Real Estate Cycles: Measuring Differences in Retail Subtypes

by William C. Wheaton, CRE, Raymond G. Torto, CRE, & James M. Costello

Overview

Is common sense really that common? For instance, real estate analysts know anecdotally that the market for neighborhood and community center space is very different from that for regional and power center space. However even with this common sense knowledge, one can still frequently see commentary that treats the market for retail space as a single entity.

In this article we will not try to address the reasons why some analysts treat the retail market as a single entity. We will attempt to provide robust support to the notion that retail subtypes should be analyzed separately. This is done by quantifying some of the differences between the retail subtypes in terms of their cycles in supply and demand.

Neighborhood and community centers are shown to have a cyclical pattern in construction, suggesting a quick linkage between the supply and demand of space for these centers. On the other hand, regional and power centers have lumpy construction patterns, with surges in construction that are independent of changes in the broader economy. These differences suggest that any analysis of retail space derived from trends in the market as a whole may be skewed.

Defining Retail Subtypes

To analyze retail subtypes, it is necessary to begin by defining them. There are a number of classification standards against which a shopping center can be measured. The International Council of Shopping Centers (ICSC), the Urban Land Institute (ULI), the National Research Bureau (NRB), and others have defined the basic types of shopping centers based on the type of tenants, site area, and size of the structure. We can spend a great deal of time comparing the different classification

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systems, however they are generally similar with some variation in the size ranges and breadth of center types.

In *The Dollars & Cents of Shopping Centers*, ULI makes a point that in defining a center type, the tenant base is equally important as the physical characteristics of the shopping center and, in this regard, these three classification systems are very similar. NRB is our primary data source for retail space market information and we generally follow their definitions. For purposes of analysis, we modify the NRB shopping center definitions slightly, by grouping regional and super-regional centers into a single regional center category.

MEASURING SUPPLY CYCLES

To measure retail supply, we track the stock of shopping center space over the last 35 years. To construct this series, we use a combination of historical information from the NRB dataset and recent completions from CB Richard Ellis. Because expansions of existing shopping centers represent a significant amount of the total shopping center space, we have uniquely adapted the NRB data to calculate each metropolitan area's stock series. This adaptation is necessary because the NRB dataset only lists the year opened, current space, and the year of any expansion. Thus, we must attribute a share of current space to the year of expansion. In shopping centers that have not expanded, the entire square footage of the center is counted as completed in the year of its opening.

There is the issue that all retail space is not shopping center space. Attempting to equilibrate changes in supply with changes in demand can be skewed from additions to supply that are not in shopping centers. For instance, one might argue that tracking only shopping centers would ignore many of the freestanding stores that have been built in recent years. This concern is only partially correct. To begin with, NRB defines a center loosely enough so they are able to track power centers where several large retailers each own their own pad and share little more than common parking. Secondly, all of the space within shopping centers is measured, including space owned directly by retailers, not just by the center's management.

Additionally, while no longer dominant due to suburbanization and the growth of shopping centers, downtown or 'High Street' retailing still exists in many markets. Presumably the market for these stand-alone retailers is not growing, so changes in metropolitan supply should only impact the shopping center market. Unfortunately, while the shopping center market is tracked and quantified by a number of organizations, there is almost no consistent data available that tracks stand-alone, High Street, retailing.

To examine the construction cycle for each type of shopping center, *Figure 1* displays annual gross investment (new construction) in each center type for the U.S. Each series is measured as a percentage of the stock, covering the period 1968-1998, with the power center series starting in 1982.

To track completions against changes in the broader economy, each graph also depicts the annual percentage change in total employment for the nation. A comparison of each type of shopping center shows that retail real estate certainly does not perform uniformly.

For neighborhood and community centers, there appears to be considerable correlation between real estate and the economy. Shortly after each downturn in the economy, (1975, 1981, 1991) investments show a downturn, with corresponding investment upturns occurring during economic recoveries. This pattern suggests that the neighborhood and community centers react to national or regional economic shocks.

With investment in regional centers, however, there appears to be little evidence of a long-term relationship to the economy. There were two mini-completion spikes in the early and mid-1980s that matched the completion cycle of neighborhood and community centers. In other time periods, regional centers have a completion cycle of their own with high levels of completions during economic downturns in the mid-1970s and early 1990s. Investment in power centers bears no relation to the broader economic cycle, with completion rates similar to those of regional centers in the late sixties and early seventies.

