2006

A Review of Restaurant Valuation Literature - The Pre 2005 Perspective

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ABSTRACT

This research examines pre 2005 restaurant valuation literature in an effort to identify unexplored areas in this emerging field. Although much has been written regarding valuation in general, there has been very little appraisal literature focusing specifically on restaurants. Of the research that has been conducted, there has been some controversy about whether the appropriate value of a restaurant is a *market value* or a *going concern value*. We also explore the continuing usage of "rules of thumb" in restaurant valuation. Although these rules are often based in theory as well as practice, their breadth can severely limit their usefulness. Accordingly, we examine the prevalence of rule-of-thumb usage in the literature and hope that this may motivate academic researchers to find evidence of the relative accuracy of these informal tools.

INTRODUCTION

There are many who argue that valuation is both an art and a science. The science portion in this equation has been increasing due to advances in information technology allowing the increased availability of information to appraisers (McKinley, 2000). Databases of transactions and electronic access of court records allow for a more thorough examination of key sales parameters, such as revenue multipliers, capitalization rates and the like. While technology will probably never completely replace judgment in appraising, it is providing insight into how values are determined. Interestingly, appraisers valuing foodservice operations still tend to significantly rely upon rules of thumb that do not utilize information that is readily available.

The purpose of this paper is to examine the restaurant valuation literature (primarily in academic journals) over the past 25 years relevant to two particular issues: 1) what

interest is being valued, and 2) what techniques have been developed to determine a final value. We will address these issues by thoroughly reviewing the literature in three main areas: assessment of potential restaurant demand, determination of the correct interest and value to be appraised in a restaurant, and informal techniques that are still widely used in restaurant valuation.

Our research is not intended to review all potential valuation techniques. There may be techniques being used that have not been discussed and published in academic literature. Additionally, we cannot comment of the reliability of one valuation technique versus another. As the reader will see, the scope of restaurant valuation literature is rather limited and does not include this type of assessment. Research into this and other related topics would make a significant contribution.

BACKGROUND

Although restaurants and hotels are both hospitality businesses, they are quite different in a number of ways, particularly regarding their valuation and access to debt capital. Many hotel appraisal assignments involve appraising a fee simple interest, where the hotel building and land are typically owned by the same group of individuals. Additionally, the most common assignment for the hotel appraiser is to determine the market value of the property. Thus, it is a relatively straightforward exercise in which the net operating income (NOI) of the property is derived and this amount is translated into a value through either direct capitalization or yield capitalization, with the latter being more commonplace.

A restaurant valuation, however, is more complex. This is because there are numerous components to be valued. It is possible for the land and/or building to be leased. Therefore, an appraiser may be valuing a leased fee interest for the landlord. On the other hand, the appraiser may be valuing a leasehold interest for the restaurant owner. Moreover, it appears to be more commonplace to assign the appraiser to determine something other than the market value. The valuation methodology is dependent not only upon the interest being valued, but also whether or not the property is new or existing.

The appraisal literature of recent years is somewhat "thin" in three areas. The first is the importance of defining the appraisal problem. According to the *Appraisal of Real Estate* (2001), "the first step in the valuation process is the development of a clear statement of the appraisal problem."[1] This statement emphasizes the importance of not only identifying the intended users, but also the how the appraisal will be used and its overall purpose. These factors will all help determine the type of value in question.

Although often overlooked, a determination of the appraisal problem will help simplify the complexity of a restaurant valuation assignment. Secondly, some research discusses the often-used rules of thumb without any discussion regarding their origin or historical reliability (Rushmore, 1980; Hartmann, 1996; Elliott and Reed, 1999). Finally, although rules of thumb can be useful, some rules exhibit such wide ranges that they can be used in such a way to support nearly any conclusion of value. There is nothing in the literature that provides any guidance as to the accuracy and reliability of these rules that are reported to be so commonly used.

€[1] The Appraisal of Real Estate (12th Edition), p. 50.

