income capitalization approach.

The aim of these three valuation approaches, also commonly used for other real estate appraisal, is to measure the market value of the hospitality property to secure financing and/or to determine the sale price or the market value of a property (Andrew, Damitio, and Schmidgall, 2007). The cost approach does not focus on income-related considerations and is best used for new facilities. The cost approach addresses development and acquisition costs and generally does not consider the hotel as an operating business (Lesser, 1992). The sales comparison approach is used to consider recent hotel sales transactions to determine what the market is currently willing to pay for a specific hotel property. The sales comparison approach relies on making adjustments to compensate for variation between unique assets (Andrew, Damitio, and Schmidgall, 2007). The income capitalization approach is used to value properties by
estimating how much NOI the property can generate. The income capitalization approach includes the following valuation methods: the single capitalization rate methodology, discounted cash flow analysis, simultaneous valuation formula, and band of investment method (Jackson, 2008b). O’Neill’s (2004) AVM for hotel properties was an adaptation of the sales comparison and income approaches, and was used to estimate hotel sales price within a mean of approximately 10% of actual selling price, whereas actual, complete appraisals estimate market value within a mean of approximately 5% of actual selling price.

**RESEARCH COLLABORATION, PRESENTATION, AND PUBLICATION OPPORTUNITIES FOR HOTEL/LODGING REAL ESTATE RESEARCHERS**

**ACADEMIC ASSOCIATION MEETINGS**

For real estate faculty teaching within business schools, the annual meetings of the American Real Estate Society (ARES) each April, along with the American Real Estate and Urban Economics Association (AREUEA) annual meetings, are the primary national/international academic conferences where they can present their latest research for input from colleagues and to update themselves on current research interests of academic real estate colleagues.\(^3\) Where ARES has for six years also sponsored an academic/industry “Critical Issues” workshop as part of their annual meeting the day before the academic ARES annual meeting,\(^3\) AREUEA has for many years held two annual meetings, with their more important one held early in January in conjunction with the annual Allied Social Sciences Association’s (ASSA’s) annual meeting.\(^4\)

Additional opportunities for real estate faculty to collaborate with colleagues around the world while presenting their current research manuscripts include not only an annual regional AREUEA conference, but also the International Real Estate Society’s (IRES) annual meetings of its different member associations held on different continents throughout the year.\(^5\)

For faculty teaching about hotels and lodging within university schools of hospitality, the annual meetings of the Council on Hotel, Restaurant, and Institutional Education (ICHRIE) held each July has been their primary national/international academic conferences where they keep up with other colleague’s research, present manuscripts, and network.\(^6\) Other networking opportunities for hotel/lodging faculty to present their latest research and collaborate include: (1) Americas Lodging Investment Summit (ALIS) held in January (2015 in Los Angeles), (2) Hunter Lodging Investment Conference in March (2015 in Atlanta), (3) Bisnow Lodging Investment Summit in April (2014 in Washington DC), (4) NYU Hospitality Industry Investment Conference in June (2014 in New York City), (5) The Lodging Conference in September (2014 in Phoenix), and (6) The Hotel, Motel and Restaurant Show in November (2014 in New York City).

Other academic associations hosting conferences where hotel/lodging real estate colleagues might present their research include the Western Regional Science
Association (WRSA), which holds its annual meetings in February along with WRSA’s affiliated associations.7

ACADEMIC JOURNALS FOR “HOTEL/LODGING REAL ESTATE” RESEARCH

When real estate was evolving into its own discipline 20–30 years ago, most real estate faculty worked in business school finance departments or as part of an economics or regional planning department. Thus, prior to real estate’s eventual evolution into its own discipline (Manning and Harrison, 2011), real estate faculty published their manuscripts in finance and economics journals. When Albert and Chandy (1986) first surveyed AREUEA members for the first subjective ranking of real-estate related journal quality [prior to the first issues of Journal of Real Estate Research (1986) and Journal of Real Estate Finance and Economics (1988)], they found that while their own Journal of the American Real Estate and Urban Economics Association ranked highest among AREUEA members, Land Economics and Financial Management, an economics and finance journal, ranked second and third.