Growth in the economy does not directly lead to increased investment in new shopping centers. Standard investment theory would argue that construction should follow changes in asset values. In neighborhood and community shopping centers, the increased demand spurred by economic growth translates quickly into new completions. This quick turnaround suggests a direct linkage between movements in demand, and movements in neighborhood and community center asset values. Because

Figure 1

Completion Rate by Center Type versus Total Employment Growth

SOURCE: RFA, NRB

the supply of regional and power center space does not move with the underlying demand in the economy, one may question whether or not we are using the proper measure of demand for each shopping center type.

MEASURING DEMAND INTERACTIONS

The demand for retail space is a derived demand in which the sales activity of retailers drives their need for space. We have been using total employment growth as a general measure of economic performance, and while this is one measure that will drive retail sales, it is not the only measure. Where possible, it makes sense to measure demand for retail space by directly examining retail sales.

In order to estimate retail sales by center type at a national level, Wheaton & Torto [1995] used the Retail Trade Survey data from the Census by SIC in combination with ULI estimates of tenant types by SIC. Following this method, we use the ULI survey [1997] of shopping centers to calculate the distribution of tenant types by SIC as a percentage of gross leaseable area for each center type. These percentage distributions are displayed in *Table 1*, and show that regional and power centers are dominated by the general merchandise category that will sell higher-order goods such as appliances. Neighborhood centers are dominated by retailers selling lower-order goods such as food, while community centers sell more of a mix of goods.

Neighborhood and community centers have dominant tenants in common, as do regional and power centers. In terms of physical characteristics, power centers have more in common with community centers than regional centers, but as we are analyzing trends in demand we group the center types based on dominant tenant types to make for a quicker analysis of the patterns in sales. Applying the percentages for the retail tenants to the Census data on retail sales by SIC allows us to estimate the national trend in retail sales by shopping center type.[1] The annual, inflation-adjusted changes in this estimate are displayed in *Figure 2*. While sales at regional and power centers are certainly more volatile than neighborhood and community centers, there is a common cycle in retail sales at these centers. These two series exhibit a correlation rate of nearly 85 percent.

Analysts should use caution with the Retail Trade Survey data for any project that is not national in scope. To develop this dataset, the U.S. Census Bureau compiles retail sales data from annual surveys of select merchandisers. Because all merchandisers surveyed do not have operations in each MSA, this data is not released officially at the metropolitan level as these chains may not be a representative sample of overall retailing. While the Census data is not representative at the metropolitan level, it is officially released at the national level as the aggregation across metropolitan

Table 1

Distribution of Tenant Types by Type of Shopping Center

SIC	Neighborhood	Community	Regional	Power
Building Materials/Hardware	1.9%	0.9%	0.1%	0.0%
Genearal Merchandise	3.6%	24.4%	47.8%	45.6%
Eating/Drink Establishments	7.6%	5.6%	2.7%	0.9%
Food	45.6%	29.1%	0.9%	17.1%
Apparel	3.2%	9.9%	25.8%	6.4%
Furniture	4.4%	4.9%	4.5%	5.0%
Other Consumer Goods	15.6%	12.9%	13.2%	18.0%
Services	18.0%	12.2%	4.9%	6.9%

SOURCES: ULI Dollars & Cents of Shopping Centers, *1997*
ULI Dollars & Cents of Power Centers, *1997*

