Volume 22 Number One

REAL ESTATE ISSUES

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The JAMES E. GIBBONS EDUCATIONAL DEVELOPMENT TRUST FUND, of The Counselors of Real Estate, announces that in 1996 scholarships were presented to 29 graduate students representing 15 identified university real estate programs nationwide. Recipients of the scholarships were:

American University
Richard Dietz and William Lowe

Columbia University Inaganti S. Rao and Katherine K. Ware

Massachusetts Institute of Technology
Aubrey Cannuscio and Vincent Norton, Jr.

*Ohio State University*Erica Waldron and Justin Smith

Pennsylvania State University Kristin Backstrom and Andrew McLaughlin

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University of Wisconsin, Madison David Bolt and Clemens Schaefer

Virginia Commonwealth University Kimberly Severino and Michael Scruggs

CONTRIBUTOR INFORMATION FOR REAL ESTATE ISSUES

The journal is published three times annually (April, August and December), and reaches a lucrative segment of the real estate industry as well as a representative cross section of professionals in related industries.

Subscribers to *Real Estate Issues* are primarily the owners, chairmen, presidents and vice presidents of real estate companies, financial corporations, property companies, banks, management companies, libraries and Realtor® boards throughout the country; professors and university personnel; and professionals in S&Ls, insurance companies and law firms.

Real Estate Issues is published for the benefit of the CRE (Counselor of Real Estate) and other real estate professionals, planners, architects, developers, economists, government personnel, lawyers and accountants. It focuses on providing up-to-date information on problems and topics in the field of real estate.

Review Process

All manuscripts are reviewed by three members of the editorial board with the author's name(s) kept anonymous. When accepted, the manuscript and any recommended changes is returned to the author for revision. If the manuscript is not accepted, the author is notified by letter

The policy of *Real Estate Issues* is not to accept articles that directly and blatantly advertise, publicize or promote the author or the author's firm or products. This policy is not intended to exclude any mention of the author, his/her firm or their activities. Any such presentations however, should be as general as possible, modest in tone, and interesting to a wide variety of readers. Potential conflicts of interest between the publication of an article and its advertising value should also be avoided.

Every effort will be made to notify the author on the acceptance or rejection of the manuscript at the earliest possible date. Upon publication, copyright is held by The Counselors of Real Estate (American Society of Real Estate Counselors). The publisher will not refuse any reasonable request by the author for permission to reproduce any of his contributions to the journal.

Deadlines

All manuscripts to be considered for the April edition must be submitted by January 15; for the August edition by June 1; for the December edition by September 1.

Manuscript/Illustrations Preparation

- 1. Manuscripts must be submitted on disk (along with hard copy): ASCII file format or Word for Windows 6.0. All submitted materials, including abstract, text and notes, are to be double-spaced on one side only per sheet, with wide margins. Recommended number of manuscript pages is not to exceed 15. Submit five copies of the manuscript accompanied by a 50- to 100-word abstract and a brief biographical statement.
- 2. All notes, both citations and explanatory, are to be numbered consecutively in the text and placed at the end of the manuscript.

- 3. Illustrations are to be considered as figures, numbered consecutively and submitted in a form suitable for reproduction. (Camera-ready form, line screen not to exceed 80 dots per inch-DPI.) If higher DPI is warranted to show greater image blends or contrast, illustrations must be computer-generated on a Macintosh or PC compatible using the following formats: QuarkXPress, PageMaker, Illustrator, Photoshop, Corel Draw. Any other formats will not be accepted.
- 4. Number all tables consecutively. All tables are to have titles.
- 5. Whenever possible, include glossy photographs to clarify and enhance the content in your article.
- 6. Title of article should contain no more than six words including an active verb.
- 7. For uniformity and accuracy consistent with our editorial policy, refer to the style rules in *The Chicago Manual of Style*.

REAL ESTATE ISSUES 1997 Editorial Calendar

April (Deadline for manuscript submission—January 15) Articles on general real estate-related topics

August (Deadline for manuscript submission—June 1)
Focus Edition "Global Real Estate Markets and
International Counseling"

December (Deadline for manuscript submission — September 1)

Special Edition "Capital Formation"

Readers are encouraged to submit their manuscripts to: Halbert C. Smith, CRE, editor in chief Real Estate Issues The Counselors of Real Estate 430 North Michigan Chicago, IL 60611

THE BALLARD AWARD MANUSCRIPT SUBMISSION INFORMATION

The editorial board of *Real Estate Issues (REI)* is accepting manuscripts in competition for the 1997 William S. Ballard Award. The competition is open to members of The Counselors of Real Estate and other real estate professionals. The \$500 cash award and plaque is presented in November during The Counselor's annual convention to the author(s) whose manuscript best exemplifies the high standards of content maintained in the journal. The recipient is selected by a three person subcommittee comprised of members of The Counselors of Real Estate. Any articles published in *REI* during the 1997 calendar year are eligible for consideration and must be submitted by September 1, 1997.

LIPPINCOTT NAMED 1997 RECIPIENT OF THE LUM AWARD



J. Daryl Lippincott, CRE

Daryl Lippincott, CRE, has been awarded the 1997 Louise L. and Y.T. Lum Award by The Counselors of Real Estate in recognition of his distinguished contribution toward advancing knowledge and education in real estate counseling. The award was established by the late Y.T. Lum, CRE, to recognize achievement in real estate.

During the past four years and his 15 return trips, Lippincott has focused almost 100 percent of his activities on the Eastern European Real Property Foundation (EERPF), a not-for-profit agency funded by the United States Agency for International Development (USAID). Founded by the National Association of REALTORS, the EERPF creates and develops private sector, market-oriented real estate institutions in Central and Eastern Europe and the Newly Independent States including Poland, Hungary, Bulgaria, Ukraine, Czech Republic, Slovak Republic, Russia, and Romania.

Lippincott has been instrumental in developing professional associations and training programs within the real estate disciplines of brokerage, appraisal and, currently, property management. In total, the EERPF has established 30 association partnerships within the eight Central and Eastern European countries. Approximately 20,000 real estate professionals have benefited from the professional knowledge provided primarily by members of The Counselors of Real Estate (CRE) and the Institute of Real Estate Management (IREM). These practitioners, who travel to the various countries, represent the American Experience. They provide their first-hand professional knowledge and assistance in developing standards of professional practice through training workshops, roundtable discussions and speaking engagements.

A former president of The Counselors of Real Estate, Lippincott was elected an Honorary Member of The Royal Institution of Chartered Surveyors, London. He currently serves as an independent real estate counselor in Phoenix, and before his 1984 retirement, was the senior vice president of Coldwell Banker and Company–Commercial Real Estate Services

Previous noteworthy recipients of the Y.T. Lum Award include CREs Jonathan H. Avery, Joseph Straus, Jr., Richard D. Simmons, Sr., Eugene G. Bowes, John McMahan, Wayne D. Hagood, Charles W. Bradshaw, Jr., Jared Shlaes, John R. White and Thurston H. Ross.

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Third class postage paid at Chicago. Subscription rates: \$33 per year (\$60 for two years, \$79 for three years); \$27 per year to students and faculty; \$38 foreign rate, submit in U.S. currency; single copy \$12. Remittances may be made by personal check or by charge payable to The Counselors of Real Estate. Remittances, change of address notices, undeliverable copies and orders for subscriptions and editorial material should be sent to Real Estate Issues, The Counselors of Real Estate, 430 North Michigan Avenue, Chicago, Illinois 60611. 312/329-8427 FAX: 312/329-8881.

Library of Congress card number LC 76-55075

Printed in U.S.A.

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Let's Not Forget The Little Guy

hile real estate seemingly has recovered from the Great Real Estate Depression of the late 1980s and early 1990s, activity in most markets has not come close to the feverish action underway in the stock market. After all, Mr. Greenspan has not twice cautioned investors about the speculative overheating of real estate markets as he has regarding the stock market. We don't have the small "mom and pop" investors clamoring to buy a piece of this or that



Halbert C. Smith, CRE

real estate. And the Japanese and other foreign investors have long since reigned in their appetites for trophy buildings in a few large cities, even disinvesting in many cases.

Why hasn't the enthusiasm for investment in stocks carried over to the real estate market? There probably are a number of important reasons, but most important is the still painful memory of the Great Real Estate Depression. Investors can well remember losses of values that averaged some 30 percent, while stocks have been in a bull market for some 15 years with only one short respite. Apparently stock investors, large and small, do not believe the stock market can have a major correction and stay down for a significant period of years. Those of us with some gray hair realize that, like a volcano which hasn't erupted for several years, it is only a matter of time and circumstances. But even many of us are caught up in the current hysteria. Should we become defensive? Without a doubt.

Another reason why real estate hasn't siphoned away enthusiasm for stocks is the lack of investment vehicles for the small investor. There is one vehicle—REITs—and presumably these enable the small investor to participate. But isn't the REIT a stock investment? And doesn't its performance resemble both stocks and real estate? So, unlike the past, we don't have a direct investment vehicle for the small investor.

I am not advocating a return to the heady days of the early-mid-1980s with the same limited partnership vehicle. At that time small investors didn't believe that the real estate, in which they held partnership shares, could fall into an abyss from an overly favorable tax treatment. Rather, as stock investors today, they believed there was an insatiable demand for real estate and that high returns, higher than for common stocks, were available. We were rudely reminded, however, that what the government giveth, it can also withdraweth.

And back in those days, the S&Ls provided the investment safety hatch for the small investor. They paid a decent rate of interest without the need for investment analysis or fears for safety of capital. But now young people ask, "What is an S&L?" Another investment vehicle for real estate was obliterated largely because of the government's policy mistakes.

Is it time to consider a new vehicle for small real estate investors? Perhaps a partnership with some advantage for long-term holdings or perhaps some liberalization in the depreciation allowance for income-producing properties? Or even—perish the thought—some advantage for a new type of S&L, a truly family-oriented financial institution?

Perhaps we should engage in some radical thinking every now and then, especially when it seems that everyone's favorite investment vehicle does nothing but provide more honey for us bees. For a truly diverse investment portfolio, however, real estate should be part of the mix. Mr. Greenspan and his large and highly qualified staff could well spend some time addressing these basic concerns at the same time they issue warnings to those with few alternatives.

Halbert C. Smith, CRE Editor in chief

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THE PRESIDENT SPEAKS

EMOTIONAL INTELLIGENCE PROVIDES KEY TO LIFE SUCCESS



Bowen H. "Buzz" McCoy, CRE

Recently I read a book, Emotional Intelligence, by Daniel Goleman, published in hardcover by Bantam Books in 1995. This book convinced me that what we were really looking for during my tenure at Morgan Stanley was emotional intelligence.

The author states that there are widespread exceptions to the rule that IQ predicts success. At best, IQ contributes about 20 percent to the factors that determine life success, which leaves 80 percent to other forces, ranging from social class to luck.

Goleman defines emotional intelligence as the ability to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope. He goes on to say that while IQ cannot be changed much by experience, these other factors can be. People who are emotionally adept-who know and manage their own feelings well, and who read and deal effectively with other people's feelings-are at an advantage in any domain of life, whether romance and intimate relationships or picking up the unspoken rules that govern success in organizational politics. Such people are also more likely to be content and effective in their lives. People who cannot marshal some control over their emotional life fight inner battles that sabotage their ability for focused work and clear thought.

People who cannot control their emotions are more likely to become tipped over the edge—enraged by something seemingly trivial—a trait which the author terms "emotional hijacking." Such a hijacking causes "toxic emotion" to break out, which is stress and anxiety that is out of proportion and out of place. I'm certain each of us has experienced such behavior in others—as well as in ourselves.

As I look back on my career, those who were most successful over time had a high skill level of emotional intelligence. I am reminded of General Bagration in Tolstoy's War and Peace. He was caught up in the din and confusion of the great battlefield. He had no idea what was going on around him. His generals, intensely anguished, came galloping up to him for instructions. Bagration remained a sea of calm and counseled them to return to their positions and do what they thought best under the circumstances. His subordinate generals returned to the fray, instructionless, but filled with confidence and hope from Bagration's high level of emotional maturity. As a result, they went on to defeat Napoleon.

In his most recent book on leadership for the future, Peter Drucker says our leaders must have the emotional maturity to deal with the high rate of change and stress encountered in every business situation. One reason I have been drawn to The Counselors of Real Estate (CREs) is because of the high level of emotional maturity exhibited by so many members. Within this association, we see the masters of their profession at work, without the din and confusion of the investment banking or brokerage communities.

I'm certain many of us would benefit greatly from this book. Likewise, there are many Counselors of Real Estate who need not take the time. They are already there.