Exhibit 1 lists real estate journals in order of their perceived academic quality and also reports the percentage of faculty from two different 2007/2008 surveys that consider these real estate journals to be a “top-tier” (i.e., Tier-1) academic quality journal. While Gibler, Sah, and Chen’s (2008) survey of ARES and AREUEA memberships yielded 95 usable responses from faculty who do real estate related research, Manning and Harrison (2011) surveyed the U.S. academic membership of the Financial Management Association (FMA) and received 635 usable responses from the approximate 2,300 17-question surveys mailed out twice in late 2007 and early 2008. They found that only 8% of the FMA respondents listed real estate as an area of expertise, as well as many FMA members having little familiarity with the real estate journals themselves or their quality.

Manning and Harrison’s (2011) FMA member ranking of real estate journal quality for all 635 respondents is reported in Exhibit 1 (%tier1,) compared to the 8% (or 22) FMA respondents who had published six or more peer-reviewed articles in real estate journals during the prior 10 years (%tier1,) and Gibler, Sah, and Chen’s (2008) ranking (%tier1 – G, S, & C) of 11 of the 12 real estate journals included in Manning and Harrison’s (2011) survey. Where 10% or more ARES and AREUEA members (Gibler, Sah, and Chen, 2008) considered all 11 of the real estate journals to be top tier, a majority (50%+) of respondents considered Real Estate Economics, Journal of Real Estate Finance and Economics, Journal of Urban Economics, and Journal of Real Estate Research to be top tier quality real estate journals. While the 22 FMA members knowledgeable of real estate journal quality generally agreed with ARES and AREUEA members’ opinions, the 635 FMA members held a lower opinion of the top tier real estate journals, with many FMA members no longer seeming to be that familiar with the real estate journals they were attempting to rank. Not only did a significant number of the 635 FMA members rank two non-existent real estate journals (i.e., Real Estate Letters and Journal of Real Estate Marketing) that Manning and Harrison (2011) included in their survey, but they also showed little agreement with two different groups of real estate researchers as to which real estate journals were top tier quality.
Exhibit 1
Real Estate Journal Rankings: % Tier 1

<table>
<thead>
<tr>
<th>Rank</th>
<th>Journal</th>
<th>% tier1</th>
<th>% tier1 G, S, &amp; C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Real Estate Economics</td>
<td>51.8</td>
<td>72.7* 79%</td>
</tr>
<tr>
<td>2</td>
<td>J. of Real Estate Finance &amp; Economics</td>
<td>39.4</td>
<td>59.1** 78%</td>
</tr>
<tr>
<td>3</td>
<td>Journal of Urban Economics</td>
<td>35.8</td>
<td>57.1* 60%</td>
</tr>
<tr>
<td>4</td>
<td>Journal of Real Estate Research</td>
<td>25.8</td>
<td>40.9** 55%</td>
</tr>
<tr>
<td>5</td>
<td>Land Economics</td>
<td>19.6</td>
<td>21.1 40%</td>
</tr>
<tr>
<td>6</td>
<td>Journal of Housing Economics</td>
<td>7.2</td>
<td>23.8* 26%</td>
</tr>
<tr>
<td>7</td>
<td>Journal of Housing Research</td>
<td>2.5</td>
<td>5.0 18%</td>
</tr>
<tr>
<td>8</td>
<td>Real Estate Finance</td>
<td>12.4</td>
<td>5.6 N/A</td>
</tr>
<tr>
<td>9</td>
<td>J. of Real Estate Portfolio Management</td>
<td>2.2</td>
<td>0.0 18%</td>
</tr>
<tr>
<td>10</td>
<td>Journal of Real Estate Literature</td>
<td>0.8</td>
<td>0.0 12%</td>
</tr>
<tr>
<td>11</td>
<td>Appraisal Journal</td>
<td>4.4</td>
<td>0.0 13%</td>
</tr>
<tr>
<td>12</td>
<td>J. of Real Estate Practice &amp; Education</td>
<td>2.7</td>
<td>5.0 10%</td>
</tr>
<tr>
<td>13</td>
<td>Real Estate Letters</td>
<td>1.3</td>
<td>0.0 N/A</td>
</tr>
<tr>
<td>14</td>
<td>Journal of Real Estate Marketing</td>
<td>2.5</td>
<td>0.0 N/A</td>
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</tbody>
</table>