Figure 2

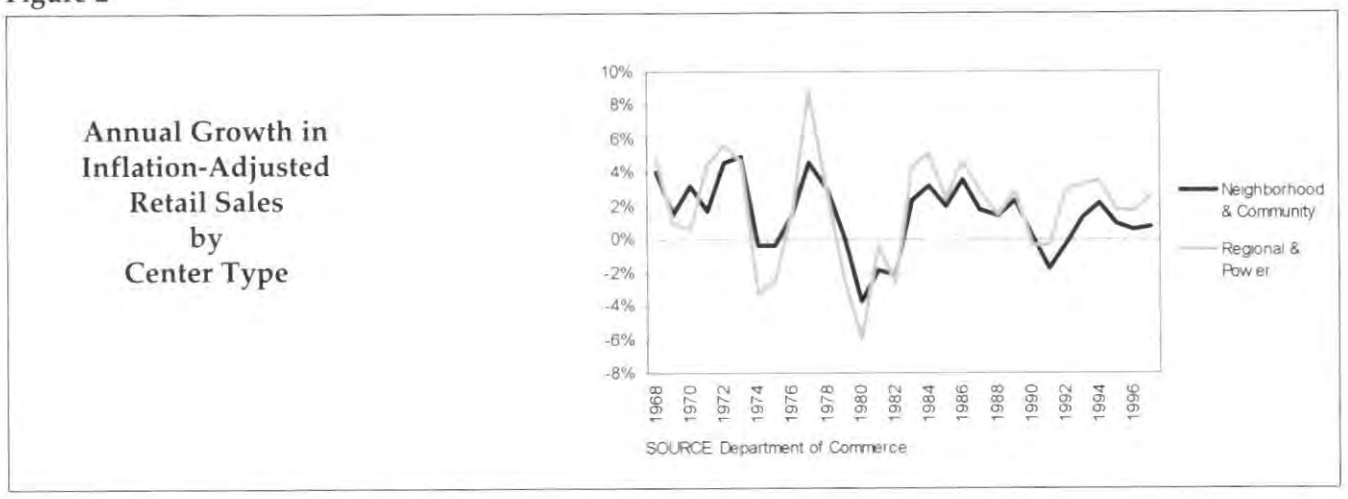
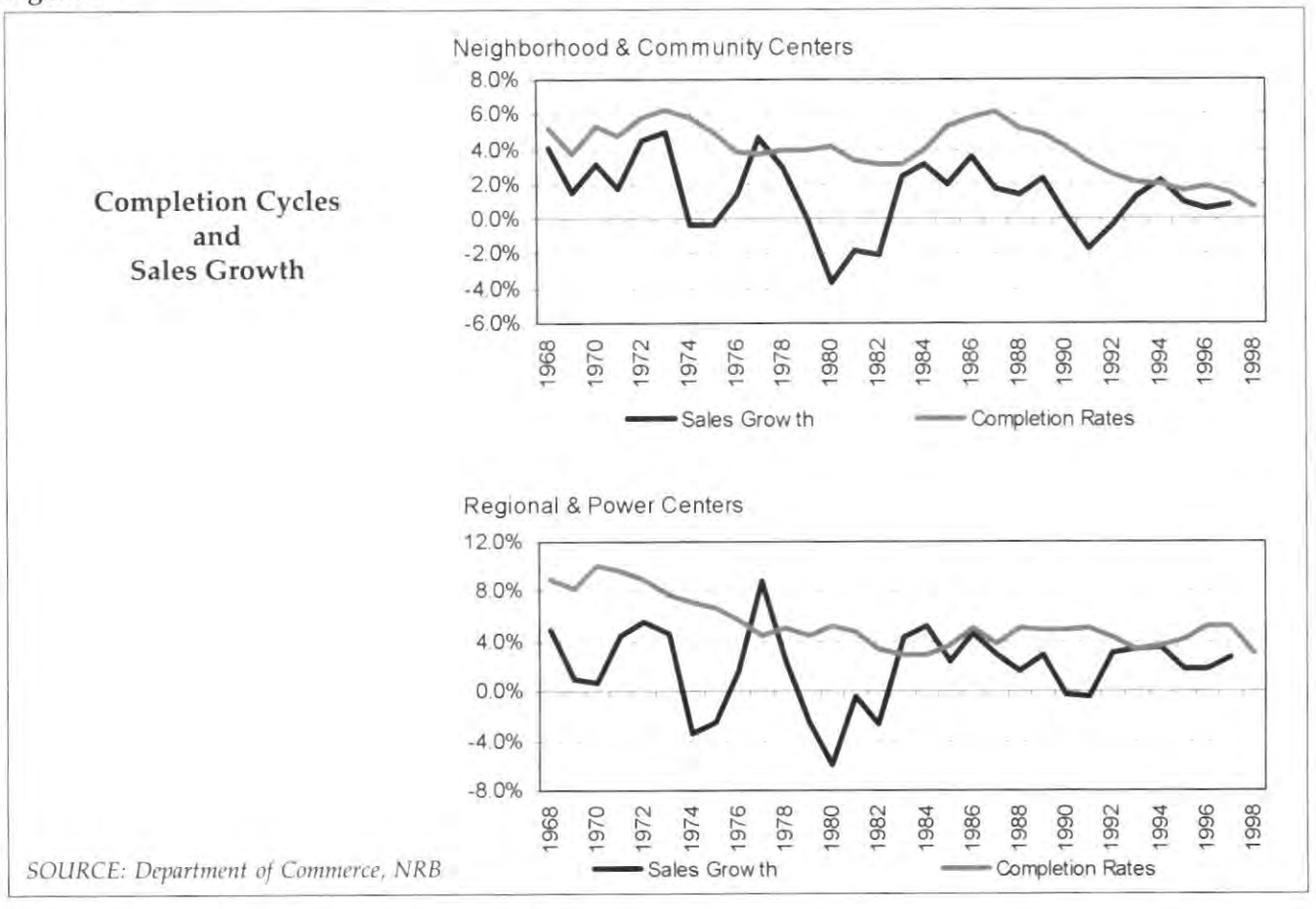