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Bowen H. "Buzz" McCoy, CRE

1997 President

The Counselors of Real Estate

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Team Performance, Attendance and Risk for Major League Baseball Stadiums: 1970-1994

William N. Kinnard, Jr., CRE, Mary Beth Geckler, CRE, and Jake DeLottie

Paid attendance is a major determinant of major league baseball (MLB) stadium revenues. It affects gate receipts, concession income and parking receipts. Between 1970 and 1994, average attendance at MLB games, when expressed as a percentage of stadium capacity, varied with each team's won-lost record. The authors' present data on other variables that impact the economic life of a stadium, such as winning a league or division championship, the effect of a new stadium, on-field performance and franchise mobility.

Real Estate Issues

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The Changing Real Estate Environment

John McMahan, CRE

This article explores the rapidly changing real estate environment and its implications for the future. Three major themes are considered: changes in the way tenants utilize space, different investor perspectives regarding real estate investment and the rapidly changing playing field for real estate enterprises. The author suggests that technological change threatens real estate probably more than it does other industries. Also he discusses how the move to securitize real estate investments has major implications for both investors and service providers.

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Some Perspectives on Sports Facilities as Tools for Economic Development

William H. Owen, CRE, and Owen M. Beitsch, CRE

Sports facilities have become urban icons. As cities have embraced these buildings and the teams that operate within them, they have generally ignored several basic economic and financial issues germane to establishing sound public policy. Given their tremendous costs and the increasing demand for limited resources, it becomes imperative that those acting as advocates for professional sports recognize both the positive and the negative consequences of securing a franchise. This articles provides some perspective on such issues and identifies several key areas where policy decisions must be made to assure that the benefits are maximized.

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The Myth and Reality of the Economic Development from Sports

Mark S. Rosentraub

Hardly a week seems to pass without a community announcing plans for a substantial investment in a stadium or arena to attract or retain a professional sports team. Yet, with teams leaving their fans to get publicly built facilities, it seems fair to ask if the public sector should invest tax dollars in these facilities? Are publicly financed facilities bribes extracted by the professional sports leagues or shrewd investments? The cities and states that have made tax money available to build arenas and ballparks are doing nothing more than subsidizing a very wealthy group of people. The tax dollars committed do nothing more than increase the pot of money to be fought over by athletes and team owners.

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Petros S. Sivitanides

This article uses the NCREIF data to explore the implications of historic patterns of real estate and stock and bond returns regarding optimal real estate allocations in mixed-asset portfolios for alternative holding periods. Its major finding is that medium-term investors with at least moderate risk concerns and long-term investors with serious risk concerns should have included real estate in their portfolios for most of the past 18 years.

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Legal Update

Morton P. Fisher, Jr., CRE

The author provides a brief, insightful overview on the legal issues currently impacting the real estate industry. From his perspective as a lawyer and a Counselor of Real Estate (CRE), he reviews the legislative developments underway on bankruptcy reform, brownfields, new lender liability, telecommunications, foreclosure, good faith and fair dealing, and the electronic age.

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About The Counselors of Real Estate

The Counselors of Real Estate, established in 1953, is an international group of high profile professionals including members of prominent real estate, financial, legal and accounting firms as well as leaders of government and academia who provide expert, objective advice on complex real property situations and land-related matters.

Membership is selective, extended by invitation only on either a sponsored or self-initiated basis. The organization's **CRE Designation** (The Counselor of Real Estate) is awarded to all members in recognition of superior problem solving ability in various areas of specialization such as litigation support, asset management, valuation, feasibility studies, acquisitions/dispositions and general analysis.

CREs bring results, acting as key players in annual transactions and/or real estate decisions valued at over \$41.5 billion. Over 300 of the Fortune 500 companies retain CREs for advice on real estate holdings and investments. CRE clients include public and private property owners, investors, attorneys, accountants, financial institutions, pension funds and advisors, government institutions, health care facilities, and developers.

Enrichment Through Networking, Education & Publications

Networking continues as the hallmark of The Counselor organization. Throughout the year, programs provide cutting-edge educational opportunities for CREs including seminars, workshops, technology sessions, and business issues forums that keep members abreast of leading industry happenings and trends. Meetings on both the local and national levels also promote interaction between CREs and members from key user groups including those specializing in financial, legal, corporate, and government issues.

CRE members benefit from a wealth of information published in The Counselors' tri-annual award-winning journal Real Estate Issues which offers decisive reporting on today's changing real estate industry. Recognized leaders contribute critical analyses not otherwise available on important topics such as institutional investment, sports and the community, real estate ethics, tenant representation, break-even analysis, the environment, cap rates/yields, REITs, and capital formation. Members also benefit from the bi-monthly member newsletter, The Counselor, and a wide range of books and monographs published by The Counselor organization. A major player in the technological revolution, the CRE regularly accesses the most advanced methodologies, techniques and computer-generated evaluation procedures available.

What is a Counselor of Real Estate (CRE)?

A Counselor of Real Estate is a real estate professional whose primary business is providing expert advisory services to clients on a non-contingent fee basis or a performance fee under certain prescribed conditions.

The counseling fee is rendered for advice given rather than for achievement or outcome of the transaction. CREs have acquired a broad range of experience in the real estate field and possess technical competency in more than one real estate discipline.

The client relies on the counselor for skilled and objective advice in assessing the client's real estate needs, implying both trust on the part of the client and trustworthiness on the part of the counselor.

Whether sole practitioners, CEOs of consulting firms, or real estate department heads for major corporations, CREs are seriously committed to applying their extensive knowledge and resources to craft real estate solutions of measurable economic value to clients' businesses. CREs assess the real estate situation by gathering the facts behind the issue, thoroughly analyzing the collected data, and then recommending key courses of action that best fit the client's goals and objectives. These real estate professionals honor the confidentiality and fiduciary responsibility of the client-counselor relationship.

The extensive CRE network stays a step ahead of the ever-changing real estate industry by reflecting the diversity of all providers of counseling services. The membership includes industry experts from the corporate, legal, financial, institutional, appraisal, academic, government, Wall Street, management, and brokerage sectors. Once invited into membership, CREs must adhere to a strict Code of Ethics and Standards of Professional Practice.

Users of Counseling Services

The demand continues to increase for expert counseling services in real estate matters worldwide. Institutions, estates, individuals, corporations and federal, state and local governments have recognized the necessity and value of a CRE's objectivity in providing advice.

CREs service both domestic and foreign clients. Assignments have been accepted in Africa, Asia, the United Kingdom, the Caribbean, Central and South America, Europe and the Middle East. CREs have been instrumental in assisting the Eastern European Real Property Foundation create and develop private sector, market-oriented real estate institutions in Central and Eastern Europe and the Newly Independent States. As a member of The Counselor organization, CREs have the opportunity to travel and share their expertise with real estate practitioners from several developing countries including Poland, Hungary, Bulgaria, Ukraine, Czech Republic, Slovak Republic, and Russia as they build their real estate businesses and develop standards of professional practice.

Only 1,000 practitioners throughout the world carry the CRE Designation, denoting the highest recognition in the real estate industry. With CRE members averaging 20 years of experience in the real estate industry, individuals, institutions, corporations, or government entities should consider consulting with a CRE to define and solve their complex real estate problems or matters.

THE CHANGING REAL ESTATE ENVIRONMENT

by John McMahan, CRE

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Underlying the investor restiveness and industry metamorphosis are unmistakable changes in the way people want to live and work—with significant, but still uncharted, consequences for real estate.

Emerging Trends in Real Estate
 1997 Equitable Real Estate
 Investment Management, Inc.

Stay Alive 'Til '95

Remember when this was the industry's watchword during the depths of the Great Real Estate Depression in the early 1990s? Fortunately, a number of real estate firms were able to stay alive and, by 1997, are able to say the good times are back. Or are they?

The return of strong real estate markets does not necessarily mean that real estate organizations are prepared to deal with the challenges of the 21st century. Certainly we know the 1980's model doesn't even work in the already different environment of the 1990s. Today real estate is an integral part of a broader national and international economy where the pace of change is accelerating dramatically. Often technology driven, these changes can have a profound effect on the demand for real estate, investor expectations and capital availability. Real estate is also increasingly fungible, allowing investors to move capital back and forth between real estate and other asset classes.

Tomorrow's real estate managers will participate in a fast-moving business revolution and an increasingly complex competitive environment. Already, changes sweeping other sectors of the economy are influencing the demand for tenant space, the flow of real estate capital and the shape and character of the playing field for real estate organizations.

Tenants Are Changing How They Use Space

The changing business environment, the accelerating use of technology and long-term shifts in lifestyle preferences probably threaten real estate more than any other industry. These trends affect virtually all property types in most markets.

Retail

The trend toward households with two or more incomes has increased the premium individuals place on the importance of time in making day-to-day personal shopping and household decisions. Developers have responded by creating power centers and big box warehouse stores which make shopping access easier. Retailers have shifted to more convenient hours and greater inventory selection as well as aggressive pricing and a no-hassle return policy.

John McMahan, CRE, is managing principal of The McMahan Group, a management consulting firm specializing in real estate services including strategic planning, mergers and acquisitions, organizational structure, risk management and market/product research. Previously he was founder and CEO of Mellon/McMahan Real Estate Advisors. For 17 years, McMahan taught Management of the Real Estate Enterprise at the Stanford Graduate School of Business and currently is teaching Institutional Real Estate Investment at the Haas School of Business at the University of California at Berkeley. This article is taken from the recently published "Real Estate Enterprise 2000."

Most of these changes would not have been possible without the support of new technology, primarily bar coding and on-line inventory measurement systems. This greater control over the flow of goods allows retailers to fine tune production runs and wholesale purchases throughout the world for the lowest price consistent with design and quality standards. Customers also benefit from merchandise that is more closely geared to their shopping preferences.

From a real estate perspective, retailers now require less space for the storage of goods and can commit more space to product merchandising. This benefits retailers at both ends of the size spectrum: larger stores can carry a wider variety of goods, and smaller more specialized stores can be located at closer intervals in the markets they serve. It also allows retailers to seek customers in airports, office buildings and other venues, reducing the importance of traditional retail locations.

Technology's big threat to retail properties, however, comes from its ability to facilitate shopping through non-store channels. The rapid growth in catalogue sales has clearly demonstrated that shoppers don't have to be in the store. While TV and electronic on-line shopping have been slower in getting off the ground, evolving technologies and new venues should accelerate its acceptance.

The World Wide Web will offer direct access to consumers for manufacturers, service companies and even start-up companies with little capital. This potentially explosive link-up will alter the fundamental shopping experience, impacting both traditional real estate shopping venues and existing retail firms.

Office

The combination of global competition, thinner margins and shorter product life cycles is forcing businesses to re-examine how they organize workspace. Demand for office space is changing with respect to location, configuration, utilization and the form of leasing arrangement.

■ Location: Increasingly, the location of the office workplace is shifting from America's downtowns to its suburbs. This phenomenon is driven by cost savings, greater availability of housing and a desire for more flexible work environments.

Fortunately, not all downtowns are dying. Firms that work effectively in a vertical environment increasingly are locating in 24-hour cities where a wide range of housing, shopping, entertainment and cultural facilities are conveniently available. This demand has led to the downtown revitalization of New York, Chicago, San Francisco, Boston, Seattle, Portland and other cities.

- Space Configuration: With shorter product life cycles, greater use of technology and the need to concurrently apply a variety of worker skills, businesses increasingly are organizing their work effort and utilizing project rather than work-flow configurations. This shift requires physical space that is flexible to configure and has the ability to be reconfigured frequently. This generally means low rise buildings with an absence of structural columns and with the necessary infrastructure (e.g., power, telecommunications, etc.) located in a readily accessible and easily reconfigured location.
- Space Utilization: Lower operating margins are forcing many firms to utilize space more efficiently. Initially, companies were seeking higher employee densities but this has often been counterproductive. More recently, firms have been experimenting with greater time utilization of space; that is, different employees use the same space within a specified period of time. This approach, often called hoteling, particularly affects professional firms such as accountants, architects and engineers, who often spend a great deal of time working in the client's office or at a project site.
- Changing Business Terms: Office tenants increasingly are challenging the traditional real estate concept of long-term leases at fixed rates. Many firms are building their own campus complexes so they can reconfigure space as needed. Others are obtaining more flexible leasing arrangements with shorter lease terms, the ability to change the work environment and provisions for short notice termination. In many ways, the use of office space can be expected to become more like that of hotels—pay for the space you need, when you need it!

Although not as threatened as retail uses, office space also may be impacted by the World Wide Web. Consider the example of corporations offering stock purchases directly to potential shareholders. This bypasses the brokerage community's popular on-line computer trading systems which just last year were state-of-the-art. The possibilities for rapid change are enormous!

