

# CAPITALIZATION RATES FOR REGIONAL SHOPPING CENTERS: ANCHOR DEPARTMENT STORES VS. MALL STORES

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In the United States and Canada, regional shopping centers are commonly valued through the use of income capitalization. The widespread use and acceptance of this valuation method indicates that it most nearly represents the thought processes and market behavior of buyers and sellers.<sup>2</sup> Moreover, sufficient quantities of appropriate market data are typically available to allow for supportable use of income capitalization. These required data include: 1. net market rentals (generally expressed as rent per square foot of gross leasable area or GLA), 2. capitalization rates extracted from sales transactions data and/or obtained from published survey services<sup>3</sup>, 3. discount rates or expected Internal Rates of Return derived from sales and from published survey sources,<sup>4</sup> and 4. retail sales per square foot of GLA,<sup>5</sup> when available.

Particularly in valuations of regional shopping centers<sup>6</sup> and their components (anchor department stores and mall stores as a group) for ad valorem real property tax purposes, direct capitalization is most commonly employed.<sup>7</sup> While some authorities argue strongly that discounted cash flow models most nearly represent the thinking and behavior of investor-purchasers of regional shopping centers,<sup>8</sup> direct capitalization, nevertheless, is widely used. The essence of direct capitalization is its disarming, and sometimes misleading, simplicity:<sup>9</sup>

$$V = \frac{I}{R}$$

This model translates to "Value equals first-year or 'stabilized' Net Operating Income capitalized at (i.e., divided by) a market-derived Capitalization Rate."

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### The Use Of Blended Capitalization Rates

Some published materials<sup>10</sup> and numerous appraisals from the past five years do not differentiate among sales of anchor department stores only, sales of the mall stores only as a group and sales of mall stores together with one or more anchor department stores when market-derived capitalization rates are extracted from those sales. Moreover, it is not uncommon for capitalization rates extracted from sales of freestanding "big box" discount department store properties, such as Wal-Mart and K-Mart, to be used for valuing components of regional shopping centers. In effect, the approach is that one rate fits all. Because there is a relative scarcity of sales transactions data available for analysis, the practice of blending overall capitalization rates from sales of dissimilar types of retail space housing dissimilar activities has become fairly widespread. The results however, have led to misleading value estimates.

Since the majority of sales reported and shared among appraisers represent transfers of malls only, the extracted capitalization rates from those transactions tend to dominate the calculation of the blended capitalization rates that are derived from mixtures of market sales transactions data. There is not a study known to be available that separates market-extracted capitalization rates derived from sales of malls only from those derived from sales of anchor department stores.

### Indications Of Differences In Risk

Many authors do not differentiate between anchor department stores and mall stores with respect to perceived risk to the owner of the real estate. This explains why they use the same capitalization rate for valuing a regional shopping center and all its components. Typically, that capitalization rate is derived from sales of malls only, or of malls plus one or more anchors (but *not* from sales of anchor department stores only).<sup>11</sup> Yet, continuing research on market rentals for regional shopping centers in both the U.S. and Canada has demonstrated unequivocally that:

1. Regional shopping center rentals per square foot of GLA decrease as size of space (square feet of GLA) increases, but at a decreasing rate;
2. Rent per square foot of GLA increases as retail sales per square foot of GLA increase, but at a decreasing rate; and
3. Sales per square foot of GLA decrease as size of space increases but at a decreasing rate.<sup>12</sup>

All this suggests that department stores, with much larger sizes but substantially lower sales per square foot of GLA, would be perceived differently by both buyers and sellers.

Indeed, a small but emphatic minority of practitioners claims that anchor department stores should

have a lower capitalization rate because there is *less* risk to the property owner associated with anchor department store tenants. The term of the lease is longer and involves less turnover and risk of frictional vacancy. Moreover, the tenant anchor department store firm is larger and usually part of a regional or national chain with allegedly better credit standing and greater financial strength than mall stores.

We do not know of any evidence which supports the argument for lower capitalization rates for anchor department stores. Rather, in property tax appeal proceedings such claims are presented as logical argument since the conclusions stand to reason. Yet in practice these advocates of lower capitalization rates for anchor department stores continue to use one blended rate for both anchors and mall stores.