IMPORTANCE OF DEMAND

The existing literature provides a reasonably good basis for estimating demand for a new or existing restaurant. Rushmore (1980) recommends using national statistics from the National Restaurant Association on a per-seat basis as a starting point. Seat turnover is based upon the appraiser conducting an intensive analysis of the local market.

Stefanelli (1980) uses more detail in the demand analysis. He states that generally, the trade area for a restaurant is approximately two miles. He believes that research indicates about half of a restaurant's patrons come from within this area. However, he also states that there are exceptions to this rule. Other important factors include demographics, psychographics, exhort factors, competitive facilities and quality of the neighborhood and site characteristics, including traffic patterns. Although Stefanelli (1980) mentions using a local chamber of commerce as a source, most chambers do not have detailed statistics to a specific location. While private sector services are available, these are often quite expensive unless the services can be utilized for a large number of assignments.

Smith (1985) has a number of different ideas on how to derive restaurant demand. He recommends reading trade journals as well as national statistics before appraising a restaurant. He cites a 1984 article from *Independent Restaurants* that makes use of primary and secondary demand zones based upon type of facility. He recommends the use of *Sales and Marketing Management's Survey of Buying Power* to determine the buying power of consumers in certain regions of the country. Another source of consumer spending behavior is the Restaurant Activity Index, where consumer preference for dining out is gauged relative to 100. When the index is above 100, the

residents dine out more often than the rest of the United States. Finally, national statistics from the Restaurant Industry Operations Report can be used in "bracketing," a technique that provides a range of sales on a per-seat basis.

Other research, such as that conducted by Fisher (1991) and Hartmann (1996), does not specifically address the derivation of customer demand. Overall, Smith does the most extensive job in explaining the different sources of demographic information. Although the existing literature reports on the importance and sources of demographic information, it does not specifically address how to use this information. As with hotels, certain demographic variables have much stronger predictive power than others. Instead of focusing on gathering a host of data on a region or a trade area, future research could provide greater detail on how these variables are used to derive customer demand.

Expenses and Development of the Pro Forma

Fisher (1991) shows an income statement as an exhibit in his article, but does not discuss how it is derived. Smith (1985), while having a lengthy discussion on demand, does not discuss expenses directly. Instead, he shows national statistics on rent as a percentage of sales as well as profit as a percentage of sales. Rushmore (1980) provides a pro forma statement based upon national statistics. Many papers including Stefanelli (1980), Elliott and Reed (1999), and Hartmann (1996) discuss valuation but do not address expenses.

The importance of accurate expense projections cannot be overemphasized. First, a tremendous percentage of a restaurant's revenues go towards the payment of expenses. Second, although national averages are a good starting point, they need to be adjusted for

local conditions. For example, labor and heating/cooling costs can vary widely from market to market. The increase in electricity costs in California in 2000 and 2001 is a perfect example of cost variance due to location.

TYPES OF VALUE AND INTERESTS

In hotel appraising, the most common type of value is *market value*. This is commonly defined as a price derived between a buyer and a seller without any undue influence or duress. In practical terms, the appraiser must assume an anonymous management team will operate the property in a competent and efficient manner. This scenario applies even to an existing property. Therefore, the appraiser must use *market-based* revenues and expenses in the projections and cannot simply rely upon the operating history of an existing property.

A restaurant can be difficult to value because it not only has a real estate component, but also a business component. If the appraiser uses the revenues and expenses of the existing property, he or she is finding the going concern value, which is different from the market value as discussed by Hartmann (1996). The going concern value can only be used for an existing operation.

Another type of value is *use value*, where the property is only considered for a specific use. Unlike market value appraisals, a *use value* appraisal does not consider a highest and best use analysis for the land. Similar to a going concern value, it makes use of specific circumstances and/or transactions that may not be currently occurring the marketplace.

The interests can be divided into three types. Fee simple interest is the highest form of ownership with the fewest encumbrances. An example would be where an owner would own the land and the restaurant building. Another appraisal assignment may involve a leased fee interest, or the interest of the landlord. This would be equal to the present value of the stream of lease payments less any operating expenses. Finally, an appraiser could value the restaurant from the operator's perspective (assuming they are renting the land and/or building) which would represent the leasehold interest of the property.