Notes: This table reports Manning and Harrison’s (2011) percentage of the 635 U.S. FMA academic member respondents that ranked each of the 14 real estate journals below as a “Tier 1” quality academic journal (%tier1), the sub-sample of the 22 associate or full professor FMA respondents with six or more peer-reviewed real estate journal publications during the prior 10 years (%tier1 G, S, & C), along with Gibler, Sah, and Chen’s (2008) percentage of their 95 survey respondents who considered each of the listed journals to be a first-tier journal (% tier1 G, C, & S).

* Significant at the 95% level.
** Significant at the 99% level.

In addition to the real estate journals listed in Exhibit 1 where hotel/lodging real estate researchers can submit their manuscripts for publication, the hotel/lodging faculty at university schools of hospitality have in the past submitted their research to the following journals: Cornell Hospitality Quarterly, Journal of Hospitality and Tourism Research, International Journal of Hospitality Management, and International Journal of Contemporary Hospitality Management.

DATA AND OTHER INFORMATION AVAILABLE TO FACILITATE “HOTEL/LODGING REAL ESTATE” RESEARCH

Hotel/lodging researchers can draw on many sources of relevant information to uncover patterns in data that might suggest interesting research questions, as well as hypotheses that could be later empirically tested. In addition to the U.S. governmental agencies that regularly publish useful economic and demographic statistics, Woods and Poole Economics combines the same governmental information with projections for a variety of geographic areas. Both the U.S. Census Bureau and Bureau of Labor Statistics provide employer business statistics, hotel company information, and...
workforce statistics for the “Accommodation Subsector” that consist of three industry groups to include “traveler accommodations.” In addition, the U.S. Commerce Department provides useful data on domestic and international tourism and related jobs through their Bureau of Economic Analysis and Office of Travel and Tourism Industries. (See the Appendix for additional details on the specific hotel/lodging real estate information available through each of these data sources.)

In addition, STR (Smith Travel Research) collects monthly and daily hotel performance data from nearly 50,000 hotels throughout the world in over 200 countries. They provide a benchmarking service to the hotel industry and generate monthly, weekly, and daily STAR Property Reports for hotels and hotel companies. Most important to faculty interested in hotel/lodging real estate research (as also reviewed in the Appendix) is the hotel-related data and related support resources available through STR’s SHARE Center to universities around the world (now numbering more than 170) for research, student projects, and classroom use. Additional non-governmental sources of hotel/lodging-related data (as also reviewed in the Appendix) include PKF Hospitality Research (specializing in hotel forecasting and analysis of hotel data), a number of consulting and data service firms (HVS Global Hospitality Services, PWC, Jones Lang LaSalle, CBRE Econometric Advisors, Colliers International, Real Capital Analytics, Coldwell Banker Commercial, Lodging Econometrics), GlobalEDGE (sponsored by Michigan State University), and HotelNewsNow.com, a leading electronic source of news related to the hotel industry.

**NEW HOTEL/LODGING REAL ESTATE RESEARCH OPPORTUNITIES AND AREAS FOR FUTURE INVESTIGATION**

The returns to the hotel owner are differentiated from other forms of real estate as the hotel ownership structure typically does not provide lease income to the owner. Rather, in the U.S., the real estate owner is typically the recipient of the net cash flow from the operation of the property. As discussed above, hotel/lodging real estate researchers have so far only studied five areas: lodging REITs, hotel investment, hotel development, hotel branding, and hotel valuation. While research continues in these areas, additional areas in which little or no research has yet been conducted are suggested below that are believed to be of interest to hotel/lodging professionals and their industry.

**PUBLIC HOTEL/LODGING COMPANY QUESTIONS (REITs AND C-CORPS)**

1. Can we determine the components of public hotel/lodging company returns and hotel/lodging asset value based on operating performance versus real estate value? Some conceptual research has been conducted in this area, but there is disagreement regarding the appropriate methodology to determine the portion of returns and value attributable to operations versus real estate.