Figure 3



areas is representative of the national trend in sales.

SUPPLY VERSUS DEMAND

To examine the dissimilarity of the construction cycles exhibited by these two markets, we plot the sales data presented in *Figure 2* against the construction series by type from *Figure 1*. *Figure 3* plots the completion rate of neighborhood and community centers against the growth in inflation-adjusted retail sales for product categories typical of neighborhood and community center tenants. Likewise, the completion rate for regional and power centers is plotted against the growth in inflation-adjusted retail sales typical of these centers. The trend in sales versus completions highlights the relationship between demand and investment more clearly than total employment growth. There is some noise in the sales growth series leading to much more movement from year to year than in the completion

series. While neighborhood and community center construction has a 32.5 percent contemporaneous correlation rate with sales growth, it is much more closely related than in regional and power centers. For these center types, sales growth and completions have almost no relationship with only a 2.2 percent correlation rate.

Since neighborhood and community center construction moves closely with the drivers of demand, the risk of investing in these property types is a demand side risk. For these types of centers, one faces danger if one over or under estimates the underlying demand for space. Investment in regional and power centers is not a demand side risk as the long-term construction patterns bear little relationship to the drivers of demand.

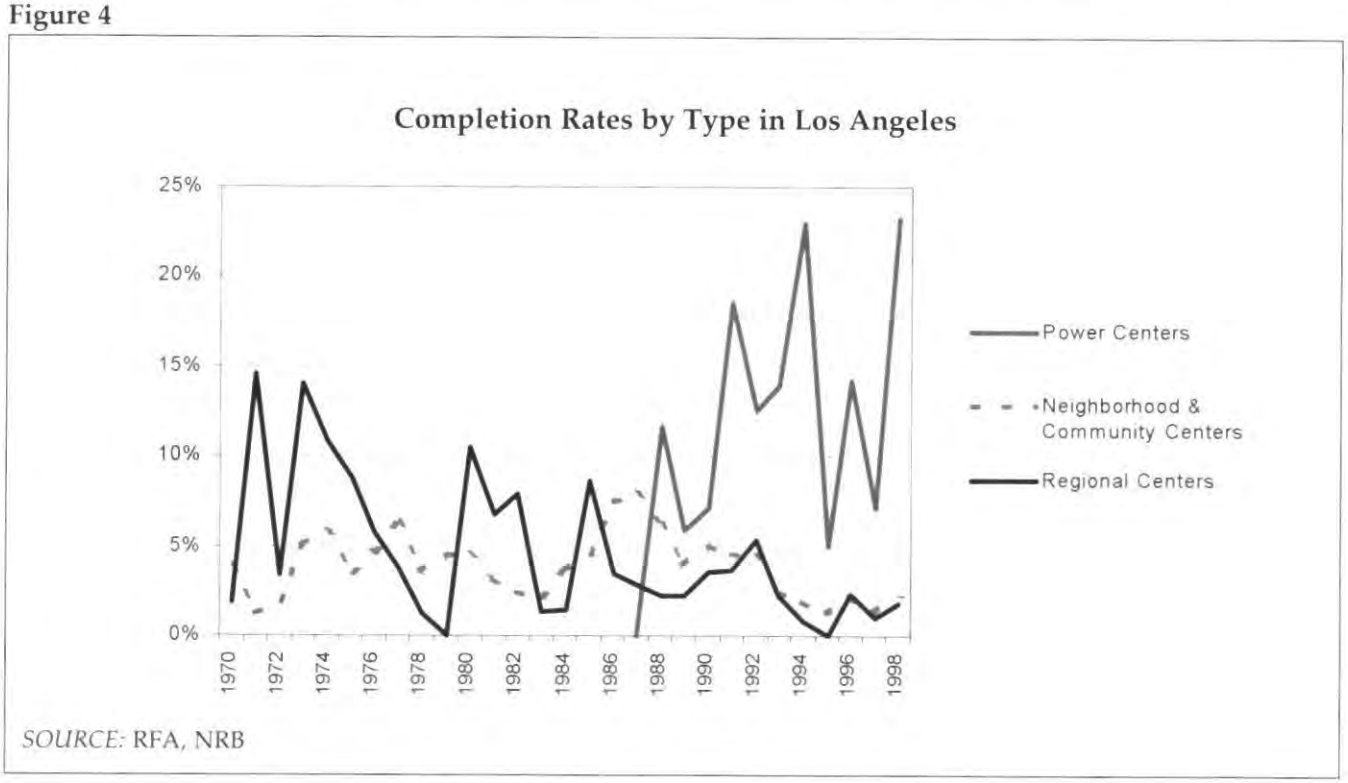
Just because there is no new investment in regional and power centers in periods of economic growth does not mean that there is no demand for such space. Anecdotal evidence points to long lead times in regional mall development with projects that, in some cases, have taken nearly a decade to go through the planning, approval, and development processes. With such a long lead time it would simply take luck to be able to time the delivery of a regional mall with an economic upswing.