Overall, a significant problem for the appraiser and the client is to clearly define the appraisal problem and to understand what is to be done before the appraiser can tackle the methodology. As stated by Hartmann (1996), a common misunderstanding is for an appraiser to provide a going concern or use value to a client while thinking it is market value. The potential interests and values of a restaurant appraisal assignment are shown in Exhibit 1 below.

Insert Exhibit 1 about here

Restaurants are different from other types of real estate such as office building or apartments because of the interweaving of the property with the business. As stated by Hartmann (1996), "the land and the building are not the restaurant; they are the asset."[2] In essence, a restaurant is a business operated on the real estate. Therefore, the components must be valued separately. There are numerous techniques shown in the literature to accomplish this, although not every one breaks out business or intangible value.

[2] Robert W. Hartmann, Valuation for Loans on Restaurants, Appraisal Journal 64, p. 409.

Fisher (1991), for example, describes a methodology to find *fair market value*. What this represents is a discounted cash flow analysis using a weighted average cost of capital. Fisher does not discuss why a direct capitalization approach is more appropriate than a yield capitalization approach (common for hotels) and why a required rate of return for debt financing is used instead of a mortgage constant in the cost of capital calculation. Utilizing this technique, Fisher has identified the market value of the leasehold interest of the restaurant. The business value is undefined but included in the market value of the restaurant. The determination of fair market value is also conducted by Gorodesky and McCarron (2005).

Williams (2002) explains the three traditional approaches to valuation. He emphasizes the income approach and uses a hypothetical example to show the value of the leased fee interest of the restaurant landlord. The capitalized rent equals the value of the land and building. He states that these capitalization rates come from comparable sales and interviews.

Rushmore (1980) explains the rationale for the use of the income approach. He delineates the market value into two components: the real estate component and the business component. The real estate component consists of the land, land improvements and building while the business component includes fixtures, furniture and equipment, management expertise, décor, and other intangibles.

Therefore, this valuation technique is fairly straightforward. The real estate value is simply the economic rent on the property capitalized into a value. The cash flow to the restaurant owner, after making rent payments, is the return to the business and is capitalized to determine the value of the business component.

COMPLEX PROBLEMS, SIMPLE TECHNIQUES

Rules of thumb are widely used in the restaurant industry for important decisions, such as pricing and staffing. They are also used in restaurant valuation because they are easy to understand and interpret. But what are the origins of the term "*rule of thumb*"? According to Quinion (2005), "the expression rule of thumb has been recorded since 1692 and probably wasn't new then. It meant then what it means now—some method or procedure that comes from practice or experience, without any formal basis."[3] The Oxford English Dictionary (2005), widely accepted as the "authority on the evolution of the English language over the last millennium" defines *rule of thumb as* "a method or procedure derived entirely from practice or experience, without any basis in scientific knowledge; a roughly practical method. Also, a particular stated rule that is based on practice or experience."[4] Thus, despite the often complex nature of a restaurant valuation assignment, these wide-ranging experience-based "rules" are still applied to a large degree in the restaurant valuation literature.

As previously discussed, Rushmore (1980) carefully delineates market value into two components: real estate and business. However, different components of restaurants have different levels of risk associated with them; accordingly, they will have different capitalization rates. Rushmore describes a "typical lessor" as one who expects a return between 10 and 14 percent. The rate of return for restaurateurs is much higher and varies more widely. According to Rushmore, the capitalization rates used to determine business

[3] Quinion, A (2005) World wide words: Rule of thumb. Retrieved online June 15, 2005 from: http://www.worldwidewords.org/qa/qa-rul1.htm

[4] Oxford English Dictionary (2005). Oxford University Press. Retrieved online June 15, 2005 from: http://dictionary.oed.com/

value will range between 20 and 33 percent depending upon operational efficiency and condition of the equipment. The range of these estimates will yield very different final values.