2. How does asset concentration (by brand, geography, service-style, etc.) affect public hotel/lodging company returns?
3. Do abnormal returns from various hotel/lodging events differ for REITs compared to C-Corps?
4. How does the amount of real estate exposure differentiate returns among public hotel/lodging companies?
5. What industry function does non-listed hotel/lodging REITs serve?
6. How much does executive motivation affect the sale of public hotel/lodging companies?
7. How does hotel/lodging REIT executive compensation compare to other REIT types?

HOTEL/LODGING REAL ESTATE INVESTMENT, DEVELOPMENT, AND VALUATION QUESTIONS

1. How does investor ego affect hotel/lodging investment returns?
2. Which matters more for hotel/lodging investment timing: buying right or selling right?
3. How can the risk of hotel/lodging investment be moderated through market timing?
4. What are the effects of various base and incentive management fee structures on hotel/lodging operating returns and sales pricing?
5. What are the effects of management agreement terms and termination at sale provisions on hotel/lodging sales pricing?
6. Why are hotels and other lodging managed by management companies rather than being subleased to them as is often done with office space and other forms of real estate?
7. Can a case be made for hedging private hotel/lodging real estate portfolios with investments in public lodging companies?
8. Can a case be made for hedging hotel/lodging real estate portfolios through investments in public online travel agencies (OTAs)?
9. Do investors achieve different equity returns based on different capital structures?
10. When are the best times in various market cycles to develop hotel/lodgings? Do the optimal times differ between limited service and full service hotels?

PROPERTY-LEVEL REAL ESTATE ISSUES

1. What is the effect of mold and mildew on hotel/lodging values?
2. What is the effect of employee unionization on hotel/lodging values?
3. How can real options theory be applied to hotel/lodging capital budgeting?
4. How should hotel/lodging portfolio managers optimally allocate capital across their portfolios?
5. How are hotel/lodging returns and values affected in low- or no-income tax states?
6. How much effect does site selection have on hotel/lodging performance? Does this effect vary by brand?
7. What is the relationship between a property’s STR Index and its performance as measured by margin and investment return?

8. What is the relationship between recency of guestroom renovation and property performance metrics?

INVESTIGATION OF HOTEL INDUSTRY PROFESSIONALS IN LODGING REAL ESTATE RESEARCH

Other than by professional consultants, there has been comparatively little research conducted by academics in collaboration with industry practitioners. This is unfortunate as an important component of future hotel/lodging real estate research should include academics conducting research believed to be useful to hotel/lodging industry practitioners and investors. Diaz (1993) states that “in the long run, the needs of the served constituency shape an applied discipline, such as real estate, and no applied discipline can long ignore its constituents and survive.” Manning and Roulac (2001) suggest that “academic real estate researchers have an implied responsibility to provide thought leadership for their subject area in order to further the state of knowledge in their field.” In addition, Boyer (1990) asserts that “A scholarship of integration calls for scholars to put isolated facts into a larger perspective.” The scholarship of integration differs from the scholarship of discovery in that the scholarship of integration also involves application and interpretation of research findings (i.e., discovery), combined with critical analysis and synthesis, to enable a larger schema to provide insight and suggest future research (Boyer, 1990).

APPENDIX
DATA FOR HOTEL/LODGING REAL ESTATE RESEARCH

There is a great deal of data available for hotel-related real estate research. Data are available from multiple government departments, as well as many private sources. We provide some of these data providers. If you know of other sources, or if you know of additional types of data from the organizations below, please let the authors know so they might keep this paper up-to-date and available upon request.