Regional centers are lumpy assets and, as opposed to neighborhood and community centers, sufficient quantities of space cannot be doled out as needed. The lumpiness is not as evident when we examine the national construction trends where many centers from around the country are aggregated to form one construction series. On a metropolitan level though, even in a large metropolitan area such as Los Angeles, such lumpiness is evident.

Figure 4 displays the completion rate of neighborhood and community centers together against regional and power centers individually. While the neighborhood and community center completions move relatively smoothly with construction in one period closely related to the next, regional center construction fluctuates wildly with a completion rate of zero one year and in double digits the next. The introduction of a single regional mall can drive such erratic swings in completion rates. However if we ignore the ups and downs of regional center construction and look at a smoothed long-term trend, one can see that the relative peaks of completion rates have been declining over time. In the same sense, the completion of power centers seems to be increasing.

In part, this construction cycle is different due to the non-homogenous nature of the retail formats in which high-order goods have been sold. This non-homogeneity can be seen in both center types and locations over time. During the late sixties and early seventies, the process of suburbanization drew the

Figure 4



SOURCE: RFA, NRB

merchandisers selling high-order goods out of their downtown locations and into newly expanding suburbs. The completion rate for regional centers was relatively high back then, not in response to broader economic demand, but due to a shift in retail formats. Likewise, in the nineties, there has been an explosion of power centers bleeding sales away from traditional regional malls. By offering a wide selection of goods typically found at a regional mall but pricing the goods more competitively and, perhaps most importantly, choosing sites proximate to existing regional malls, power centers have bled sales away from regional malls.

Investing in regional and power centers is not so much a demand side risk as a supply side risk. As the name implies, regional centers serve the needs of a large customer base in a wide region over which they enjoy a relative monopoly. These centers benefited as the traditional downtown retailers lost a relative monopoly when their customer base moved away from downtown locations during the process of suburbanization. These centers then suffered as power centers located proximate to their existing locations and ate into the monopoly status of regional centers. Some have suggested that power centers themselves face a supply side risk from the Internet. Power centers focus more on goods that are commodities, which at this point is what is being sold on-line.

CONCLUSION

Even with the common sense knowledge that the retail subtypes exhibit different behavior, much commentary still treats the market for retail space as a single entity. In this article, we presented the following differences between the retail subtypes:

- The construction cycle for neighborhood and community centers exhibits a cyclical pattern that moves closely with changes in the broader economy;
- Regional and power centers construction patterns do not have a similar relationship to the broader economy;
- There is a strong correlation in the sale of goods typically found at each center type, but the construction of neighborhood and community centers moves more closely with retail sales than the construction of regional and power centers;
- Investing in neighborhood and community centers has a demand side risk where the danger is in under or overestimating demand;
- The risk in regional and power center investment is not from the demand side but the supply side, where centers face the danger of losing sales to competitors in other locations or to other formats.

These differences suggest that any analysis of retail space derived from trends in the market as a whole is missing part of the story. If each of the subtypes exhibits different construction patterns, and each faces unique investment risks, one retail subtype could be doing quite well while others suffer. REI

NOTES & REFERENCES

1. The Census data measures retail sales and while presented in *Table 1*, we exclude the services category from the analysis as it is not directly comparable.

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