Our research suggests a different situation. This article includes the preliminary results of that research.

### Nature Of The Research

Published articles and papers that address shopping center valuation were reviewed with particular reference to the capitalization rate(s) appropriate to such valuation.<sup>13</sup>

Then, utilizing data from every issue of *Dollars & Cents of Shopping Centers* from 1975 through 1995, we compared levels of sales per square foot of GLA and rent per square foot of GLA for anchor department stores and for mall stores as a group. We made these comparisons for both regional and superregional shopping centers in the U.S., primarily because the Urban Land Institute has reported data on this basis since 1975. Those analyses included comparisons of trends in sales per square foot of GLA and rent per square foot of GLA for both categories of store space. The data on which the U.S. analyses were based are presented in Exhibit 1, parts A and B.

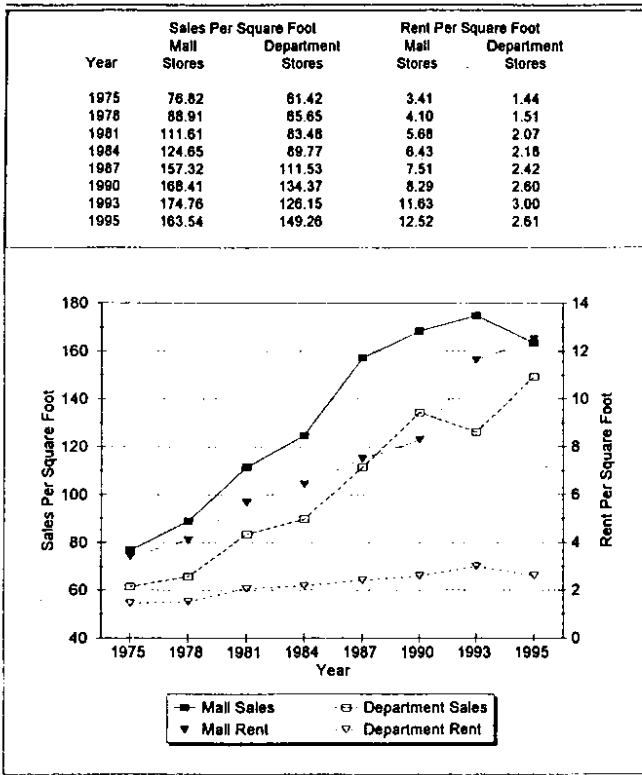
Further, we analyzed the risks and consequences to owner-operators of regional shopping centers from losing an anchor department store.<sup>14</sup>

### Risk And Growth Ingredients For Anchor Department Stores

As a result of these investigations, we reaffirmed the obvious but important fact that since anchor department stores occupy larger amounts of space, the consequences of their departure or having their space become vacant are substantially greater for regional or superregional shopping center owner-operators. Moreover, it is not surprising that their rental rates per square foot of GLA tend to be lowest in regional shopping centers, given the findings enumerated above. ULI data also indicate that anchor department stores represent at least as much

### EXHIBIT 1A

Comparison of Sales Per Square Foot of GLA and Rent Per Square Foot of GLA Anchor Department Stores Vs. Mall Stores U.S. Regional Shopping Centers, 1975-1995



Source: Dollars & Cents of Shopping Centers

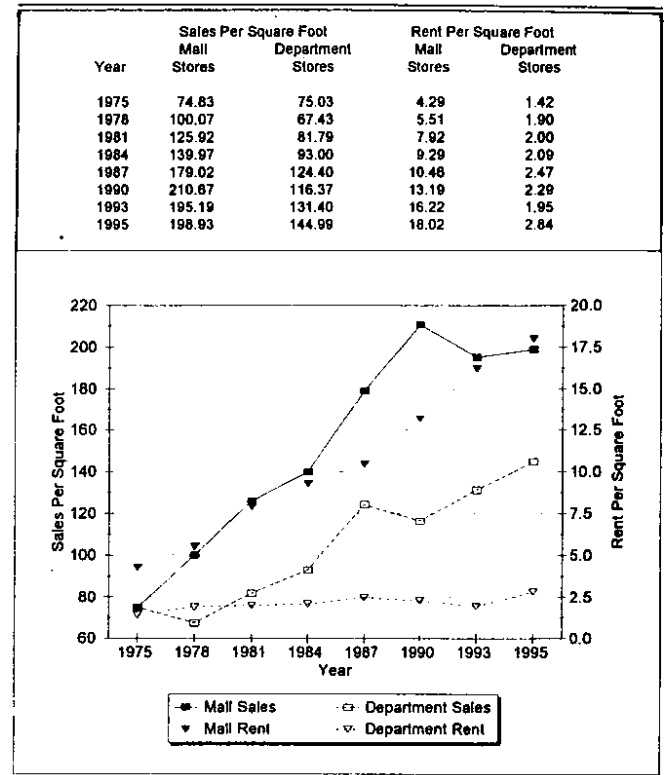
total space as do all mall stores combined in U.S. regional and superregional shopping centers. This is demonstrated clearly in Exhibit 2.