Housing

A major catalyst of change in the work place is the exploding use of communication technology which enables work to be performed in virtually any location. While the number of Americans working full time at home is not yet significant, those who work a portion of their time at home is growing. Today, the extra bedroom or den in many new homes is often designed and promoted as a home office.

Also, several major apartment owners are experimenting with shared office facilities for tenant usage.

Warehouse

Retailers are not the only ones gaining more control over their flow of goods. Business inventories are also more tightly managed with just-in-time and other computerized inventory control systems. This allows firms to consolidate storage operations in large complexes, generally near major metropolitan areas.

Hotels

Video and audio conferencing is influencing the demand for hotel space through a reduced need for face-to-face business meetings. Technology will also alter dramatically the hotel stay itself with automated credit card check-in replacing the registration desk and hotel rooms designed as a live-work environment with faxes, modems and teleconferencing equipment.

In summary, changes in the business environment and lifestyle shifts will influence where buildings are located, how space is configured and how it is owned and leased. In some cases, these forces may actually reduce the overall demand for building space. As more and more physical space loses its unique qualities, real estate will be viewed increasingly by its users as a commodity, configured for the greatest amount of operating flexibility, to be bought or leased at the lowest possible cost.

Investors Are Viewing Real Estate Differently Fundamental changes are occurring in the way investors, particularly pension funds, view real estate.

Bad Experience: Many real estate investors are still licking their wounds from losing as much as 30 percent of their portfolio value in the 1988-1994 real estate depression. As Fortune magazine put it, "they made millions by starting with billions".

Whether their experience was a result of naiveté or market collapse, real estate investors are becoming increasingly sophisticated and less accepting of many traditional reasons for investing in the asset class. Consequently, investors appear to better understand the risks of real estate investment and expect commensurate returns for assuming those risks.

Distrust: A distrust of the delivery system continues, particularly the agency problem in which the allegiances of real estate investment professionals are unclear.² In this environment, investors worry that financial incentives motivate their investment professionals to take actions that are not always in the investors' best interest. This distrust

underlies a determined search by investors for alternative approaches to real estate. Almost one-third of pension fund investors have decided to exit the asset class entirely.³ Others are moving to securitize a portion or all of their real estate portfolios.

Move To Securitization

Securitized real estate investment formats, particularly real estate investment trusts (REITs)⁴ continue to gain favor with investors. REITs provide a level of liquidity and governance that has been sorely lacking in the private real estate market. For the real estate operator, REITs provide a tighter cost-of-capital-driven vehicle with enhanced capital market flexibility. Specific attractions include:

- Shift in Risk: By unbundling real estate investments through the use of shares, REITs permit investors to diversify at the portfolio rather than the property level. If an investor is not happy with an investment, or believes that a property cycle or geographical market is passing its peak, he or she can simply sell his or her stock. This shifts the risk of poor property investment decisions to the real estate manager. Perhaps this is as it should be—the person or firm with the most knowledge and skills carries the greatest burden of the risk.
- Capital Efficiency: In order to maintain their favorable tax status, REITs must pay out a high percentage of their annual cash flows each year, requiring them to come to the capital markets frequently. Each time this takes place, the capital seeker is subject to intense scrutiny by rating agencies and stock analysts. As a result of this process, capital is more apt to be rationed to the most efficient operators.
- Management Incentive: The securitized real estate format offers managers an opportunity to be rewarded for sound firm-building as well as successful real estate investments. As real estate becomes increasingly viewed as a commodity, a major way for value to be added and management excellence rewarded is through the premium paid by investors for enterprise value. Since the compensation for most REIT managers is tied to the value of the firm's stock, the manager directly benefits from successful business decisions.
- Investors Share in Enterprise Value: Investors are used to participating in enterprise value in their stock portfolios. To date, many investors have had a hard time understanding why the traditional real estate investment process permitted all the enterprise value to go to investment advisors, syndicators, developers and other sponsors of investment products. With securitized real estate investing, a share of enterprise value goes to the investors who backed the management team.

■ Global Strategy: There is growing interest in international real estate investing. To some extent this is a natural evolution following years of international investing in stocks and bonds. Direct investment in foreign real estate, however, can be extremely complicated, and often requires a relationshp with a local developer or investor. In some cases it may be difficult to repatriate the funds to realize value once it is created.

Public markets for real estate have been operating in many foreign countries for some time. Securitized real estate therefore provides an attractive approach to establishing an international real estate portfolio without the problems inherent in direct investing.

Substantial Institutional Interest

Many institutional investors have delayed investing in REITs because they were unsure whether real estate securities represented a separate asset class (which would lower overall portfolio risk) or simply another equities market sector. Much of this handwringing was due to early research on REITs concluding that their performance was more directly correlated with small cap stocks than real estate.

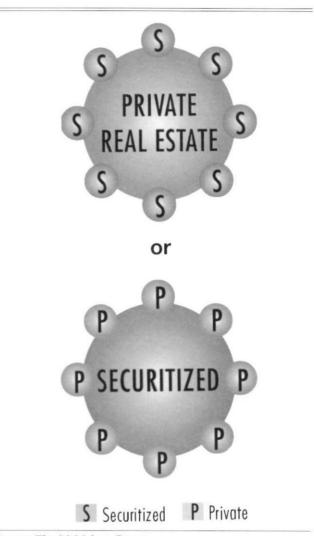
Fortunately, there appears to be some resolution to the portfolio effect issue. Recent research indicates that since 1992 REITs have performed more like real estate than stocks. As a result of a lower covariance with stocks, securitized real estate investments will now be viewed as having a more beneficial impact on total portfolio performance. Since there is still some stock market effect however, REITs will not be as effective as direct investment in lowering overall portfolio risk.

In addition to cash investing, institutions also can be expected to continue bringing real estate assets to the REIT marketplace by swapping assets for stocks in existing REITs and by sponsoring private REITs that ultimately go public. Some institutions also will co-invest with REITs to acquire private market assets. Many of these transactions will involve higher risk (e.g., development, asset restructuring, etc.) where one of the key attractions is the quality and accountability of public firm management.

Stepped-up involvement by institutions should accelerate growth in the overall size of the REIT capital base. The longer-term institutional investment horizon also should help to stabilize the marketplace. As institutional investors mix securitized and private assets, the resulting real estate portfolio most likely will evolve into something quite different than either of its components.

Exhibit I

What Will Be The "Core" Of Future Real Estate Portfolios?



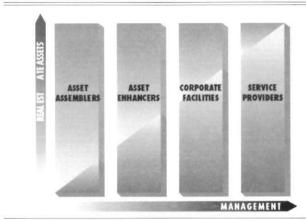
Source: The McMahan Group

Impact Of Securitization

As a result of the move to securitized investing, real estate can be expected to become increasingly fungible with other investment alternatives. Investors will be able to move assets in and out of real estate depending on their expectations of risk and return. In order to maintain allocation targets, institutions will be able to better rebalance real estate portfolios by shifting investments to different property types and geographic areas.

In terms of the investment delivery system, institutional investors will expect enterprises to have forward-looking, integrated research; efficient sourcing and acquisition of new investments; seamless portfolio, asset and property management; timely financial reporting systems; and a pro-active sell discipline.

Exhibit II Source Of Enterprise Value



Source: The McMahan Group

Institutional investors will also expect strong, continuing board governance of REIT management. In some cases they will participate in the process through board positions, advisory committees and other management oversight techniques. This will be particularly true in the case of private placement investments where investors have more complicated exit strategies.

On a longer-term basis, it is conceivable that securitized real estate investments will begin to increasingly comprise the core of real estate portfolios, with specialized investments taking the form of higher-risk private vehicles.

This evolution would be consistent with most stock investment portfolios where core investments are large cap stocks (in many cases indexed) surrounded by smaller clusters of small cap stocks, international, private investments and venture capital. In this emerging model, real estate portfolios of small and medium-sized institutional investors would be almost entirely securitized. Larger portfolios would have a securitized core, perhaps indexed, with direct investments consisting of higher risk and higher yield projects organized in a venture capital format.

In essence, the real estate capital market will divide into three camps: those investors who view real estate as a separate asset class and use it as a portfolio diversifier, those who view it as just another industrial sector in their stock portfolio and those who look to real estate as an opportunity investment which competes for yields with other high risk, high return investment alternatives (e.g., venture capital, opportunity funds, etc.)

Changing Playing Field

The securitization of real estate investments, the shift in tenant's use of space and the commodization of the asset class make it difficult to distinguish between the various players and the services and products they offer. This has been further complicated by the entry of new firms and the consolidation of existing firms.

A useful way to gain some clarity and distinguish the various players is to categorize them on the basis of whether their enterprise value comes from the performance of real estate assets or the management of real estate services or, as in most cases, some combination of both.

Asset Assemblers: These firms generate most of their enterprise value from the success of the real estate assets they own or manage. Examples include real estate mutual fund managers, investment advisors⁶ and REITs who acquire and manage portfolios but do not develop or restructure properties. These firms create enterprise value by assembling property portfolios and managing assets to increase cash flow and property values at a rate greater than inflation.

As a result, most, if not all, of the firm's enterprise value is created by the assets in the portfolio. Understanding property type and capital market trends, selecting geographical markets and sub-markets, acquiring and disposing of properties at good values—all of these skills are essential to the asset assembler. Property and portfolio risk levels are relatively low and returns are in line with those expected from institutional quality investment real estate (i.e., 10 percent-12 percent annually). Most core real estate portfolios have been and will continue to be developed by asset assemblers.

Asset Enhancers: These firms—REOCs, developers, opportunity funds, and REITs that develop and restructure properties—create enterprise value through the assets they own and their ability to add value by repositioning their use, physical design, tenancy or capital structure.

Investors generally recognize the higher risks associated with this type of activity but are willing to assume these risks in order to get enhanced investment returns (i.e., 15 percent-30 percent). There may be less emphasis on public formats since liquidity is often not an issue, and the need to move quickly to secure opportunities is well understood. Generally, asset enhancers will be found on the periphery rather than at the core of real estate portfolios.

Critical skill sets for financial restructuring include a knowledge of capital market pricing shifts as well as creative deal sourcing, negotiation and execution. Those involved in physical and tenant restructuring must have control over the development process, as well as extensive leasing and property management skills. Asset enhancers also will be expected (and will desire) to participate in the capital funding of investment opportunities.

Corporate Facilities: Corporations are the largest owners of real estate in America, mostly for use in their business operations. Real estate contributes to corporate enterprise value by allowing operating units to function at maximum efficiency. Part of this value comes from the proper selection of facilities to meet operating needs and a portion from the management of services associated with facility use.

Generally, the value of a corporate facilities management group is measured in terms of lower costs or convenience created for the operating units. In some cases, real estate may have value independent of corporate operations and, through restructuring, be able to generate capital for other corporate activity or be returned to shareholders.

Some companies own their real estate facilities because they want to assure operating flexibility and control industrial security. Others spin-off real estate assets into REOCs, REITs or other vehicles where they can outsource the management of facilities but still continue to participate in real estate returns. Still others prefer to lease their facilities, viewing real estate as a cost rather than a profit center. In a few cases, real estate rich companies restructure business operations to become real estate operating companies.

To date, most people involved in corporate real estate have come from backgrounds similar to asset enhancers, since the development and leasing of corporate facilities is a large part of their job. Increasingly, the skills of the asset assembler will be required as corporations begin to view their real estate assets as an investment portfolio to be exploited economically as they would any other corporate resource. This will unlock opportunities for new enterprises, both inside and outside of the corporation. Part of the enterprise value will come from corporate assets, but an increasingly important portion will come through management.

Service Providers: In addition to those who develop or own real estate, a plethora of organizations has emerged to service the real estate industry. Some of these are associated with the

creation of buildings—architects, planners, engineers and market consultants. Others are involved with real estate transactions or management—real estate brokers, mortgage brokers, investment bankers, property management firms, leasing agents and tenant representatives. Still others measure the performance and value of real estate investments—accountants, appraisers, investment consultants and research organizations.

All of these firms have several characteristics in common. Because they provide a service and generally do not own assets, they are almost exclusively dependent upon their preople and the franchise they establish. In addition to their usual competitors, service providers are also subject to vertical integration by other organizations. Even clients can become competitors, not only for their own account but for the accounts of others as well.

Service providers also are highly vulnerable to being replaced or reduced in scope by technological innovation. For example, computers have had a major impact on creating and interpreting architectural and engineering drawings, brokerage listings, and accounting and valuation data.

Lacking hard assets, enterprise value for service providers comes from organization and management. Franchise positions are created through industry thought-leadership and maintained through branding, distribution and customer loyalty. Quality people, a good organizational environment and state-of-the-art systems are all essential ingredients. Management must continually create new strategic initiatives in order to maintain a competitive position.