U.S. GOVERNMENT DATA

   - Employment, unemployment, and layoffs
   - Union membership and representation
   - Extended mass layoffs
   - Employment by occupation
First-line supervisors/managers of housekeeping and janitorial workers
Hotel, motel, and resorts desk clerks
Lodging managers
Maids and housekeeping cleaners
Waiters and waitresses
Employment projections (detail available in www.bls.gov/emp/ep_table_109.htm)
Earnings and hours of all employees (average of all)
Earnings and hours of production and nonsupervisory employees
Earnings related to union membership and representation
Earnings by occupation (same five categories as above)
Work-related fatalities, injuries, and illnesses
Producer Pricing Index (prices that producers receive for goods and services)
Number of establishments


2. Commerce Department: The Commerce Department tracks international and domestic tourism spending, numbers of international visitors, and their impact on tourism-related jobs. There are several offices within the Commerce Department that are involved.

a. Bureau of Economic Analysis: The Bureau of Economic Analysis (BEA), within the Commerce Department, collects and distributes information about travel and tourism spending, prices for travel and tourism goods and services, and employment. Their website is www.bea.gov. They produce regular news releases and publications with tourism-related data (www.bea.gov/industry/tourism_data.htm). There is also a variety of online articles available (www.bea.gov/industry/iedguide.htm#TTSA).

b. Office of Travel and Tourism Industries: Another office within the Commerce Department is the Office of Travel and Tourism Industries (OTTI). Their website is www.tinet.ita.doc.gov. This office manages the Travel and Tourism Statistical System, which includes several programs:
   ○ Travel and Tourism Satellite Accounts: A program that measures the impact of travel and tourism on the U.S. economy.
   ○ International arrivals database: The database contains information on international arrivals (from Department of Homeland Security).
   ○ International air traffic database: Contains information on outbound travel (also from DHS).
○ Survey of International Air Travelers: Collects research data on international travelers via in-flight surveys.

○ International traveler receipts and payment data (from BEA).

○ Statistics Canada: Collects Canadian travel data.

○ International visitors forecast program: Provides estimates for international travel.

○ Travel Trade Barometer: Internet trade survey used to forecast travel demand.

The OTTI also generates a range of different data tables (www.tinet.ita.doc.gov/outreachpages).

3. Census Bureau: The Census Bureau collects business statistics related to employers. This data includes numbers of hotels, guestrooms, and employees; sales, expense, and payroll amounts; and hotel company information. Their website is www.census.gov, but detailed information regarding the accommodation sector can be found at www.census.gov/econ/industry/hist/h721.htm. There are tables of data including operating expenses and annual sales. Data are available by geography, size of business, and type of business. Historic information is available for 2007, 2002, and 1997.

4. Federal Aviation Administration: The Federal Aviation Administration (FAA) tracks airline traffic data including number of passengers and enplanements, and airline and airport info. Their website is www.faa.gov/data_research. Tables show stats like the number of annual enplanements by airport with percentage change.

Woods & Poole Economics

Although not a government agency, Woods and Poole Economics makes much of the same government economic and demographic data and projections available for a variety of geographic areas. Their website is www.woodsandpoole.com.

STR Data

STR (Smith Travel Research) collects monthly and daily hotel performance data from nearly 50,000 hotels throughout the world from over 200 countries. They provide a benchmarking service to the hotel industry and generate monthly, weekly, and daily STAR Property Reports for hotels and hotel companies. STR also generates a wide range of various hotel-related reports and data files that are relevant when it comes to hospitality real estate research. Their website is www.str.com.

STR recently launched a program called the SHARE Center where they make hotel-related data and other resources available to universities at a nominal cost for research, student projects, and classroom use. There are currently over 170 schools around the world that are members who take advantage of the following STR reports and data files:
1. **Market Trend Reports:** STR provides monthly and daily performance data for markets or user-defined groups of hotels anywhere in the world. Data are available from 1987. Raw monthly and daily data, running 12-month data, and day of week/weekday/weekend data (business vs. leisure) are available. Segmentation data are also available by type of business (group, transient, and contract). (The reports are in Excel format with multiple tabs of data and graphs.)

2. **Pipeline Reports:** STR generates Pipeline Reports for markets around the world that provide historic supply changes as well as future development information by scale, brand, and phase (under construction, final planning, and planning). Reports show changes to supply due to opens, closes, adds, drops, and conversions in and out. Property information and Pipeline Project detail are included.