Exhibits 1A and 1B show that sales per square foot of GLA for anchor department stores have not increased as much as sales per square foot of GLA for mall stores among regional and superregional shopping centers in the U.S. Exhibit 1 also indicates that rent per square foot of GLA for anchor department stores has been much lower than rent per square foot for mall stores and has shown dramatically less growth during 1975-1995. Since a capitalization rate (R) may be characterized as a yield rate (discount rate) adjusted downward for anticipated income and value growth over time ( $R = Y - G$ ), it is apparent that the capitalization rate (R) for anchor department stores will be substantially different from the capitalization rate appropriate for mall stores, based on different growth rates.

The consolidation of anchor department store chains, coupled with growing numbers of bankruptcies leading to further consolidations, has had a double-barreled effect on regional shopping centers in recent years. First, some anchor department

### EXHIBIT 1B

Comparison of Sales Per Square Foot of GLA and Rent Per Square Foot of GLA Anchor Department Stores Vs. Mall Stores U.S. Superregional Shopping Centers, 1975-1995



Source: Dollars & Cents of Shopping Centers

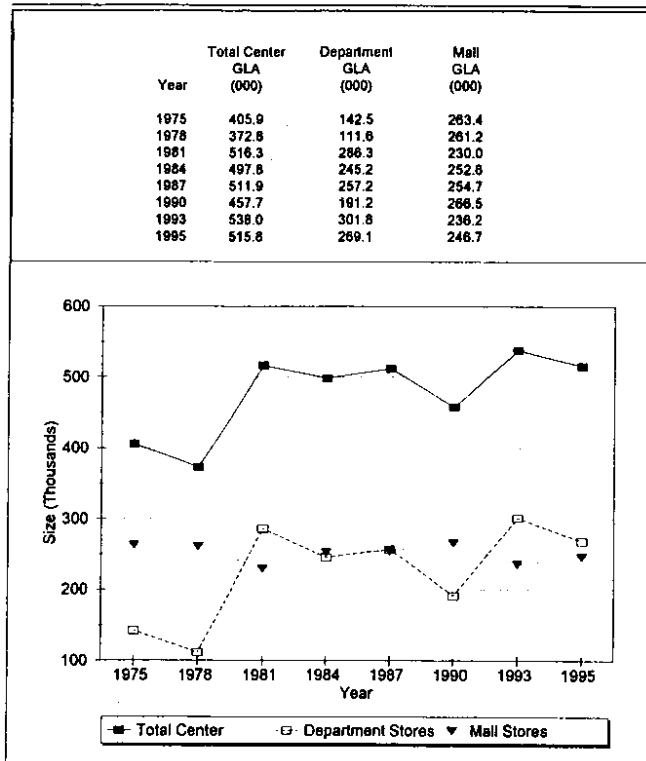
store spaces have been vacated either because of bankruptcy or because consolidating chains have no desire to compete with themselves for the same shopper volume in any given center. Second, that consolidation process means there are fewer replacement alternatives available to regional mall owner-operators for vacated anchor department store space. Subsequently, the loss of a department store anchor tends to be exacerbated by loss of sales volume and ultimately of mall tenants in that part of the shopping center vacated by the anchor department store. Since one of the major functions of an anchor department store in a regional shopping center (acknowledged by authors on both sides of the capitalization rate debate<sup>15</sup>) is to attract shoppers and customers to the shopping center, the loss of an anchor department store invariably means decreased shopper traffic in that portion of the shopping center.<sup>16</sup>