Summary

Several themes will dominate the real estate landscape over the next 5-10 years:

- Changing business operations and shifts in lifestyle preferences will influence where buildings are located, how space is configured and the owner-tenant relationship.
- Investors will be less accepting of the traditional reasons for investing in real estate. Increasingly, they will prefer a securitized format.
- The real estate capital market will divide into those investors who view real estate as a portfolio diversifier; those who view it as a sector in their stock portfolio and those who look to real estate as an opportunity investment which must compete for yields with other high risk, high return investment opportunities.

- Over time it is conceivable that securitized real estate investments will become the core of real estate portfolios with specialized investments taking the form of higher-risk vehicles.
- The playing field for real estate enterprises will continue to change rapidly as firms compete for market share and attempt to establish sustainable franchise value.

As in most turbulent environments, changing property and capital markets will create new areas of opportunity for real estate enterprises. The big question is: Who will capitalize on the opportunities that arise? Will it be existing real estate organizations who restructure and regenerate their operations to deal with the future? Will it be firms from other industries who have already accomplished much of the necessary organizational restructuring and who will transfer these skills to real estate, either directly or through strategic alliances with other firms? Will it be brand new organizations, specifically designed and nurtured to capture the opportunities presented?

Coming to grips with these questions will be one of the major challenges facing real estate enterprises as they prepare themselves to enter the highly competitive world of the 21st century.

NOTES

- 1. Fortune (December 14, 1992).
- See Peter C. Aldrich and Thomas G. Eastman, Whom Do You Trust: Waking Up to a New Paradigm (Aldrich Eastman Waltch, 1995).
- Briggs Wengert Associates, "Institutional Investor Market Analysis," (July 12, 1996).
- 4. REITs are corporations and trusts operating in real estate which, after meeting a series of annual tests, elect a tax treatment which allows the pass-through of the majority of net income to investors without income tax at the entity level. REITs can be public or private income to investors without income tax at the entity level. REITs can be public or private entities. Real Estate Operating Companies (REOCs) are corporations operating in real estate who do not seek the REIT tax election and are taxed like any other corporation. Most of the comments in this section about REITs also apply to REOCs.
- Michael Giliberto, REITs and Real Estate: Two Markets Re-Examined, Lehman Brothers, (December, 1995).
- 6. For the purpose of this discussion, the term "investment advisor" is used interchangeably with "investment manager."
- 7. Investment advisors also have created enterprise value as a result of established client relationships with pension funds. As pension plans become more sophisticated and more real estate investment alternatives are available, this premium can be expected to diminish. The degree of loss will depend on the ability of advisors to successfully provide new investment alternatives that will help them retain and expand their client base.

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TEAM PERFORMANCE, **ATTENDANCE** AND RISK FOR MAJOR LEAGUE **BASERA** STADIUMS: 1970-1994

by William N. Kinnard, Jr., CRE, Mary Beth Geckler, CRE, and Jake W. DeLottie

he market value of a major league baseball (MLB) stadium is, to a large extent, a function of attendance levels1 at MLB team games. Attendance levels determine revenue from ticket sales (and stadium rentals), concession (food and souvenir) and parking.2 What are the identifiable influences on home game attendance for a MLB stadium or team? In an effort to provide supportable answers to this question, we analyzed available published data on average attendance for all MLB stadiums and teams for the period 1970-1994.³

Activities Undertaken By RECGC

Sources of Data

With assistance from Research Associates of Virginia, data were assembled on attendance figures, stadium capacity and won-lost records during the regular season (also called "winning percentage" or WINPCT) for all teams in major league baseball. These data were obtained from published sources for 1970 through 1994. We considered this 25-year span adequate to reflect long-term trends as well as cyclical variations over time.

Data Gathered

We first organized our information by league (American and National), and then by team, for each year. A data file for each team was developed that included the following information:

- · Team name
- · League
- Year franchise began (if after 1970)
- Average attendance per home date per Dome stadium (Yes-No) year (excludes post-season)
- · Won-Lost record
- ("Winning Percentage") · Games behind league or division champion at end of season
- · Won league or World Series previous year

- · Capacity of stadium (each year)
- Date of new stadium (if any)
- · Capacity of new stadium (if applicable)
- · Strike Year (Yes-No)
- · Games missed (if strike year)
- · Year (for all annual data)

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Mary Beth Geckler, CRE, is vice president of RECGC and a licensed general appraiser in Connecticut. She was a commercial real estate lending officer at two regional banks in Connecticut for nine years after spending nearly a decade in market research, analysis and providing advice to public agencies and educational institutions. Since 1990, she has specialized in market proximity impact studies, evaluation of risks involved in real estate ownership or development and review of special purpose property appraisals.

Jake W. DeLottie is a senior research associate at RECGC and has participated in several studies of market rentals in regional and community shopping centers in the United States and Canada. He is a candidate for a Master of Science degree in Computer Science at The Graduate Center, Hartford, Connecticut.

Exhibit 1 New Teams and New Stadiums Major League Baseball, 1970-1994

	A. New Teams	
Texas Rangers	1972	American League
Seattle Mariners	1977	American League
Toronto Blue Jays	1977	American League
Colorado Rockies	1993	National League
Florida Marlins	1993	National League

B. New Stadiums

Kansas City Royals
New York Yankees (Decreased Capacity Only)*
California Angels (Increased Capacity for NFL)
Minnesota Twins
Toronto Blue Jays
Chicago White Sox
Baltimore Orioles
Cleveland Indians
Texas Rangers
Philadelphia Phillies
Montreal Expos

^{*}Played in Shea Stadium 1974-1975 during renovations

Five teams began franchise operations after 1970: Texas Rangers (1972); Seattle Mariners (1977); Toronto Blue Jays (1977); Colorado Rockies (1993); and Florida Marlins (1993). In addition, there were seven new American League stadiums and two new National League stadiums occupied during the period covered in the analysis (see Exhibit 1). In addition, capacity of the California Angels' stadium was increased in 1981 to accommodate National Football League specifications. The New York Yankees played home games at Shea Stadium in 1974 and 1975 while Yankee Stadium was being renovated and its capacity reduced.

We calculated Winning Percentages by dividing games won by total games played each season. The Attendance Percentage was calculated by dividing average attendance per game for each season by the stadium's official seating capacity occupied during that season. In the case of the Toronto Blue Jays, who occupied the SkyDome in June 1989, a weighted average percentage was calculated, because games were played in two different stadiums during the 1989 season.

Tabulations, Graphs And Models Produced After the foregoing information and calculations were assembled, the occurrence and duration of MLB work stoppages (strikes and lockouts) were tabulated, as shown in Exhibit 2.

The Winning Percentage (WINPCT) and Attendance Percentage (ATTPCT) figures for each team were calculated by year. The American League figures are presented in Exhibit 3; the National League figures are in Exhibit 4. From these figures each team's average Winning Percentage and average Attendance Percentage were calculated for the entire 25-year study period. The Winning Percentage and Attendance Percentage averages also were calculated for 1989-1994 for all 26 teams (a two-year average for the Colorado Rockies and Florida Marlins).

Each of the teams was then ranked by average Won-Lost percentage and by average Attendance Percentage for the two time periods: 1970-1994 and 1989-1994. Those results are presented in Exhibit 5.

Exhibit 2 Work Stoppages and Games Missed Major League Baseball, 1970-1994

Year	Work Stoppage	Games Missed	Length	Dates	Issue
1972	Strike	86	13 Days	April 1-13	Pensions
1973	Lockout	0	17 Days	February 8-25	Salary Arbitration
1976	Lockout	0	17 Days	March 1-17	Free Agency
1980	Strike	0	8 Days	April 1-8	Free-Agent Compensation
1981	Strike	712	50 Days	June 12-July 31	Free-Agent Compensation
1985	Strike	0	2 Days	August 6-7	Salary Arbitration
1990	Lockout	0	32 Days	February 15-March 18	Salary Arbitration and Salary Cap
1994	Strike	669*	81 Dayst	August 12-	Salary Cap and Revenue Sharing

^{*}Through end of regular season (Owners cancelled remainder of regular season and entire post season on September 14, 1994.)

Exhibit 3

American League Averages

		19	1970-1994		89-1994
Team		W - L	Attendance	W - L	Attendance
Baltimore		.543	.438	.510	.763
Boston		.532	.744*	.498	.899
California	1	.485	.426	.475	.436
Chicago (WS)	.495	.433	.542	.646
Cleveland		.461	.198	.467	.346
Detroit		.509	.399	.470	.385
Kansas C	ity	.522	.566	.510	.643
Milwauke	ee	.486	.350	.487	.412
Minnesota		.488	.334	.500	.470
New York (Yankees)		.540	.422	.491	.451
Oakland		.518	.363	.538	.630
Seattle	(1977)	.432*	.262	.463	.375
Texas	(1972)	.476	.460	.502	.655
Toronto	(1977)	.497	.679	.550	.951
Mean		.499	.434	.500	.576
Standard Deviation		.031	.148	.028	.196
Coefficien	nt of Dispersion	.062	.340	.056	.341
2 Standard	d Deviation +	.561	.729	.556	.969
	-	.437	.139	.444	.183

^{*}Outside Mean +/- 2 Standard Deviations

We plotted the relationships between average Winning Percentage and average Attendance Percentage figures, over the entire 25-year study period, on separate graphs for each team. Eight of those graphs are presented as Exhibit 6. They show figures for the five teams that occupied new stadiums after 1989, plus the Atlanta Braves and Los Angeles Dodgers (high Won-Lost records in recent years), and the Boston Red Sox (an unexplained anomaly).

Exhibit 4
National League Averages

	19	1970-1994		89-1994
Team	W - L	Attendance	W - L	Attendance
Atlanta	.476	.338	.536	.587
Chicago (Cubs)	.478	.561	.476	.766
Cincinnati	.542	.482	.511	.552
Colorado (1993)	.434	.758	.434	.758
Florida (1993)	.419	.741	.419*	.741
Houston	.505	.386	.499	.380
Los Angeles	.537	.634	.497	.672
Montreal	.503	.406	.539	.380
New York (Mets)	.490	.432	.479	.498
Philadelphia	.501	.433	.475	.467
Pittsburgh	.524	.314	.532	.400
San Diego	.449	.326	.469	.379
San Francisco	.496	.279	.519	.413
St. Louis	.509	.492	.499	.595
Mean	.490	.470	.492	.542
Standard Deviation	.036	.153	.036	.147
Coefficient of Disper	rsion .073	.326	.073	.271
2 Standard Deviation	+ .562	.776	.564	.836
	418	.164	.420	.248

^{*}Outside Mean +/- 2 Standard Deviations

Exhibit 5
Team Rankings By League

	19	70-1994	1989-1994	
Team	W - L	Attendance	W - L	Attendance
Baltimore	1	5	4.5	3
Boston	3	1	8	2
California	11	7	11	10
Chicago (White Sox)	8	6	2	5
Cleveland	13	14	13	14
Detroit	6	9	12	12
Kansas City	4	3	4.5	6
Milwaukee	10	11	10	11
Minnesota	9	12	7	8
New York (Yankees)	2	8	9	9
Oakland	5	10	3	7
Seattle (1977)	14	13	14	13
Texas (1972)	12	4	6	4
Toronto (1977)	7	2	1	1

National	League
1970	-1994

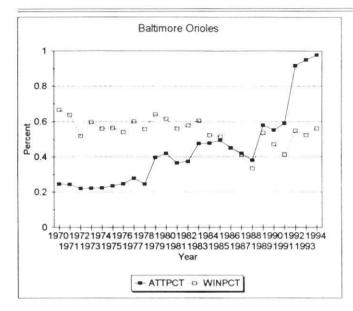
	19	1970-1994		89-1994
Team	W - L	Attendance	W - L	Attendance
Atlanta	11	11	2	6
Chicago (Cubs)	10	4	10	1
Cincinnati	1	6	5	7
Colorado (1993)	13	1	13	2
Florida (1993)	14	2	14	3
Houston	5	10	6.5	12.5
Los Angeles	2	3	8	4
Montreal	6	9	1	12.5
New York (Mets)	9	8	9	8
Philadelphia	7	7	11	9
Pittsburgh	3	13	3	11
San Diego	12	12	12	14
San Francisco	8	14	4	10
St. Louis	4	5	6.5	5

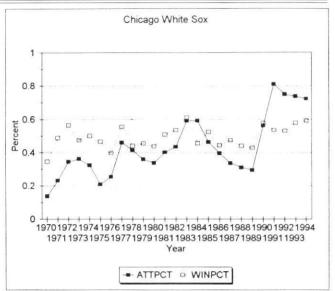
Finally, we developed Multiple Regression models using the entire data set of some 638 separate annual team data files. The most appropriate form and format for the model were identified by testing different combinations of variables, including both Attendance Percentage (ATTPCT) and the Natural Logarithm of Attendance Percentage (LNATTPCT) as the Dependent Variable. Size-Attendance Percentage relationships are typically curvilinear rather than straight-line, since Attendance Percentage has an upper limit: 100%. We therefore chose the model with LNATTPCT as the Dependent Variable.