Stefanelli (1982) examines how a buyer and a seller determine an appropriate selling price for a restaurant property. This is done by each party placing a value on all of the tangible and intangible assets of the restaurant. Therefore, Stefanelli argues that one cannot simply use the income approach to value all of the assets. The parties are expected to value a wide variety of assets, ranging from furniture and equipment to receivables, licenses, and even customer lists. Stefanelli discusses a simpler valuation method from Hansen (1975) that is based upon annual revenue.

According to Hansen, a starting point for a sales price is 40 percent of annual revenue. Smaller, independent operations may sell for only 25 percent of annual revenue while franchised operations such as a Dairy Queen may sell for up to 50 percent of annual revenue. Once again, however, a range of 25 to 50 percent of gross revenue is quite large, resulting in a large variance in the appropriate selling price.

Elliott and Reed (1999) discuss the valuation of the business components, emphasizing the use of the income approach and the importance of goodwill. In fact, they provide a chart of over 100 items that can be considered intangible assets. According to the authors, goodwill results in "super profits" that can be capitalized into the value of the business. The authors reproduce a chart from Schlit (1982) that places businesses into five broad risk premium categories. These risk premiums are as low as 6 to 9 percent for well-established business to more than 25 percent for small sole proprietorships.

The authors utilize a case study of a going concern value for a fast-food restaurant. This value contains both tangible and intangible components that only need to be separated for accounting purposes. The authors interviewed eight appraisers and concluded that the capitalization of super profits was used to determine business value. They argue that only then should rule of thumb methods be used as a check against the value conclusion found via the income capitalization approach.

Williams and Williams (2002) utilize a hypothetical pro forma income statement to arrive at an estimate of earnings available to a restaurateur leasing a building. This amount is then capitalized using rates ranging from 13 to 30 percent based upon the stability of the revenue. Once again, these are only presented as rules of thumb. An estimate of fixtures, furniture and equipment is subtracted to determine the value of the restaurant business.

Apple (2004) does not complete a restaurant valuation per se, but instead considers what it takes for a new restaurant in a leasehold situation to be successful. Apple first emphasizes the importance of an accurate estimate of annual sales. He regards this as the key to a successful new operation. His measure of success, based upon his experience with new restaurants, is the sales to start-up investment ratio. A minimum ratio is 1.5; 2 is more prudent. He also recommends that the rent should not exceed 6 percent of gross revenue. The author could provide more powerful evidence for his rule of thumb by providing some actual historical statistics of restaurants that have succeeded and those that have failed with their corresponding sales to investment ratios.

As this section reveals, rules of thumb are still widely discussed in the literature. However, the wide ranges they exhibit could yield very different values for the same

property if applied differently by different appraisers. Moreover, the problem is acerbated when numerous rules are applied simultaneously and the variance in price is compounded. Nevertheless, an important contribution could be made if studies were conducted that compared actual sales prices with valuations that utilized rules of thumb to assess their accuracy and reliability.

CONCLUSION AND SUGGESTIONS FOR FUTURE RESEARCH

As stated by Elliott and Reed (1999), there is an important gap in the academic literature regarding restaurant valuation. It should be stated that the academic literature does a relatively good job of explaining the derivation of restaurant demand. On the other hand, it appears that much of the existing literature has been written by, and for, restaurant valuation practitioners who share what could be termed "common knowledge." Although rules of thumb and typical rates of return are discussed in the literature and used in everyday practice, their basis could come into question. The problem with rules of thumb is that sometimes they work, and sometimes they do not. Restaurant values can vary widely depending upon the range of these common rules. Further comparative study into appraised values using rules of thumb and actual sales prices is greatly needed.

Moreover, additional academic research needs to be conducted and presented to better understand important investment parameters. Investor surveys are readily available for properties such as office buildings and shopping malls. It would be worthwhile for this information to be made available to academics to compare to the rules of thumb currently being used. This would shed some light onto the important topic of restaurant valuation, which remains somewhat of a black box.