#### Research Hypothesis

Given this background of prior research and information, we developed the hypothesis that the capitalization rate for anchor department stores is greater than for mall stores as a group, in regional

## EXHIBIT 2A

Comparison of Total Gross Leasable Area  
Anchor Department Stores Vs. Mall Stores  
U.S. Regional Shopping Centers, 1975-1995



Source: Dollars & Cents of Shopping Centers

shopping centers in the U.S. and Canada. Anchor department stores occupy larger spaces than mall stores. They also produce lower sales per square foot of GLA, lower rent per square foot of GLA, lower growth in sales and rents over time, and greater risk and consequences of loss for the owner of the anchor department store space.

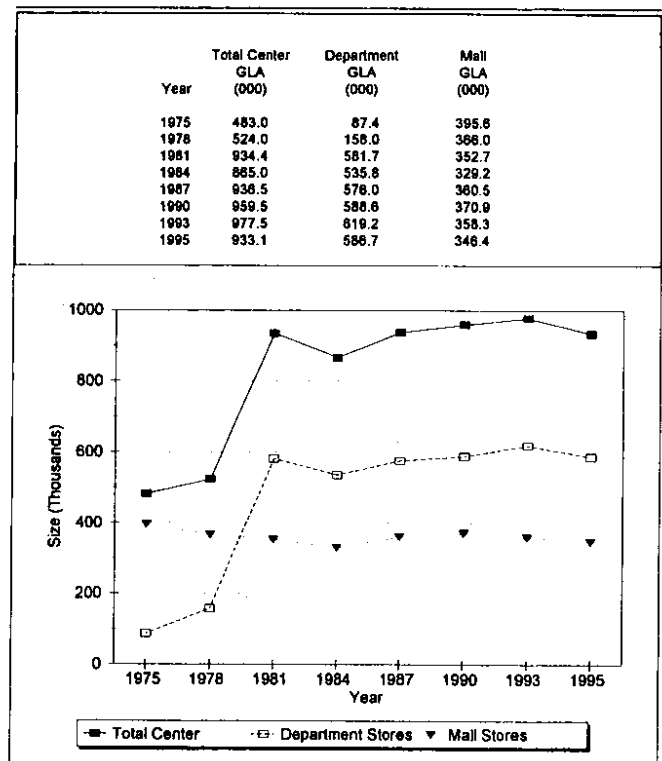
### Data Employed

To test this hypothesis, sales data were assembled from a number of sources. The data obtained for analysis consisted of relatively recent sales of regional shopping center space for which both sales price and net operating income at the time of sale had been obtained. Ultimately sufficient data was obtained to serve as the basis of further analysis on eight sales of anchor department stores only, plus 29 sales of mall stores only and 34 sales of malls with one or more anchor department stores included in the transaction. In the latter group, all but two of the sales included one department store only.

The period included 1988-1995. Some sales occurred in each of the four census regions of the U.S. Data also was obtained showing the year and month of the sales transactions, whether the

## EXHIBIT 2B

Comparison of Total Gross Leasable Area  
Anchor Department Stores Vs. Mall Stores  
U.S. Superregional Shopping Centers, 1975-1995



Source: Dollars & Cents of Shopping Centers

shopping center involved was a superregional or regional center and (in some cases) the year built. Unfortunately, not all of the otherwise usable sales transactions files contained data on the year built (for age at time of sale), so that variable was eliminated from analysis.

### Analytical Procedures Followed

First applied was simple comparisons of averages to distinguish capitalization rates for sales of anchor department stores only from sales of mall store space only, as well as from malls with one or more anchors included in the sales transaction. For this analysis, some 41 sales were included with only spotty information available but with data on sales price and NOI at the time of sale. For informational purposes, these 41 sales are included as part of the category "All Except Anchors Only" in Exhibit 3.