3. **HOST/Profitability Reports:** STR also collects profit and loss accounting data from hotels around the world. These data are available in two formats. There are two annual overviews: one for the U.S. and one global version. These provide general data on top markets, countries, and scale categories. STR also produces custom HOST reports displaying annual data for specific markets or user-defined groups of hotels anywhere in the world. Data are available as far back as the mid-1990s. Reports display ratio to sales, amount per available room, and amount per occupied room for all major P&L accounts.

4. **Destination Reports:** STR provides Destination Reports to help track ongoing performance information for markets or user-defined groups of hotels. There are a variety of different templates that display various types of performance data. It is possible to select a multiple geographic areas or specific groups of hotels and then receive monthly or weekly performance updates.

5. **Census Database:** Hotel attribute information is available for properties in any area of the world. There are over 100 available fields of data, including categories, amenities, history, conversions, meeting space, and latitude/longitudes on over 150,000 hotels.

6. **Property and Room Counts:** STR provides size and structure information on hotels in any area of the world. Users can choose from a variety of subtotal options to generate valuable market data.

7. **Forecast Data:** STR generates Forecast Reports for top U.S. and global markets.

8. **Sales Transaction Data:** Information on hotel sales is available for properties throughout the U.S.

9. **Ad-Hoc Industry Data Files:** STR can generate raw hotel data files for special research needs.

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### Additional Public Sources of Hotel-Related Data

**PKF Hospitality Research:** PKF specializes in hotel forecasting, the gathering and analysis of hotel data, and customized analyses. Their website is www.pkfc.com. PKF...
generates a wide range of reports including “Annual Trends® in the Hotel Industry Report,” a review of annual P&L data for hotels in the U.S. Revenue and expenses are displayed for various categories of hotels and commentary is provided. PKF generates Benchmark Reports with similar P&L data personalized for a single market. They produce an annual “Hospitality Investment Survey,” which is used to evaluate investment criteria, historical averages, and investment climates. PKF provides “Hotel Horizons” reports with national and local market forecasts. They also collect data on hotel transactions.

**HVS Global Hospitality Services:** HVS provides consulting services and solutions specific to the hospitality industry. Their website is www.hvs.com. They generate a wide range of hotel-related research. They produce Market Intelligence Reports for major cities around the world, as well as informative updates on various topics. You can access their library at www.hvs.com/Library/Articles. They generate an annual report on “Hotel Valuation and Transaction Trends for the U.S. Lodging Industry” which reports hotel values in major markets. Additional reports include the “Hotel Development and Cost Survey,” “Hotel Lender Survey,” “Franchise Fee Survey,” “U.S. Investment Overview,” and “Manhattan Hotel Market Overview.” HVS maintains a large database of hotel sales information.

**PWC:** PWC provides advisory services and market analyses related to the hotel industry. Their website is www.pwc.com/us/en/asset-management/hospitality-leisure/lodging.jhtml. They have a wide range of services including market research, supply and demand analyses, and forecasting information. Their “Hospitality Directions” publication provides a quarterly update on the hotel industry and forecasts for the future. PWC also produces “Local Lodging Market Forecasts,” which forecast future trends in top markets. They also generate a “Manhattan Lodging Index” report that focuses on Manhattan.

**Jones Lang LaSalle:** Jones Lang LaSalle provides consulting services for the hospitality industry. Their website is www.joneslanglasalle.com. They generate research related to specific markets, investment, and investor sentiment. They maintain a library of their hotel and hospitality research, which can be found at www.joneslanglasalle.com/hotels/EN-GB/Pages/Researchfilter.aspx. The Hotel Intelligence Reports provide market analysis related to the hotel industry. Data includes detail on transactions, openings, tourism, arrivals, feeder markets, supply, conference/exhibition demand, special events, demographics, and economic/trade conditions. The reports also provide informative perspective on STR performance data.