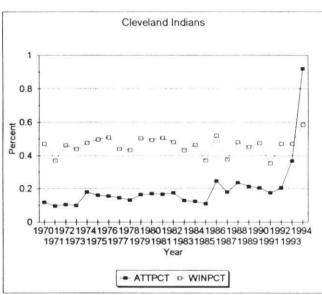
The best estimator model is presented as Exhibit 7. In that model, most of the independent variables are binary (Yes-No) variables. With the Natural Logarithm of Attendance Percentage as the dependent variable, the coefficients of the Yes-No independent variables can be used as indicators of percentage differences in their impact or influence

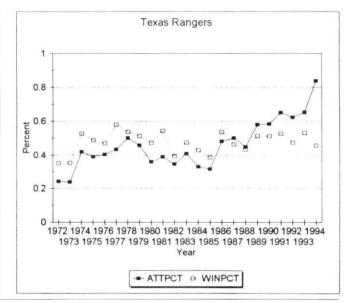
Exhibit 6A

Average Attendance as a Percentage of Stadium Capacity Related to Won-Lost Record, By Year; 1970-1994 Teams with New Stadiums after 1988, Teams with High Attendance Percentages without New Stadiums









on Attendance Percentage. Exhibit 7 indicates that such Yes-No variables (Yes = 1; No = 0) included:

- Dome (Is it a covered dome stadium? Yes-No)
- American League (as opposed to National League; Yes-No)
- Strike (Was it a year in which a strike occurred? Yes-No)
- Won League previous year (Yes-No)

"Strike" rather than "Games Missed" was selected as the variable to represent work stoppages, because "Strike" proved to be more significant statistically.

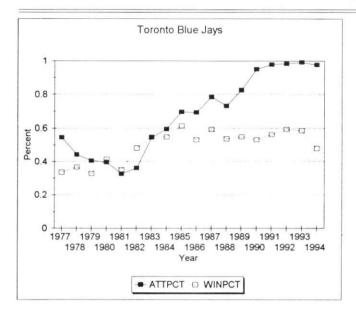
True variables with values determined by calculation or observation included:

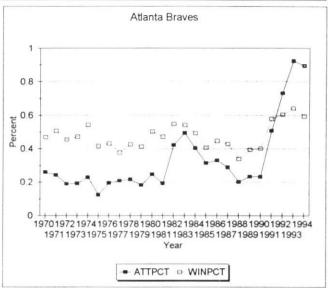
- Year (Any year from 1970 through 1994)
- Winning Percentage and Games Behind (games behind the winner of the league or division at the end of the season)
- Games Behind rather than Standing were chosen because the former was statistically significant and the latter was not.

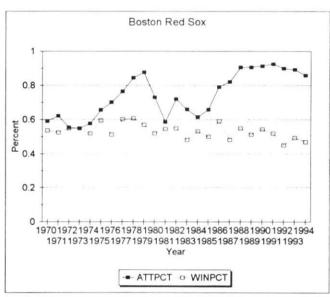
For age of stadium, Year of Operation of Stadium (after its opening) was used. The variables were YROPP1 (for Year 1), YROPP2 (for Year 2), YROPP3 (for Year 3), YROPP4 (for Year 4). All years after the fourth year of operations were used as the norm against which the others were compared: 5 years or more.

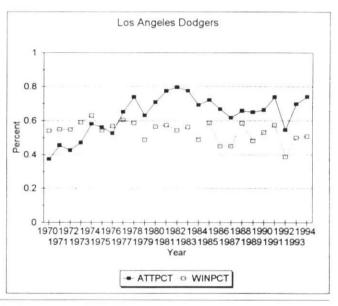
Exhibit 6B

Average Attendance as a Percentage of Stadium Capacity Related to Won-Lost Record, By Year; 1970-1994 Teams with New Stadiums after 1988, Teams with High Attendance Percentages without New Stadiums









The team variables were also Yes-No variables. To reflect both the team (including the influence of its market area, its reputation and its following) and the capacity of the home stadium for the team, these two factors were combined into a "Team CAP" interactive variable. If a team played in more than one stadium over the 1970-1994 period, that is indicated in the team variables by "CAP 1", "CAP 2" and (in the case of the New York Yankees) "CAP 3," as well.

Findings

General Findings

First, the Year ("YR") variable in Exhibit 7 demonstrates quite clearly that, for most teams and for

major league baseball generally, there has been an upward trend in Attendance Percentage over time. That increase has been especially evident since about 1980 (see the graphs in Exhibit 6). It is partly explained by some teams moving into new stadiums with smaller capacity: e.g., Baltimore Orioles, Cleveland Indians and New York Yankees. The highly significant positive coefficient value for the "YR" variable indicates an unquestionable underlying upward trend in overall Attendance Percentage.

The graphs in Exhibit 6, particularly when read in conjunction with the new stadium information in Exhibit 1, show unequivocally that (since 1989 at least) a new stadium has resulted in dramatic

Exhibit 7 Multiple Regression Model Influences on Natural Logarithm of Attendance as a Percentage of Stadium Capacity Major League Baseball, 1970-1994

	Depe	endent Variable: LATT	PCT	Degrees of I	Freedom: 590
Independent Variable	Coefficient	Standard Error	Beta Coefficient	t Statistic	Probability
DOME	178547877	.096706133	119296112	-1.84629	.06535031
PREVLEAG	.166046664	.033760991	.093632192	4.91830	.00000113
AMERICAN	.064069737	.059877615	.068408706	1.07001	.28505167
YR	.027665371	.001353928	.424164281	20.43342	0.00000000
YROPP1	.243884170	.067948216	.076381527	3.58927	.00035918
YROPP2	.201011379	.065048034	.060712866	3.09020	.00209445
YROPP3	.143701234	.063141636	.043403084	2.27586	.02321226
YROPP4	.108955686	.063355632	.032908644	1.71975	.08600278
GB	003778323	.001561231	092152734	-2.42009	.01581765
WINPCT	2.101753485	.267494748	.306297860	7.85718	1.7208e-14
RSOXCAP	.000019720	.000001778	.275002249	11.08804	0.00000000
ANGECAP	.000003400	.000001059	.079948828	3.21200	.00138990
CUBSCAP	.000014925	.000001572	.235148536	9.49402	6.6613e-16
WSOXCAP1	.000003527	.000002733	.026411322	1.29059	.19735302
WSOXCAP2	.000002838	.000001426	.048100747	1.99067	.04697832
REDSCAP	.000003945	.000001165	.085414070	3.38508	.00075882
INDICAP1	.000004869	.000005356	.017541147	.90908	.36367788
INDICAP2	000008315	8.1637e-07	255671418	-10.18522	5.5511e-16
ROCKCAP	.000006445	.000002180	.058617821	2.95694	.00323134
TIGECAP	.000002012	.000001126	.044469557	1.78621	.07457792
MARLCAP	.000015475	.000003275	.088770915	4.72515	.00000287
ASTRCAP	.000006276	.000002328	.124414154	2.69628	.00721195
ROYACAP1	.000009317	.000001520	.147806205	6.13023	.00000000
ROYACAP2	.000003800	.000003700	.019671791	1.02717	.30476273
DODGCAP	.000009386	.000001078	.218029203	8.70448	7.7716e-16
BREWCAP	1.2214e-07	.000001147	.002663394	.10653	.91519601
TWINCAP1	.000001746	.000002196	.029251993	.79507	.42689062
TWINCAP2	000003736	.000001695	048234545	-2.20400	.02790968
EXPOCAP1	1.6765e-08	.000001346	.000339959	.01246	.99006528
EXPOCAP2	.000025372	.000003229	.160780099	7.85848	1.8541e-14
METSCAP	.000004135	.000001078	.095005407	3.83582	.00013862
YANKCAP1	.000001651	.000001124	.034379107	1.46850	.14250068
YANKCAP2	000001556	.000002833	010282432	54912	.58313328
YANKCAP3	000003605	.000001760	039855320	-2.04857	.04094586
ATHLCAP	000003945	.000001211	080941997	-3.25873	.00118346
PHILCAP1	.000003535	9.8698e-07	.088444752	3.58208	.00036899
PHILCAP2	.000006268	.000006471	.017815896	.96861	.33313604
PIRACAP	000003286	.000001137	072345854	-2.89055	.00398713
PADRCAP	.000001420	.000001133	.031022858	1.25354	.21050523
GIANCAP	000004124	.000001032	098879045	-3.99602	.00007257
MARICAP	000001569	.000001995	032860933	78668	.43178362
CARDCAP	.000006643	.000001153	.142970471	5.75953	.00000001
RANGCAP1	.000007952	.000004777	.032349169	1.66475	.09649363
RANGCAP2	.000005689	.000001536	.089977266	3.70495	.00023130
BLUECAP1	.000012710	.000002779	.132486724	4.57416	.00000583
BLUECAP2	.000009855	.000001736	.124004041	5.67541	.00000002
STRIKE	037587897	.018423124	037476272	-2.04026	.04176952
T I	ant. 4 2071//270			r	2: .809261829
	ept: -4.387166270				r: .899589812
	stic: 53.26054386				f.): .891300107
Standard	Error: .212438903			Proportion Reduce	ea: .00026/1/3

Standard Error (d.f.): .220551505

Cumulative Reduced: .809261829

Analysis of Variance

		Amary 515 O	1 variance		
Sum of	Squares	D.F.	Mean Squares	F Ratio	Probability
Regression Residual Total	112.9721922 26.62686971 139.5990620	47 590 637	2.403663665 .045130288	53.26054386	3.1467e-57
Durbin-Watson: Residual S.D./De	1.952799016 ep Variable S.D.: .43673581	3 Residual	S.D.: .204451518		

increases in Attendance Percentage for the affected team. There were smaller increases during the 1970s (in Philadelphia and Montreal), as well as very modest increases in Anaheim (1981), Kansas City (1993) and Minnesota (1982).

It is not at all clear, however, how long the positive effect of a new stadium is likely to last. When is a stadium no longer new and a separate attraction to attend a major league baseball game, irrespective of the field performance of the home team? Exhibit 7 indicates clearly that there is a decline in the positive percentage impact of a new stadium that is statistically significant over the first three years. On average, it is a robust 24 percent in Year 1, still 20 percent in Year 2 and 14 percent in Year 3. By Year 4 the positive impact is no longer statistically significant, but it is still 11 percent.

Conversely, a domed stadium has had a negative (somewhat significant) effect on Attendance Percentage. It is possible that the lackluster long-term field performance of teams with domed home stadiums (except for Toronto) accounts for this. A strike in any year has had a negative and significant effect (3.8 percent, on average). These results, shown in Exhibit 7, indicate further that being in the American League enhances the Attendance Percentage of the home team, but not significantly.

A team's Winning Percentage is the major (and highly significant) positive influence on Attendance Percentage, after time (YR). In addition, having won the league title and played in the World Series the previous year (PREVLEAG) is a very significant positive influence on Attendance Percentage, while being a greater number of Games Behind at the end of the season is a significant negative influence. Neither of these results is surprising: local fans enjoy seeing the home team win and are not particularly attracted by home teams that are not in contention for the league or division title for much of the season.

The Multiple Regression model in Exhibit 7 is statistically very robust and gratifying. The results are consistent with intuitive expectations. The Coefficient of Multiple Determination (R2) means that over 80 percent of the variability in Attendance Percentage is explained by the model, a notably strong result. Moreover, the F-Ratio is extremely high; its probability indicates there is virtually no chance this model could have emerged randomly. The Standard Error of the Estimate (Std Error [d.f.]), adjusted for degrees of freedom, is lower than for all the other models considered. The model in Exhibit 7 produces the most reliable results. In summary, the results of this model can be used with a high degree of confidence for reliability and statistical significance.