With a database of 71 sales (8 anchor department stores only, 29 malls only, 34 mixed), sparse but nevertheless instructive multiple regression models were developed in the Hedonic Pricing Model format. In this particular instance, the dependent variable used was overall capitalization rate (OAR). We employed two usable models: one that included census region as an independent variable

### EXHIBIT 3

#### Comparison of Averages Capitalization Rates Derived from Sales Anchor Department Stores Vs. Malls

	Average (X)	Standard Deviation (s)	Coefficient of Variation (C.V.)	Difference From Anchor (Percentage Points)
Anchors Only (8)	10.48%	0.44%	.0420	0.00
Malls Only (29)	6.62%	0.91%	.1375	3.86
All Verified Except Anchors Only (59)	6.74%	1.00%	.1484	3.74
All Except Anchors Only (100)	6.99%	1.64%	.2346	3.49

and one that did not. The model that included census region as a location variable was Model A; the one that omitted census region as an independent variable was Model B.

Discrete binary year variables (Yes-No) were included to account for varying market conditions over time. Also incorporated were binary variables (Yes-No) for superregional versus regional shopping centers (SUPERREG) and for sales of anchor department stores only versus all other sales (DEPTST). Finally, a variable was included for the size of the square footage sold (GLASOLD). As already noted, too few sales transaction files contained information on year built, so there was no independent variable for age at time of sale. The results obtained from Models A and B are summarized in Exhibit 4, and the implications of those results are discussed in the following section.

The regression models produced satisfactory statistical indicators which strongly suggests that the results are usable and reasonably reliable. Both Models A and B produce Adjusted R<sup>2</sup> in the vicinity of .70. The F-Ratio for each model indicates that the results are highly significant and therefore clearly non-random and non-chance. The standard error adjusted for degrees of freedom is low relative to both the intercept and standard calculated values of the dependent variable.

Several alternative models utilizing natural logarithms for both the dependent variable and GLASOLD were tested, but no improvement in statistical quality was obtained. As a result, the linear form of model was selected, as represented by Models A and B.

#### Findings

Comparison of Averages (Exhibit 3) clearly demonstrates that, when the results of the data subsets are compared, the anticipated overall capitalization rate (OAR) for sales of anchor department stores only is measurably and markedly higher than for sales of

### EXHIBIT 4

#### Selected Multiple Regression Model Results Overall Capitalization Rate is Dependent Variable

	Model A	Model B
Number Sales	71	71
R2 (Adjusted)	.6710	.7160
F-Ratio	10.92	13.52
Standard Error (d.f. Adjusted)	1.00	0.98
Variables	Coefficients	
1991	+0.37 (0.83)	+0.14 (0.36)
1992	+1.17 (2.88)	+1.04 (2.68)
1993	+1.17 (2.48)	+1.12 (2.43)
1994	-0.28 (0.25)	-0.20 (0.19)
1995	+1.40 (1.34)	+1.49 (1.46)
Superregional (Yes - No)	-0.28 (0.97)	-0.18 (0.63)
Department Store (Yes - No)	+3.69 (6.23)	+3.57 (6.21)
Intercept	+6.29 (3.30)	+6.26 (3.68)

NOTE: Figures in parentheses are calculated *t*-Values.

malls only or for sales of malls that include one or more anchor department stores. Particularly in comparing rates extracted from sales of anchor department stores only with those derived from sales of malls only, the differences are substantial and statistically significant. It is highly unlikely that these are random or chance occurrences.

The regression models indicate there is no benefit derived from including the census region as a location variable. Indeed, coefficients for all census regions were nonsignificant statistically, suggesting that any regional market differences had essentially equal effects on rentals, occupancy and sales prices. Accordingly, the results of Model B were primarily relied on for analyses.

The time variables (binary year) showed an interesting yet unsurprising pattern. The base year of 1989 was selected against which all others would be measured and compared. For 1988 and 1990, the coefficients were negative but nonsignificant. This makes logical sense and is consistent with market evidence for that time period. However, starting in 1991, the year coefficient (reflecting market conditions) is positive. This indicates that higher capitalization rates were required by investors in shopping centers as the effects of overbuilt markets and generally declining economic conditions took hold. These year coefficients increased through 1993, with 1992 and 1993 exhibiting positive, statistically significant coefficients. A brief decline occurred in 1994 with a further (but nonsignificant) increase in capitalization rates for regional shopping center sales in 1995. GLASOLD had a small, almost neutral coefficient. It was highly nonsignificant. As a result, its values are not shown in Exhibit 4.

