

ON ASSEMBLING REAL ESTATE PORTFOLIOS

A guide to determining why and why not to invest in a particular real estate market.

by Joseph J. Del Casino

As an edge in reducing the risk factor, real estate investments are increasingly being included in most investor portfolios (especially in the equity form). This tendency is growing since returns for real estate tend to be negatively correlated with those of the more traditional investments such as stocks and bonds.¹

In order to invest wisely, the following factors need to be considered: how much of one's portfolio should be related to real estate; what kind of real estate should be purchased (e.g. office building, hotel, etc.); the type of investment vehicle (e.g. direct investment, real estate investment trusts, etc.); and where to buy (e.g. region, state, city).

This article discusses how to decide where to buy based on the assumption that the investor is interested in assembling a real estate portfolio that contains several individual office properties, in the most attractive investment environments, offering the highest returns with limited investment exposure in any particular market.

How To Decide Where To Buy?

Four major economic aspects of a property market should be considered: the general and long-term economic growth potential; the extent the economic/industrial base is diversified; how much of the economy is comprised of service-producing industries; and the magnitude of the manufacturing base.

Economic Growth Potential

An investor should consider metropolitan areas that continue to experience rapid population growth since these areas are more likely to experience the greatest expansions in business investment over the long term. The

Joseph J. Del Casino is a senior associate with the New York investment division of Jones Lang Wootton, an international real estate consulting firm. He has a masters degree in city planning from the University of Pennsylvania and a bachelors degree in economics from Brown University.

1980 Census indicated a spatial redistribution in the nation's population from the North and East to the South and West.² More important, the accompanying shift in the economy is still gaining momentum, and the U.S. is continuing to experience the results of the mass population movement during the last two decades. During 1975-82, approximately one billion square feet of office space was constructed in the South and West accounting for approximately 70% of the total amount of building construction in the U.S.

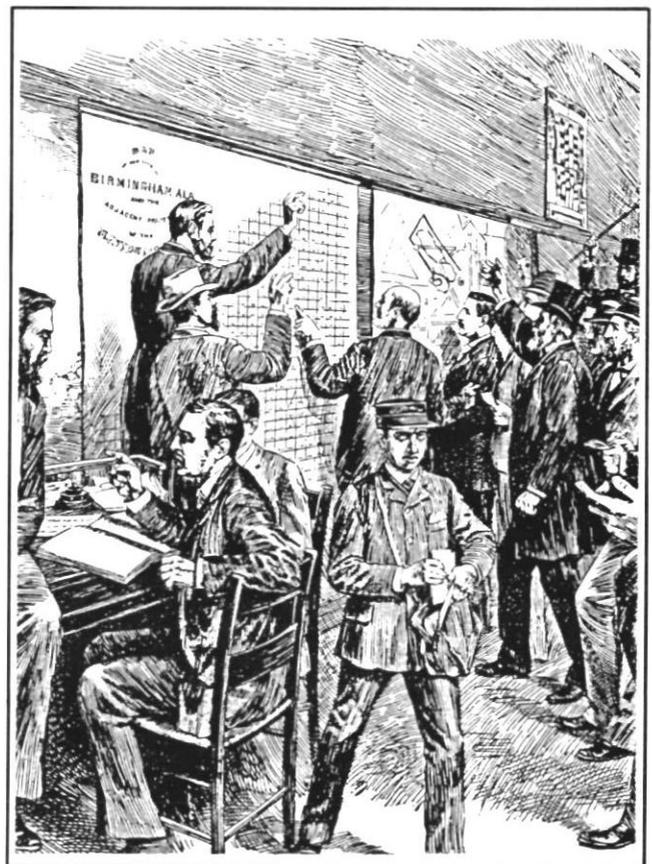


TABLE 1

Employment Concentration Ratios
A Comparison Of 20 U.S. Metropolitan Areas

| | <u>Mining*</u> | <u>Construc- tion</u> | <u>Manufac- turing</u> | <u>Transpor- tation</u> | <u>Wholesale/ Retail</u> | <u>FIRE</u> | <u>Services</u> | <u>Government</u> |
|---------------|----------------|---------------------------|----------------------------|-----------------------------|------------------------------|-------------|-----------------|-------------------|
| Atlanta | .00 | 1.05 | .65 | 1.59 | 1.24 | 1.15 | 1.01 | .92 |
| Baltimore | .00 | 1.05 | .70 | 1.09 | 1.05 | 1.04 | 1.04 | 1.25 |
| Boston | .00 | .69 | .90 | .83 | .96 | 1.30 | 1.47 | .71 |
| Chicago | .07 | .77 | 1.04 | 1.04 | 1.07 | 1.31 | 1.10 | .74 |
| Dallas | 1.60 | 1.24 | .95 | 1.10 | 1.20 | 1.26 | .92 | .67 |
| Denver | 2.60 | 1.27 | .69 | 1.27 | 1.06 | 1.18 | 1.03 | .93 |
| Houston | 5.03 | 2.07 | .73 | 1.22 | 1.05 | 1.06 | .95 | .65 |
| Los Angeles | .31 | .66 | 1.13 | .96 | 1.01 | 1.10 | 1.15 | .75 |
| Miami | .00 | 1.01 | .62 | 1.74 | 1.17 | 1.32 | 1.17 | .75 |
| Minneapolis | .00 | .79 | 1.02 | 1.00 | 1.08 | 1.14 | 1.11 | .82 |
| New Orleans | 3.10 | 1.39 | .43 | 1.70 | 1.10 | 1.01 | 1.14 | .88 |
| New York | .03 | .64 | .67 | 1.26 | .82 | 2.24 | 1.32 | .88 |
| Philadelphia | .00 | .81 | .97 | .88 | .99 | 1.11 | 1.23 | .88 |
| Phoenix | .07 | 1.49 | .77 | .94 | 1.15 | 1.21 | 1.05 | .91 |
| Pittsburgh | .75 | 1.13 | .94 | 1.04 | 1.05 | .90 | 1.25 | .71 |
| San Antonio | .58 | 1.49 | .55 | .76 | 1.13 | 1.15 | 1.01 | 1.29 |
| San Diego | .06 | .91 | .76 | .77 | 1.02 | 1.05 | 1.15 | 1.22 |
| San Francisco | .22 | 1.03 | .57 | 1.40 | 1.02 | 1.63 | 1.13 | 1.03 |
| Seattle | .15 | 1.07 | .86 | 1.00 | 1.08 | .95 | .95 | 1.18 |
| Washington DC | .00 | .99 | .18 | .81 | .84 | .94 | 1.38 | 1.87 |

