Trends and Patterns in Real Estate

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Nature of Real Estate Practice and Decisions

In Practice the Real Estate Business is driven by specifics and tactical operations with a focus on:

• The uniqueness of the property

• The agents (parties) in the transactions
Requirements of Forecasting Approach

Forecasting Requires Aggregation identifying patterns and trends. For Real Estate this requires using a Parallel Process considering the:

- Tracking of general patterns of space use over time as well as,
- Addressing Specific market segments at points in and across time,
- this two tiered approach allows consideration of the variables influencing real estate value
Basis of Real Estate Value

• Control of the productive capacity of the property (a commodity value)

• The use of property as collateral (a financial asset value)
Basis of Real Estate Value

Productive capacity is a function of:

- Physical attributes
- Legal attributes
- Location (as Economic characteristic)
Basis of Real Estate Value: Basic Bid Rent Curve Model – defining the Pattern of Trade-off Location and Accessibility

- Site Rent
- Transportation Costs
- Agricultural and Direct return to Physical Land
- Economic Edge of City

Income Allocated to Location and Accessibility
Basis of Real Estate Value: Basic Bid Rent Curve: Patterns of Trade-off of Site Rent and Accessibility Vary with Land Use
Other Measures of Economic Landscape

- Density Gradient: Population Per capita per SF
- Transportation Gradient: Comparison of Traffic Flow Counts
Basis of Real Estate Value: Examples of Atlanta Market Segments

![Graph showing the relationship between Rent/SF and Distance from CBD for Atlanta Quality Office North segments: CBD, Midtown, Buckhead, Central Perimeter, Roswell/North Fulton.](image)
Basis of Real Estate Value: Examples of Atlanta Market Segments

Retail Bid Rent Curve North of CBD

- CBD
- Sandy Springs/Dunwoody
- Buckhead
- Midtown
- Roswell/Alpharetta
- Cumming/Forsyth Co.

Miles from CBD vs. Rents/ft
Basis of Real Estate Value: Examples of Atlanta Market Segments

Comparative Retail Bid Rent Patterns by Center Type

- Neighborhood Centers
- Aggregated Retail Rent North
- Community Centers
- Neighborhood Centers
- Strip Centers

Source: Grissom GSU RERC
Basis of Real Estate Value: Examples of Atlanta Market Segments
Basis of Real Estate Value: Examples of Atlanta Market Segments

Comparative Bid Rent Curves
For Atlanta Office and Retail

Bid Rents/SF

Distance from CBD

Office Bid Rent Curve
Midtown
Buckhead
Central Perimeter
Retail Bid Rent Curve
ATLANTA RETAIL TRENDS

A: Central Atlanta
B: Dekalb
C: Central Perimeter
D: BuckHead
E: Gwinnett
F: South Cobb
G: North Cobb
H: Atlanta Airport
I: South Metropolitan
J: West Metropolitan

CBD: $10.39

A: $13.45
B: $9.55
C: $13.31
D: $11.36
E: $10.44
F: $10.37
G: $10.06
H: $8.15
I: $9.03
J: $9.06
ATLANTA OFFICE TRENDS

A : Downtown
B : Midtown
C : Buckhead
D : Northwest
E : Central Perimeter
F : North Fulton
G : North East
H : Northlake / Decatur
I : Airport/South Atlanta

- A $14.02
- B $13.53
- C $17.07
- D $13.96
- E $15.15
- F $16.14
- G $13.42
- H $13.00
- I $8.15
Basis of Real Estate Value: Examples of Atlanta Market Segments

Obvious Implications of Bid Rent Curve:

• Site rents within a Metro-market are a function of change in cost of transportation within and across the metropolis

• Transportation (DOT) projects impact land values and returns
Basis of Real Estate Value

Strategic Implications of Bid Rent Curves:

• There is a hierarchy of Land Use Markets based on Pricing and Site rents – Uses dominate market segments

• Despite hierarchies, prices paid by separate uses are interdependent

• Situs theory: Relationship of the total urban environment as it relates to a specific land use on a specific parcel of land as they function in time
Basis of Real Estate Value: Application of Model

Situs Process:
• Activities
• Associations
• Accessibility
• Environment

Patterns set foundation influencing trends and direction of markets over time
General Real Estate Trends: The Long Term

Total Annual Returns to Real Estate: Long-term Trend and Cycles:

Source: Grissom GSU; Data Source I&A and NCREIF
General Real Estate Trends: Multiple Indices

Comparison of Alternative Returns Series: Converted to Indices

Source: Grissom GSU Real Estate Center
General Real Estate Trends: Real Estate as an Asset, the Traditional Capital Market

![Graph showing risk and returns for different financial assets]

- **Total Returns**
- **Risk (STD)**

- **Stocks**
- **Corporate Bonds**
- **Government Bonds**
- **TBS**
General Real Estate Trends: Real Estate as an Asset, the Emerging Capital Market

Evolving Capital Market Return and Risk Pattern

- Returns
- Risk

- MFUND
- TRES
- CSRE
- EREITs
- Stocks
- REITs
- FidRE
- Bank Acceptances
- Corporate Bonds
- Government Bonds
- HREITs
- MREITs
- TBS
- Real Estate
General Real Estate Trends: Implications of Economic Variables, Policy and Expectations

This exhibit shows the segmented splines or trend in the key causal variables impacting real estate returns over time.

Source: Grissom; GSU Real Estate Center
General Real Estate Trends: Implications of Economic and Political Events

Event and Return History

- Korean War
- Creeping Inflation
- Vietnam War
- Stagflation
- 1981 Tax Act
- 1986 Tax Act
- 1997 Tax Act
- 9-11 Event Technology Bubble
- Deregulation
- Reagonomics
- Oil Concerns
- 1991 FDIC Improvement Act
- FIRREA
- EMCA
- Oil Concerns Comp. Conservatives
- Oil Concerns Neo-Keynesian
- Supply-side Reagonomics
- ERISA
- Repeal Bretton Woods
- 1993 Tax Act
- CEO-SOBs
- 1991 FDIC Improvement Act
- Technology Bubble
- Gulf War
- Stagflation

Returns

Years

Source: Grissom, GSU
Atlanta Real Estate in an Asset Pricing Context: Office Markets

Capital Returns and Risk Measures: Atlanta Office Submarkets

Cap Rates

Duluth/Suwanee/Buford
Norcr/PtreeCorners
Chamblee/Dorv/N.D. Hills
Cumberland/Galleria
Buckhead
Midtown/Pershing Point
N. Fulton/Forsyth Co.
Perimeter
Possible Under-Priced Markets
Possible Over-Priced Markets
Risk(STD)
Return Versus Risk for Retail Properties

- Cumming/Forsyth
- Shady Spring/Dunwoody
- Buckhead
- CBD
- Roswell/Alpharetta
- Midtown
Conclusions, Expectations and Concerns

- Growth and/or Sustainability
- Inflation and interest rates
- Employment and productivity
- Asset Economy and Consumption without jobs
- Increasing focus on economic and financial puzzles