References

Apple, S. (2004). What the big chains know can help you. Restaurant Start-Up and Growth (April), 64-67.

Elliott, P. & Reed, R. (1999). The valuation of fast-food outlets: analysis, methodology and reliability. Appraisal Journal 67, 359-369.

Fisher, D. (1991). Restaurant Valuation: A Financial Approach. Cornell Hotel and Restaurant Administration Quarterly 31, 88-92.

Gorodesky, R. & McCarron, E. (2005). How much is your restaurant worth? Available online at http:www.restaurant report.com/features/ft_valuation.html.

Hansen, J. (1975). Guide to buying and selling a business. Englewood Cliffs, NJ: Prentice-Hall.

Hartmann, R. (1996). Valuation for loans on restaurants. Appraisal Journal 64, 406-415.

McKinley, M. (2000). More than a makeover: introducing the third edition of appraising residential properties. Appraisal Journal 68, 109-110.

Oxford English Dictionary (2005). Oxford University Press. Retrieved online June 15, 2005 from: http://dictionary.oed.com/

Quinion, A (2005) World wide words: Rule of thumb. Retrieved online June 15, 2005 from: http://www.worldwidewords.org/qa/qa-rul1.htm

Rushmore, S. (1980). The appraisal of food service facilities. Appraisal Journal 48, 354-360.

Schlit, J. (1982). A rational approach to capitalization rates for discounting the future income stream of a closely held company. Financial Planner (January), p. 20.

Smith, C. (1985). Practical guidelines in appraising restaurants. Appraisal Journal 53, 167-178.

Stefanelli, J. (1982). Buying or selling a restaurant: how to set the price. Cornell Hotel and Restaurant Administration Quarterly 23, 80-92.

Stefanelli, J. (1980). Appraisal of an existing commercial foodservice operation. The Real Estate Appraiser and Analyst 46, 29-33.

Williams, R. & Williams, M. (2002). What is my restaurant business worth? Part I. Available online at http:www.hotelresource.com/studies/hvs061702.htm.

Williams, R. (2002). What is my restaurant business worth? Part II. Available online at http:www.hotelresource.com/studies/hvs071502.htm.

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Exhibit 1
Potential Restaurant Values, Interests and Components

Types of Value	Interests	Components
Market Going Concern Use	Fee Simple Leased Fee Leasehold	Real Estate Business/Intangible

APPENDIX A

Chronological Review of Contributions to Restaurant Valuation Literature

Date	Author(s)	Contributions
1980	Rushmore	Emphasizes the use of the income approach; delineates a restaurant investment into two components; utilizes national figures for sales estimates
1980	Stefanelli	Addresses the need to examine trading area information and site characteristics; valuation of the property elements
1982	Stefanelli	A case study of restaurant valuation from both a buyer and seller's perspective; valuation of all tangible and intangible elements; operating statements for a restaurant from both a buyer and seller's perspective
1985	Smith	Review of valuation literature up to that point; determination of restaurant revenues and sources of information; use of a bracketing technique for sales
1991	Fisher	Focuses on income valuation using the weighted average cost of capital technique to determine fair market value
1996	Hartmann	Differentiates four types of appraised values; offers a rule-of-thumb for sales prices
1999	Eliott and Reed	Divides a business into tangible and intangible components; offers a rule-of-thumb for risk premiums on capitalization rates
2002	Williams and Williams	Makes use of a hypothetical case study to find restaurant value; uses rule-of-thumb for capitalization rates

APPENDIX A, continued

Chronological Review of Contributions to Restaurant Valuation

Literature

Date	Author(s)	Contributions
2002	Williams	Discusses the three standard approaches to value; shows a sensitivity analysis based on different capitalization rates
2004	Apple	Evaluates a leasehold interest in restaurant; provides a rule-of-thumb for sales relative to investment
2005	Gorodesky and McCarron	Provides fair market value and makes use of a rule-of-thumb for capitalization rates