*Includes the petroleum and other energy-related industries.

Although high rates of growth do not guarantee either long or short business cycles, there is a tendency for greater economic expansion in areas of rapid secular development. During periods of business recession, high-growth economies are hit as hard as others. However, when the economy improves these areas recover faster and stronger.

Economic/Industrial Base

An investor should consider economically diversified areas since they tend to be more stable and are less vulnerable to shifts in the economy. Employment concentration ratios (also known as location quotients)³ are a convenient method for analyzing the breadth and diversity of an economy. These ratios compare the concentrations of employment in each local sector with the economy of the entire country. The concentration ratios for 20 metropolitan areas, shown in Table 1, indicate that when an industry's ratio is greater than (1.0) the area employs more workers than the national average. Similarly, if the concentration ratio for an industry is less than one (1.0) the area employs fewer workers than the national average. Since many of the metropolitan areas in Table 1 have concentration ratios near 1.0, their employment composition reflects the well diversified U.S. economy.

In some instances an area shows a strong dependence on a particular industry. For example Dallas, Denver, Houston and New Orleans are very dependent on mining, including the petroleum and other energy related industries; Washington, D.C.—government; and New York—finance, insurance and real estate.

Generally, an investor is more interested in a broad, diversified metropolitan area. However, when a particular sector (such as Houston or Denver) is selected, an investor should minimize his/her exposure in other areas with the same economic dependency.

Service-Producing Industries

An investor should consider metropolitan areas with service-producing industries. Such industries are a significant part of the U.S. economy and in recent years they have accounted for more than half the national income and have employed more than half of all the employees on nonagricultural payrolls. Broadly defined, the service sector industries consist of businesses whose output is intangible such as transportation and communication utilities; wholesale and retail trade; finance, insurance and real estate; and personal and business services—the largest and fastest growing.

As indicated in Table 1, some metropolitan areas reflect the current economic changes. For example, New York, San Francisco, Miami, Chicago, Boston and Dallas have a heavy concentration in the finance, insurance and real estate industries; Boston, Washington, D.C., New York, Pittsburgh and Philadelphia are dominant centers for services. These areas are well positioned to grow as the U.S. continues its evolution into a service-based economy.

Manufacturing Base

An investor should consider metropolitan economies that have small concentrations of durables manufacturing employment. Analysts believe that a metropolitan

economy, dependent on the production of durables, is most sensitive to changes in the business cycle.

Employment in manufacturing, particularly durables manufacturing, represents a small percentage of the total employment in most metropolitan areas. Manufacturing employment accounts for only 21% of the total employment in the U.S. and is located in the heavy manufacturing metropolitan areas of Chicago (22%), Minneapolis (21%), Dallas (20%), Los Angeles (24%), Pittsburgh (20%) and Philadelphia (20%).⁴ Durables manufacturing employment represents 12% of the nation's employment and is concentrated in Boston (14%), Chicago (16%), Los Angeles (16%), Pittsburgh (20%), Minneapolis (14%) and Seattle (16%).

Few property markets will meet all four of the requirements detailed above. For example, while Houston and Denver are situated in two of the fastest growing regions in the U.S., they are heavily dependent on the mining industry. Similarly, the economies of New York and Bos-

ton are heavily concentrated in services but lie in the slower growing Northeast. The selection of property markets cannot be reduced to a simple mechanical process. Nevertheless, the use of market criteria are useful in the process of selection and comparisons.

NOTES

1. The reasoning behind this statement is derived from modern portfolio theory.
2. In 1980, the geographic center of the U.S. population was situated in Missouri. (The "center of population" is the point at which an imaginary flat, weightless and rigid U.S. map would balance if weights of identical value were placed so that each weight represents the location of one person.)
3. The concentration ratio (location quotient) is defined as $(e_i^m/E^m) \div (e_i^n/E^n)$ where e_i^m = metropolitan area employment in sector i ;
 E^m = total metropolitan area employment;
 e_i^n = national employment in sector i ;
and E^n = total national employment.
4. These percentages are derived from Table 1 assuming that 21% of the nation's workers are employed in manufacturing.