Conclusions

- 1. Not surprisingly, winning is still better than losing; it produces a high level of Attendance Percentage. Indeed, the most important influence on Attendance Percentage, aside from the long-term upward trend for all of major league baseball and the downsizing of new ballparks, is a team's on-field performance. Higher attendance percentages produce increased revenues from ticket sales and from parking, food and souvenir concessions at MLB stadiums. Dependence of stadium revenues on team performance represents greater investment risk, since third-party owners of MLB stadiums have no control or influence over the on-field performance of the tenant team.
- 2. Since 1989, a new stadium has been a dramatic stimulus to Attendance Percentage. At first, the ballpark itself is an attraction, almost irrespective of the team's on-field performance. This initial increase is tempered by general declines over the next five years, unless the team itself remains or becomes a winner. Moreover, some of the increase in Attendance Percentage is artificial when the franchise moves from an oversized stadium to a smaller, more friendly or traditional environment, as in Baltimore and Cleveland.
- 3. Nevertheless, when combined with a winning team, a new stadium generates notably higher Attendance Percentages for a few years. This is particularly evident for Baltimore, Cleveland and (most especially) Toronto, as shown in Exhibit 6. On the other hand, the new Comisky Park did not help Attendance Percentages for the Chicago White Sox nearly as much, nor as long. Moreover, Attendance Percentages reportedly have fallen off noticeably in Toronto in 1995 and 1996, when the Blue Jays' Won-Lost percentages and league standing declined.
- 4. A new franchise helps for a while, but that effect lasts briefly if the team does not win regularly. This occurred with the Florida Marlins and to a lesser degree the Colorado Rockies. Their rankings in Won-Lost records and Attendance Percentages, shown in Exhibit 5, reflect this.
- 5. It is quite unusual for a team in either league to sustain a high Won-Lost percentage and to win a league/division championship for more than 5-6 years. The resulting cyclical patterns of attendance result in variable stadium revenues. Income variability creates further investment return risk, as well as debt service coverage risk.
- The investment risk problem is exacerbated when the team franchise regards the stadium's luxury boxes and club seating arrangements as inadequate. With the exception of the SkyDome,

the bulk of MLB luxury box and club seat license fees goes to the team franchise, rather than to stadium ownership. The costs of luxury boxes and the extra amenities of club seating have been borne in recent years by public ownership. These increased costs must be financed and amortized through public debt. Non-participation in luxury box or club seat revenues enhances the investment return risk and debt service coverage risk associated with MLB stadium ownership, especially by public bodies.

- 7. The threat of a move to a new stadium within a team's franchise area, or the necessity to add or improve luxury boxes and club seating, reduces the reasonably expected economic life of an existing MLB stadium.
- 8. All of this confirms what has been pointed out regularly in published case studies and anecdotal essays: 4 a major league baseball stadium makes no sense as a financial investment. The results of this study reinforce that conclusion and demonstrate that the risks associated with owning event-driven facilities for major league baseball are greater than previously estimated. 5

NOTES

- In this presentation, "attendance" means paid attendance, rather than turnstile "clicks."
- 2. Of course MLB franchises receive local and shared national television and radio revenues, none of which benefit the stadium owner per se. Further, luxury box and club seat license fees usually flow entirely or primarily to the team franchise, rather than to stadium ownership. The SkyDome, at least until 1998, is a notable exception.
- 3. The major sources for these data were the annual *year books* for the American and National Leagues, plus the annual *Baseball Almanac*. Conflicts were resolved primarily through telephone calls to the affected teams.
- See, for example, Robert Baade's, "Sports Stadiums and Area Development: A Critical Review," Economic Development Quarterly, August 1988, pp. 265-275. See also, Kevin Grace, Ballparks: A Research and Reading Guide. Cincinnati, OH: University of Cincinnati, 1994.
- According to published accounts, SkyDome cost C\$475 million to complete in June 1989. It was acquired by a private consortium in the fall of 1994 for approximately C\$175 million.

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SOME PERSPECTIVES ON SPORTS FACILITIES AS TOOLS FOR ECONOMIC ACTIVITY

by William H. Owen, CRE, and Owen M. Beitsch, CRE While much has been written regarding the economic impact of sports and sport-related activity, the subject remains hotly debated. This article is not intended to satisfy either the critics or the supporters of such investments, but it does serve as a general guide to the issues involved when public dollars are directed or allocated to develop a sports facility. This article is a policy checklist, not a critique.

In this commentary, some observations are made regarding one-time sports events such as World Cup Soccer which was hosted at several venues in the United States during the summer of 1994. However, the principal focus of the article is the ostensible costs and benefits to be derived from the development of the sports venue itself. To provide added perspective, these costs and benefits are compared with the potential impacts said to be derived from both a major aquarium and convention center in settings where these kinds of facilities might be plausibly supported. Finally, the proposed Sports District in Orlando is described and offered not to illustrate sports facility financing but as a possible model for physical and economic development. These comparisons serve as examples to measure the benefits, if any, which can be derived from a major sports venture. They suggest the creative ways in which public resources might be leveraged to enhance even a marginal return.

Sports Stadia

Of approximately 100 facilities used by professional football, baseball, hockey and basketball teams, some two-thirds are publicly owned and financed using a variety of grants, taxes and other sources of government funds, as shown in Table 1.^{1,2,3} The current costs are staggering; a contemporary openair baseball park is expected to cost \$130 million to \$170 million to develop.

Equally staggering are the demands of the typical team which ultimately yield negotiators seemingly attractive rewards over a relatively moderate lease period. The most vulnerable cities, e.g., Miami, receive almost nothing for their considerable capital investment. In the case of Miami, the city will lose its second sports franchise to a suburban neighbor before the decade is over. A few years ago, Miami lost the Dolphins and now the Panthers are planning to vacate an arena built less than 10 years ago. The residual of these moves are certainly not disastrous economically but the city has been left with materially obsolete facilities. Because these facilities are highly specialized in design and have

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Table 1Profile of Selected Financing Programs, Existing or Proposed Sports Facilities

Facility & Location	Year Built	Cost of Construction	Debt Structure
White Sox Stadium Chicago, IL	1991	\$120,000,000	2% local hotel/motel taxState and City guaranteesTeam lease payments
Robbie Stadium Miami, FL	1988	\$100,000,000	Revenue bonds secured by lease revenueBalance paid through lease and operating agreements
Phoenix Stadium Phoenix, AZ	1988	\$250,000,000	\$75,000,000 city contributionBalance paid through lease and operating agreements
Orioles Stadium Baltimore, MD	1993	\$200,000,000	State lottery proceedsCity contributions
Sun Coast Dome St. Petersburg, FL	1988	\$ 85,000,000	0.5% sales tax2% local hotel/motel taxExcise tax
Georgia Fulton Stadium Atlanta, GA	1966	\$ 18,500,000	 Revenue bond issue with shortfalls guaranteed by City and County Team lease payments
Superdome New Orleans, LA	1965	\$120,000,000	• 4% local hotel/motel tax
Silverdome Pontiac, MI	1974	\$ 44,500,000	Local, general obligation bondStadium revenue bondsTeam lease payments
Metrodome Minneapolis, MN	1980	\$ 55,000,000	 3% local hotel tax 10% admission tax Allocation of state liquor tax Team lease payments

Sources: SMG Consulting, Morgan Stanley, Real Estate Research Consultants, Inc.

utility only under limited circumstances, the loss of a team instantly strips them of value. With some exceptions, troubling issues such as these have gone largely unreported until expansion possibilities are given endless coverage. Expansions are the darling of sports writers everywhere, whereas, it seems, a move is strictly the concern of the local Chamber of Commerce. Given these costs and the potential for long term financial exposure, what are the principal motivations for the public's investment in sports? Generally, the reasons have focused on four areas.^{4,5,6,7}

- Stadiums have become a preferred tool of development and redevelopment. The scale and opportunities associated with adjacent development is perceived as far greater than what might be obtained through entirely private means. They are promoted as catalysts for nearby projects which can produce their own economic benefits.
- The stadium is a surrogate measure of a community's maturity and economic well being. The presence of a professional sports facility is viewed with old time community pride. Conversely, an abandoned or vacated stadium is seen

as something of a blemish on the city's record of achievement. Communities such as Baltimore and St. Louis may suffer a perception of disinvestment by losing their teams even though viable indicators of economic or fiscal wealth may amply demonstrate otherwise. Certainly, both of these communities have worked to leverage their financial resources to attract teams that had civic partnerships with *other* communities.

- Sports have, by almost any measure, become an economically significant business worthy of recognition in their own right. Both amateur and professional events have their own set of attributes that link them to activities associated with a range of services or activities that extend far beyond the venue and the locker room.
- Sporting events represent recreational opportunities that complement other recreational options within the community, including, for example, parks and cultural offerings. In many cities, more people will attend sporting events than will attend all the performances combined of local opera, theater and symphony groups.

Table 2
Variable and Fixed Annual Operating Costs of Selected Publicly Owned Stadiums 1970-1971 Season

Stadium Costs	Variable Depreciation	Interest and Costs	Total
Anaheim Stadium	\$262,000	\$1,068,000	\$1,496,000
Atlanta Stadium	221,000	1,320,000	1,806,000
Candlestick Park (San Francisco)	260,000	900,000	1,310,000
Cincinnati Riverfront Stadium	255,000	1,750,000	2,255,000
Astrodome (Houston)	255,000	1,500,000	2,015,000
RFK Stadium (Washington, DC)	265,000	1,285,000	1,834,000
San Diego Stadium	244,000	1,506,000	1,948,000
Shea Stadium (New York)	300,000	1,500,000	2,085,000

Source: Okner

Obviously, it is the professional team(s) itself which is integral to these propositions. Absent a team to occupy a facility, no jurisdiction could expect to recover its stadium investment and enjoy the stream of benefits implied by the above rationale(s).

Investment Studies

Many studies have contemplated public investment in sports. 8,9,10 One of the more comprehensive was completed in 1974 by Benjamin Okner. 11 His analysis profiled the fixed and variable costs—full capital costs as well as annual maintenance and operation—associated with 50 baseball and football facilities. The study concluded that revenues attributable to these facilities only satisfied approximately 70 percent of the annualized costs. His study also indicated that there was an additional implicit cost from not collecting property tax or other assessments on large land holdings which were withheld from private sector development.

In concept, his analytical framework has been described or verified in other articles and

Table 3

Share of Gross Revenue Flowing to Selected NFL Teams, Typical Operating Year

	Comparable Teams \$36,414,000	
Gross Revenue		
Team Share: Percent of Gross	73.8% - 79.8%	
Facility Share: Percent of Gross	6.4% - 7.5%	

Source: Real Estate Research Consultants, Inc.

studies. ^{12,13,14} Particularly interesting, given the age of his study, is Okner's observation that the relationship of revenue to costs becomes increasingly unfavorable the newer the facility. Technology has brought stadium design up, not down, in price as witnessed by the retractable domed stadium erected in Toronto in 1988-1989. In this stadium, the dome roof and its subsystems are by themselves almost \$100,000,000, a sum equivalent to the adjusted current cost of the entire Pontiac Silverdome erected in 1975 for \$52,000,000. The *renovation* cost of Jacksonville's existing open air stadium for the Jaguars, a new NFL entry, was more than \$150,000,000.

Selected data from the Okner study and an analysis completed in 1988 by staff of Real Estate Research Consultants (RERC) are summarized in Tables 2 and 3.15 Okner's data addresses fixed costs associated with interest and debt amortization, as well as variable costs related to operations. The analysis was concerned strictly with revenue arising from operation and provides some perspective on the magnitude of income generated by the National Football League's roster prior to its recent expansion.

Because the relationships are important and not the absolute value of operating costs, Okner's figures have not been adjusted to current dollars. While direct comparisons in the data are cautioned, Okner's data is more revealing when studied in the context of the analysis. RERC profiled the distribution of revenue flowing from the several football stadia owned or developed in some kind of public/ private venture. The study reported that the average NFL team received approximately 74 percent of a franchise's operating revenue while the public partner received an average of 7.5 percent. Viewed in conjunction with the Okner analysis, there is at least the impression that pricing is not functionally related to the nominal economic burden carried by each party. For the community which owns the stadium, this burden is likely to grow as teams press to upgrade or replace dated facilities.

Interestingly, these facilities, from just an utilitarian perspective, are not that old. Houston will be leaving the Astrodome and Tampa will be vacating Buccaneer Place. However, both facilities were built in the 1960s when the team's primary requirements were strictly a function of seating capacity and an adequate playing surface. These requirements have not changed much, but they can have a tremendous effect on the facility's capacity to generate sufficient income to pay for higher costs of operation. So, seating is upgraded, common areas are improved and higher tariffs are justified.

Community Benefit

The various benefits attendant to these kinds of facilities have been well-described in the literature although, as pointed out, there is disagreement on the magnitude. Many argue that the result is less than positive, others argue persuasively that the standard by which a benefit must be measured is not well defined. Among others, the following benefits have been researched or claimed. 16,17,18,19

- Increased land values in the vicinity of the stadium generating higher ad valorem taxes.
- Increased hotel activity generated by out-of-town visitation.
- Increased sales tax revenue to local and state governments derived from higher hotel occupancies and retail demand, particularly food and beverage.
- Increased employment.