The coefficient for sales of components of superregional (as opposed to regional) shopping centers was negative, quite small and statistically nonsignificant. This result would be expected because of the relative popularity of superregional centers among investors, as reported in the professional and trade press.

Finally, the coefficient for "Department Store" is positive, relatively large (the largest of any coefficient in the model) and statistically significant. This result indicates that capitalization rates for sales of anchor department stores only are higher than those for sales transactions involving mall stores, whether mall stores only or mall stores in combination with one or more anchor department stores. Both Model A and Model B indicate that this is a systematic market phenomenon. Moreover, the typical (average) differential or premium for a capitalization rate on the sale of anchor department store space is approximately 3.60 percentage points. That figure is quite consistent with the differentials indicated in Exhibit 3, especially the comparison between rates for all verified sales except anchor stores only and for anchor department stores only.

### Conclusion

From this limited sample, it is quite apparent that a strong, systematic market process is at work. Sales of anchor department stores occurred at capitalization rates substantially in excess of those associated with sales of mall stores as a group, whether or not in combination with one or more anchor department stores. These findings have important implications for the valuation of regional (and superregional) shopping centers and their components. They indicate strongly that anchor department store space should be valued separately and differently from mall space. These findings are a direct response to the concerns expressed by Gaylord Wood, Esq. in 1988.<sup>17</sup>

At the same time, the limited number of sales transactions files available for this analysis indicates that more studies using more data are necessary to test whether the findings have broad applicability. The issue is important enough to suggest that similar research efforts be undertaken in the near term future.

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### NOTES

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2. See Appraisal Institute [2], Butcher, [4,5], Eppli & Shilling [8], Kinnard & Geckler [13], McElveen & Diskin [17], Ramsland [21], and Vernor & Rabianski [25].
3. See Korpacz [15], Real Estate Research Corporation [22].
4. Ibidem.
5. Urban Land Institute, *Dollars & Cents of Shopping Centers*, Washington, DC: Triennially 1969-1993; 1995. See also Kinnard [11] and Kinnard & Geckler [12].
6. Throughout this article, we refer to both regional and super-regional shopping centers as regional. It was not until 1975 that the Urban Land Institute reported separate data on regional and superregional shopping centers. Moreover, ULI still combines regional and superregional centers when reporting on Canadian regionals.
7. See, for example, Grad [9], Martin & Nafe [16], McElveen & Diskin [17], Scribens & Hiller [23], Tessier [24] and Wood [26].
8. See, for example, Benjamin et al [3], Eppli & Shilling [8], Ramsland [21] and Vernor & Rabianski [25].
9. See Kinnard, William N., Jr., "Capitalization Rates Are Not Discount Rates: A Handy Guide to Identifying Misleading Appraisals," publication pending April 1996. This article contains numerous references to other authorities published since 1984.
10. See, for example, Appraisal Institute [2], Eckert (IAAO) [7], McLean [18,19], Scribens & Hiller [23].
11. See, for example, Scribens & Hiller [23], Tessier [24] and Wood [26].
12. See, for example, Kinnard [11], Kinnard & Geckler [12,13], Martin & Nafe [16].
13. In particular, we reviewed Benjamin et al [3], Eppli & Shilling [8], Katz [10], Kinnard [11,14], Kinnard & Geckler [12,13], Ramsey [20] and Ramsland [21].
14. In this process, we studied particularly Benjamin et al [3], Carter [6], Kinnard [14], Kinnard & Geckler [13], McElveen & Diskin [17], McLean [19] and Vernor & Rabianski [25].
15. See, Carter [6], Katz [10], McElveen & Diskin [17], McLean [18,19], Ramsey [20], Tessier [24], Vernor & Rabianski [25] and Wood [26]. See also Gatzloff, Dean H., G. Stacy Sirmans and Barry A. Diskin, "The Effect of Anchor Tenant Loss on Shopping Center Rents". Paper presented at the American Real Estate Society Annual Conference, Santa Barbara, CA, April 1994.
16. See, for example, Carter [6], Katz [10], Martin & Nafe [16] and Ramsland [21].
17. Wood [26].

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