**CBRE Econometric Advisors (formerly Torto Wheaton Research):** CBRE EA provides analytical tools and advisory services. Their website is www.cbre-ea.com. They provide a variety of publications and forecasts on real estate fundamentals and capital markets across the U.S. and Canada. Using data from STR, the “CBRE EA Hotel Outlook” combines analytical expertise with deal specific information. They produce a publication titled “Hotel Transaction Results,” which reports historical hotel sales data. They also deliver the “CBRE EA/Dodge Pipeline” (along with FW Dodge/McGraw Hill) that includes development-related data on hotel projects.
Colliers International: Colliers International Hotels is an international real estate investment advisory company specializing in the lodging industry. Their website is www.colliers.com/en-us/us/services/specializations/hotels. They have a relationship with PKF and provide market reports from a development perspective, including economic information, hotel P&Ls, sale prices, and hotel performance numbers.

Real Capital Analytics: RCA offers market research and real estate sales and trends analysis. Their website is www.rcanalytics.com. They track a variety of market and transaction data. They publish Capital Trends on areas around the world of key aspects of the capital environment. RCA also has information on distressed properties.

Coldwell Banker Commercial: The CBC Hospitality Group provides advisory services, valuation services, and market analyses. Their website is www.cbcworldwide.com. They produce “Market Snapshots” that provide an overview into economic and commercial conditions.

Lodging Econometrics: LE provides a variety of hotel-related reports. Their website is www.lodgingeconometrics.com. They offer quarterly Market Intelligence Report with an analysis of the latest trends and market values. LE also provides a Construction Pipeline Trend Report, which covers the U.S. and major markets. They generate Market Trend Reports for specific cities. LE produces a Transaction Trend Report, in which they review sales activity throughout the U.S. They also produce a Sales Comp Report that focuses on sales activity in a user-defined area. These reports can be found at www.lodgingeconometrics.com/lodging-real-estate-reports-for-analysts.

GlobalEDGE: Sponsored by Michigan State University, GlobalEDGE provides links to articles and research related to the hospitality industry. The website is www.globaledge.cmsu.edu/industries/hospitality-and-travel. The website lists resources, events, and statistics.

HotelNewsNow.com: HNN is a leading electronic source of news related to the hotel industry. Their website is www.hotelnewsnow.com. This website also has a user-friendly search capability to find past articles on specific topics.

ENDNOTES

1. The American Real Estate Society (ARES) hosted its first hotel/lodging panel at its 29th Annual Meeting in Kohala, Hawaii, on April 11, 2013: “Opportunities in Hotel/Lodging Research.” The success of this panel, comprised by Chris Manning, Chair, Barry Bloom, John O’Neill, Arjun Singh, Steve Hood, and Crocker Liu, led to this paper seeking to define “hotel/lodging real estate research” and provide the published literature context and foundation to encourage future collaboration between these two researcher/faculty groups that share many common goals and interests. More recently, ARES hosted a second hotel/lodging real estate panel at its 30th Annual Meeting in San Diego, California, on April 3, 2014: “Hotel/Lodging Industry Collaboration Research Opportunities,” along with five hotel/lodging real estate manuscripts presented in the paper presentation session: “Hotel/Lodging Property Analysis.”
2. The 30th ARES Annual Meeting was held April 1–5, 2014 at the Marriott Coronado Resort in San Diego, the 31st ARES Annual Meeting is April 14–18, 2015 at the Sanibel Harbour Marriott Resort & Spa, Fort Myers, Florida, the 32nd ARES Annual Meeting will be April 5–9, 2016 at the Eldorado Hotel in Santa Fe, New Mexico, and the 33rd ARES Annual Meeting will be April 18–22, 2017 at the Mauna Lani Bay Resort, Kohala Coast, Big Island of Hawaii.

3. The ARES 6th Annual “critical issues” seminar/workshop held on Wednesday, April 2, 2014, entitled “Education and Research: Industry/academic planning and development leadership,” was co-sponsored by ARES, the Appraisal Institute (AI), the CCIM Institute, National Association of Realtors (NAR), Realfor University, Royal Institution of Chartered Surveyors (RICS), and the Counselors of Real Estate (CRE).


6. ICHRIE held its 2014 Annual Meeting from July 30 to August 2 at the Sheraton San Diego Hotel and Marina in San Diego, California.

7. The Western Regional Science Association (WRSA) held its 54th Annual Meeting in Tucson, Arizona February 15–18, 2015, and hosts additional networking opportunities in conjunction with the Regional Science Association International (RSAI).

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