Benefits such as those listed here are meaningful only if they are incremental to the local economy. That is, they represent a stream of unrealized dollars flowing into the local area which would not have been received were the venue not available to support a team or its activities. Such infusions may have a multiplier effect as they are exchanged for services or goods in subsequent rounds of spending. This multiplier effect is known to increase as an economy becomes more diversified. The marketplace which supports an economy may be comprised of several adjacent or nearby communities that closely interact through commercial trade. These communities may share collectively in a team's spirit, but they will not share equally in the costs or benefits that may be attributed to a team, whatever the multiplier. These costs or benefits can, in fact, be highly localized. Consequently, it is imperative to recognize that jurisdictional boundaries become very important when tracking the flow of dollars. The regional fiscal or economic benefits, if any, may be minuscule but a specific community could receive a windfall from the multiplier effect, a point that is consistently overlooked by critics of these projects.

Like the quantifiable benefits which are claimed, there is a lively debate about the intangible benefits generated by sports activities and their relative significance. Advocates of public investment in stadia cite civic pride, community boosterism, national exposure and stature among cities of similar size. The critics respond that increased operating costs of a team or stadium should not be solved with public expenditures.

While the public relations value of such an investment has yet to be quantified, it is an accepted premise that private businesses spend lavishly to

promote their products or services, sometimes allocating hundreds of thousands of dollars to accomplish a specific marketing objective. The fact is that almost any city's image can be positively affected by the presence of professional franchises, because they are almost universally recognized and tied to an easily promotable theme. Certainly, the extraordinary sales of Orlando Magic memorabilia are not generated exclusively by that community's population. The team's fan base and the area's recognition as a sports and leisure center extend far beyond the city's geographic influence.

Aquaria

At least ostensibly, the demand for aquarium facilities seems endless at this time. Norfolk, Corpus Christi, Atlanta, Cleveland, San Francisco, St. Louis, Milwaukee and other cities are contemplating the construction of aquaria as a means of energizing or enhancing their urban environments. Such development is a costly undertaking. Tampa's new aquarium cost well over \$100,000,000. At a construction cost of approximately \$30,000,000 in 1981, Baltimore's National Aquarium seems relatively modest in scale when compared with the \$150,000,000 redevelopment plans proposed by the New England Aquarium a few years ago.

Unlike most stadia and convention centers which rely primarily on public financing, the new generation of aquaria is typically a partnership based on public and private sources of capital. Besides dedicated funding from the public sector, frequently from tax advantages or monies from the local and state education system, grants from foundations and contributions from individuals or coroftentimes underwrite debt operations. Private donors, for example, have contributed funds equaling approximately half the cost of Chicago's Shedd Aquarium's expansion program. Both the Monterey Aquarium and the Corpus Christi Aquarium were financed entirely by contributions and grants. However, some public educational funds are recognized in Monterey's operating revenues.

Financial Overview

These facilities, more than the stadium or convention center, function like an attraction or business. While aquarium require large attendance to be financially successful, they are not dependent on the scheduling of events. Compared to the other structures, an aquaria's operating deficit is significantly less as a group. Many operate at approximately break-even levels prior to the application of public funds, as indicated by the examples in Table 4.²⁰ Some operate profitably with the admissions revenue providing the principal source of income. In the case of Tampa's Florida Aquarium, which opened in 1994, operating revenues were expected to cover

Table 4Major Aquaria in the United States, Existing or Under Construction, as of January 1991

Location/Facility	Number of Species	Annual Operating Profit (Loss)	Source of Operating Funds	Estimated Attendance
Monterey Bay Aquarium Monterey, CA	10,000	\$2,700,000/1989	Private ^{a/b}	1,500,000
Steinhardt Aquarium San Francisco, CA	14,000	\$153,000/1989	Public ^{d/e} Private ^c	N/A
Mystic Marinelife Aquarium Mystic, CT	5,100	\$18,000/1989	Private ^a	726,000
Waikiki Aquarium Waikiki, HI	1,200	N/A	Public ^c Private ^{a/b}	336,000
Shedd Aquarium Chicago, IL	7,700	\$10,100,000/1989	Public ^e Private ^b	1,000,000
New England Aquarium Boston, MA	7,600	\$373,000/1989	Private ^{a/b}	1,200,000
Florida Aquarium Tampa, FL	N/A	\$7,800,000/1992	Private ^a	1,500,000
Chattanooga Aquarium Chattanooga, TN	N/A	\$157,000/1992	N/A	600,000
Seattle Aquarium Seattle, WA	17,260	N/A	Private Public ^e	600,000
New York Aquarium New York, NY	22,500	N/A	Private ^{a/b} Public ^{c/e/f}	751,000
National Aquarium Baltimore, MD	7,000	\$4,100,000/1989	Public ^f	1,450,000
Dallas Aquarium Dallas, TX	1,400	N/A	Public ^e	427,000
Aquarium of the Americas New Orleans, LA	N/A	\$1,200,000/1991	Private ^{a/b} Public ^e	1,000,000

Source(s): Real Estate Research Consultants, Inc.

N/A Not Applicable

debt service as well as other costs. Tampa's vision, however, may need to be modified based on recent financial results which are below those originally projected.

Even though the Florida Aquarium may be suffering from an aggressive financial forecast, the appeal of these facilities is still associated with their ostensible economic self-sufficiency. They appear to be partnerships between public and private interests, functioning only with moderate monetary dependency on the public sector. Meanwhile, they promote tourism, goodwill and environmental education. In conjunction with sensitive design and well-planned urban form—features typically absent in most sports or convention facilities—they seem to offer the elements that logically are the foundation for redevelopment and economic development programs. The aquarium may be an imposing

structure, but it may be a better neighbor than the monolithic convention center or stadium. By almost any scale, all of these points represent very beneficial attributes.

Aquaria, in many cases, are achieving a gate comparable in numbers to the average single purpose, professional football stadium (500,000 to 600,000 persons attending home games for a single season) and the typical convention center (100,000 to 200,000 persons for trade shows and conventions during the year). The attendance is moderately balanced throughout the year, and there are no dark dates, i.e., a day without users. According to a Sedway-Cooke study, at least half the attendance is visitation from outside the area.²¹ It is this inflow of attendance which presumably creates the momentum for related development and redevelopment

^a Operating revenue, more than 50 percent from admissions

^b Contributions, other than public grants

^c State backed d County backed

^{*} Locally backed f Other

opportunities. The communities which contemplate an aquarium, visualize the facility as the centerpiece in a coordinated strategy contributing to urban stabilization.

Because aquaria have a relatively short history, research attesting to their economic development promise is limited and primarily anecdotal. What has been articulated is grounded almost exclusively in emotional terms, not discrete analysis. Nonetheless, the qualitative rationales are compelling. The benefits below have been described.^{22,23,24}

- Increased hotel activity generated by out-of-town visitors.
- Increased expenditures for food and beverage and other nearby entertainment.
- Increased sales tax revenue from this spending.
- Enhanced development opportunity.
- Exposure for the host city.

Again, these are the benefits generally attributable to the other facilities and may create net positive impact if they import new dollars into the community from their operation. In a broadly structured economy, additional benefits would be induced by the multiplier effects referenced previously.

Like so many highly visible projects, however, only the positive aspects have been emphasized. Successful as it is, Baltimore's National Aquarium is a small element in a total redevelopment program that has pumped \$2.5 billion into the area's waterfront. Today there are many other significant projects in the harbor area, including the convention center, which may contribute benefits more substantial than those credited to the aquarium. Another nearby neighbor is the Orioles' home, Camden Yards, which also is an acclaimed success story by virtue of its design, community integration and links to other land use activity. Should the Baltimore experience define the approach to redevelopment planning, then other cities, like Tampa, may have to recognize that the capital outlay for an aquarium is only an initial cost. Other investments will be necessary to leverage the original expenditures. Broader more comprehensive strategies are needed. At best, facilities represent a catalyst. The taxpayers in New Orleans apparently are not concerned about such issues. Although they voted down increased taxes for police and fire protection, they passed a special tax for the aquarium which opened a few years ago. Attendance there is well ahead of projections.

Convention Centers

The operating characteristics of the nation's largest, and many of its smallest, convention centers is well documented.^{25,26} Almost none operate profitably as suggested by the financial and debt information

summarized in Table 5. Most are publicly owned. The deficits noted arise from modest occupancy rates and from the heavy management and staffing requirements necessary to run the building when they are booked. Adding to their economic difficulty, the buildings are virtually precluded from charging adequate rentals because of prevailing, competitive practices in the market which keep rates low. Bolstered by local appropriations, it is generally accepted that the convention center cannot cover its own operating costs. Rather, any financial losses experienced by the public's ownership are thought to be recovered through the economic benefits claimed to accrue as delegates and their families stay in the area.

Community Impact

Proponents of convention centers cite these delegates as a source of positive direct and secondary economic impacts. Where non-local visitation to an aquarium can only be inferred in the absence of a detailed study, it is easier, even for critics, to accept the premise that most convention delegates travel to a particular community to attend a scheduled event. Although one city may be more attractive as a destination location, it is the facility itself which serves as the venue. Without the building, the event, planned some months or years in advance, would be scheduled elsewhere.

Because convention centers operate at a loss, they are even less likely than a stadium to be financed privately. Since, it is argued, these buildings contribute broadly to community development, they are most appropriately constructed using public sources. Public sources, of course, are the means to cover the aforementioned operating shortfalls as well.

In many instances, the perceived relationship between the hospitality industry and the convention center results in a special levy, such as a hotel tax, to finance the facility. Often these funds do not pay for all costs, and pledges from the hotel or room tax must be supplemented by other revenues including gas and sales taxes which are more widely collected. Taken in aggregate, these observations imply a pattern of benefits comparable to those generated by sports facilities and aquarium. The following have been explored in some detail in several settings. ^{27,28,29}

- Extensive direct spending.
- Support for related commercial development.
- Opportunity to showcase the community and promote additional tourism.
- Infrastructure for tourist development activities, including development of restaurants, entertainment venues and hotels.

Because convention spending may mean new money for a community, it also means new jobs.

Table 5Financial Characteristics of Selected Major Convention Centers

Facility	Year Constructed/ Remodeled	Cost of Construction	Source of Financing	Annual Operating Profit (Loss)	Source of Operating Funds
Cincinnati Convention Center	1967	N/A	Public/Privatea/b/c	(\$1,313,925)/1988	Public ^c
Baltimore Convention Center	1982	\$59,000,000	N/A	(\$1,010,000)/1982	N/A
Orange County Convention Center	1983	N/A	Public ^b	(\$350,000)/1990	Public ^b
Tampa Convention Center	1990	\$100,000,000	Public ^c	(\$2,000,000)/1991	Public ^c
Hynes Auditorium	1988	N/A	Public ^a	N/A	N/A
New Orleans Convention Center	1985	\$71,000,000	Public ^a	N/A	Public ^a
Cook Convention Center	1974	\$23,000,000	N/A	(\$1,141,204)/1986	N/A
Jacob Javits	1986	\$456,000,000	N/A	(\$10,000,000)/1986	N/A
Atlantic City Convention Center	1971	\$19,000,000	Public ^a	(\$4,000,000)/1988	Public ^a
Miami Beach Convention Center	1988	\$95,000,000	Public ^b	(\$2,000,000)/1990	Public ^b
Century II Center	1969	\$10,000,000	Public ^c	(\$440,000)/1983	Public ^c
Oregon Convention Center	1990	\$85,000,000	Public ^{a/c}	N/A	Public ^c
Cervantes	1976	N/A	Public ^c	(\$988,000)/1987	Public ^c

Sources: Annual reports of the respective convention centers compiled by Peat Marwick; Real Estate Research Consultants, Inc. Notes: All figures expressed in current year dollars.

All figures rounded.

N/A Not Applicable

The jobs, however, may not inherently be desirable and have become a subject of much debate. Wages in tourist-based industries can be low. The labor force is highly mobile and may only earn a subsistence income necessitating supplemental benefits from publicly supported social service agencies. By extension of this argument, the public supports not only the physical infrastructure of a tourist-based industry but also its related jobs.

There are reasons to disagree with this thesis. The U.S. National Tourism Review Commission observed in a 1973 study that approximately one-third of the employment in the food and lodging industries is comprised of skilled labor. The Studies in Central Florida, one of the largest concentrations of tourist and convention related employment, indicate that such labor frequently provides a second income to the household and is not the principal source of family earnings. The series of the se

What of the convention center's role in revitalization efforts? Several studies performed by industry consultants allude to such benefits which are difficult to isolate. ^{32,33,34,35} Property taxes have been used as an indirect measure, but a failure to control for other variables makes such taxes a spurious indicator at best. In our view, the facility must complement other tourist-oriented infrastructures as part of a total strategy. Convention delegates identify a destination that is defined by a broad base of amenities. The convention center is simply a vehicle to accommodate the destination appeal.

World Cup Soccer

Orlando hosted World Cup Soccer in 1994, one of a handful of American cities to enjoy this privilege. The effort, costly and logistically difficult, was weighed against the possibility that the benefits would be elusive or, at best, substantially overstated. Certainly, given the manner in which such information is routinely reported, economic loss was a pressing concern. Unlike regularly scheduled sports events which require ongoing investment, events such as the World Cup are distinguished by short term capital requirements and a significant infusion of imported dollars brought to the host community by non-residents. It is these imported dollars that become the fuel to generate true economic benefits. As already suggested in this article, the base of support is highly localized for most regularly scheduled sports, precluding or at least limiting the occasions when imported dollars would be spent.

Assuming preliminary estimates were accurate, World Cup Soccer brought Orlando more than \$100,000,000 in economic and fiscal benefits against an investment of less than \$10,000,000. Are these estimates reasonable? Yes, but only in the community context in which the event was staged. Held elsewhere, managed differently, the results could have been far less significant even if the relative attendance had been the same.

Orlando Sports Dstrict

From the beginning, the Orlando Sports District was conceived as an opportunity to combine both economic development and physical redevelopment

^a State backed

^b County backed

c Locally backed

of an area immediately adjacent to downtown. Unlike the case in many other localities, construction of a sports venue was identified as a means to achieve many disparate community goals stated clearly at the onset. Construction of a facility and the acquisition of a team were never perceived as the primary objectives. To effect the desired mix of ultimate development, the community identified a specific population, geographic area and economic sector to service. In the Orlando model, the sports venue, obviously integral to the entire proposition, is a secondary priority.

What the experiences of other cities and other kinds of facilities demonstrate is a fundamental need to leverage financial and locational advantages associated with the planned undertaking. Rather than thinking in very narrow terms, it is absolutely essential that all elements be considered together as a plan that is divorced of emotional issues. Except in isolated cases, no community has envisioned the larger outcomes which could be possible by thinking in terms that encompass a wider area, a district, rather than just a neighborhood. Portland, Oregon has identified a convention center district, like Orlando, intended to accomplish similar goals. However, to date, the New Jersey Meadowlands complex is the only concept that envisions the ultimate relationships that might evolve from the construction of professional sports venues. In this case, however, the objective appears to be driven less by the motivation to encourage beneficial community development and more by a need to bring more life to what is provided by the normal sports calendar. So far, this project remains only a plan.

It is the careful and insightful combination of activities in Orlando's Sports District that provides the opportunity to create the many benefits referenced in this article. Frankly, the expectations of most communities have been too high. Sports, by themselves, are not the vehicle for bringing jobs or financial salvation. Sports development must be accompanied by a more comprehensive planning and development strategy if the theoretical benefits touted by proponents are to be realized. If executed as conceived, Orlando has the opportunity to generate economic, fiscal and physical benefits far in excess of those contemplated in communities of similar size but lacking the appropriate linkages within the industry.

Current estimates are that Orlando could achieve benefits worth more than \$100,000,000 from its sports district. These benefits are attributable exclusively to new spending and adjusted for the flow of dollars from alternative locations and venues. This is an extraordinary sum that makes the concept attractive as it also encourages a rational application of limited community resources.

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THE MYTH AND REALITY OF THE ECONOMIC DEVELOPMENT FROM SPORTS

by Mark S. Rosentraub

ardly a week seems to pass without an announcement that a community plans to invest in a stadium or arena to attract or retain a professional sports team. Indeed, the 1990s have been a great decade for the design and construction of sports facilities. Anaheim, Arlington (Texas), Atlanta, Baltimore, Boston, Chicago, Cleveland, Denver, Green Bay, Miami, Minneapolis, Montreal, Nashville, New York, Oakland, Philadelphia, Phoenix, Portland, Salt Lake City, San Antonio, San Jose, Seattle and St. Louis each have had at least one new facility built or an older facility substantially remodeled for major league sports teams. Some communities built two facilities and, as this article is being written, Cincinnati, Dallas, Detroit, Houston, Indianapolis, Los Angeles, Milwaukee, Nashville, Pittsburgh, New York, San Antonio and Seattle are considering or have agreed to build one or more facilities. This listing only enumerates the cities that have agreed to build facilities for major league sports teams. However, countless smaller communities are developing ballparks and arenas for minor league franchises.

New Stadiums Lure Teams

News and announcements of this high business and construction activity usually are met with enthusiasm. Large construction projects hold not only a promise of new jobs and expanded development, but sporting events are attended by millions of people. But, amidst all of this excitement about sports and the accompanying building boom, some dark clouds are visible. For example, reminiscent of the depression that spread across Brooklyn when the Dodgers moved to Los Angeles, Cleveland saw their beloved Browns suddenly move to Baltimore. The Browns' owner was lured by the promise of a new stadium being built and paid for by the public sector. The Baltimore Ravens (the Browns name remains with the city of Cleveland to be used by a new expansion team) pay little or no rent for its use of the stadium. The team also gets to keep virtually all revenues generated on game days.

The Cleveland franchise is not the only team to leave its long-standing fans in search of expanded revenues. Indeed, a game of musical chairs involving cities from coast-to-coast is now underway. Houston's Oilers, a part of Houston for more than 30 years, are off to Nashville lured by a deal strikingly similar to the one given the Baltimore

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Ravens. Winnipeg's Jets left Canada for the more profitable U.S. market, landing in Phoenix where they will share the publicly subsidized America West Arena with the Phoenix Suns. Oakland's Raiders returned back home again after a 13-year stay in Los Angeles. They were drawn back to the Bay Area by the promise of a remodeled stadium with luxury suites, primarily paid for by the public sector, of course. Los Angeles' Rams are now in St. Louis after almost five decades of play in Southern California because they received a lucrative lease on a new domed stadium built by the citizens of St. Louis and Missouri.

Seattle's Mariners and Seahawks have both toyed with relocating in search of a better stadium deal, and the Brewers continue to mention the possibility of leaving Milwaukee if their stadium needs are not addressed. New York, again, is plagued by threats of teams leaving its boundaries and region. The Devils flirted with Nashville, but before rejecting that city's subsidies, renegotiated its existing lease in New Jersey; the Yankees are evaluating its options in New Jersey after more than 80 years of play in New York City, and the NFL's Giants and Jets have already left for New Jersey. The Bengals and Reds both threatened to leave Cincinnati unless they each received a new stadium paid for by the public sector (which they did), and the Pirates' future in Pittsburgh is still in doubt unless a new stadium is built. The Reds and Pirates have played in their current cities for more than 100 years.

In the last few years numerous cities and counties in several different states have increased taxes to pay for new sports facilities in order to become or stay home to a major league sports team. Teams also have shown their willingness to leave their fans and homes for more profits. The movement of teams and the seeming requirement of increasing taxes to pay for the facilities have prompted some people to wonder if this is an appropriate use of tax dollars. If teams simply move when they get a better deal, should the public sector invest tax dollars in the facilities used by professional sports teams? If the loyalty of the team for its community and fans is as nostalgic as Leave it to Beaver, what does the public sector get when it invests in a facility for a team? Are publicly financed ballparks and arenas nothing more than bribes or bounties extracted by the professional sports leagues, or are these expenditures shrewd investments made by the public sector to generate economic development?

While the focus here is on facilities that receive tax support, it should be noted that some arenas and ballparks are privately developed and owned. For example, the new Rose Garden in Portland, the Delta Center in Salt Lake City and the new home of the Carolina Panthers were mostly privately financed and involved minimal investments of the

public sector's resources for the improved roads and sewers to complement these facilities. In contrast, however, governments in states as politically different as Maryland, Ohio, Texas, Washington, Florida, Tennessee and California have agreed to contribute to the cost of building a facility. If these expenditures by the government result in the receipt of higher tax revenues, higher levels of economic development or the creation of numerous jobs, the expenditure of tax dollars could be considered a wise use of the public's resources. If, however, the sports facilities built with tax dollars and the teams that use them do not generate substantial economic returns, then governments across America may be providing welfare payments to wealthy team owners and players who earn in excess of \$1 million every season. This is hardly a group that needs or deserves subsidies. So, which is it? Is the public's investment in sports a strategic use of tax dollars or is it welfare for the rich?

What Does The Spending On Sports Mean For An Economy?

The production of studies on the economic impact of professional sports teams and the facilities they use has itself become a mini industry. From the largest accounting and management firms to university faculty across the nation, everyone seems able to and interested in producing studies on the economic impact of teams and the facilities they use. Within this environment, wildly different numbers are produced engendering an impression that for the right price you will get whatever number you want. In such a setting it is sometimes hard to know which estimates are valid and which are not. However, a sufficient number of research studies have been reviewed by critics and supporters of investments in sports to permit some general agreement on what are the real economic gains from sports teams and the facilities they use.

The first problem or issue is that in the absence of a team or new ballpark, people will still spend money on recreation. People also will continue to eat in restaurants and visit bars and other night spots if a team leaves a city or never comes to a community. A large portion of the economic activity that occurs at a stadium or arena still will take place even if the team leaves the city or the facility is not built. The transfer of spending that occurs as a result of the team's presence is generally referred to as a substitution effect. Substitution here refers to the enjoyment of one form of recreation over another.

How much substitution is likely to occur? That depends on the type of city being analyzed. For example, in New York City where there are numerous recreational opportunities, the presence or absence of one additional form of entertainment (a

team) will likely have no effect or very marginal impacts. At the other extreme, a small city without a team would have lower levels of substitution if the residents would visit other cities for their recreation. Various studies have projected that for smaller communities at least two-thirds, and perhaps as much as three-quarters of the spending that is associated with a team or facility, is a mere substitution of one form of recreation for another. In larger communities, substitution effects could account for more than four-fifths of the spending that takes place.

All this means that less than 20 percent of the economic activity associated with the spending for sports by fans is real economic development. The real growth in an economy that occurs from sports occurs as a result of people coming to your community because of the existence of a team and the retention of recreational spending by your own residents who do not go elsewhere. However, if non-residents of your community already come to your city for recreational events (e.g., shows, restaurants, etc.), then the only economic development that occurs because of a team results from the *extra trips* they make to your city.

Use Of A Multiplier

Studies of recreation patterns within any city can pinpoint the correct proportion of spending that is a substitution and identify real economic development. The first step to measure the economic development that occurs from spending associated with teams and their facilities is to tabulate the total spent on tickets, souvenirs, food and beverages that can be associated with the event. This figure then should be reduced by at least two-thirds and perhaps as much as 80 to 90 percent to arrive at a true measure of the economic activity associated with teams and the real economic development received by your community. You must remember that the figure remaining after the reduction is the potential for new economic development from sports.

The new dollars or economic development in your local economy also will be recirculated to other people. As such, a multiplier factor needs to be applied. But here, again, some caution has to be taken in the application of a multiplier. If caution is not used, wild numbers are produced to describe the economic development benefits to be realized from a team or new ballpark. Multipliers are based on the spending patterns of average consumers who earn average incomes.

With approximately half of all revenues earned by teams belonging to players, the spending habits of these athletes becomes a central issue in the measure of and specification of the multiplier. Two factors must be kept in mind. *First*, players frequently have permanent homes in other areas. As a result, a

substantial portion of their spending may occur hundreds of miles from the team's home. Second, players earn their lifetime incomes in a relatively short time period; careers frequently last ten years or less. As a result, athletes often save or invest far larger proportions of their salaries than does the average consumer who is used for the specification of multipliers. Consequently, an adjustment has to be made in the gross figure that is used with any multiplier to compensate for the large portion of the players' salaries that is not spent in any local economy. Generally, the rule of thumb is that at least 50 percent of the players' salaries will not be spent in the team's home community. If players earn about half the revenues received by a team, and if players spend no more than one-half of their incomes in a local economy, then the figure tabulated for real growth should be reduced by one-quarter or 25 percent before the application of a multiplier.

What multiplier should be used? The Department of Commerce issues these figures for most areas of the nation. As a rule, a multiplier of 2 will be an approximate estimate of what can be used.

Economic Impact

When followed, these techniques reveal that the annual economic development impacts of a professional sports team are in the \$11 million to \$15 million range and are not the hundreds of millions of dollars often suggested or forecasted. Now you're probably thinking this is a surprisingly low figure. Is it really accurate? Well, consider the size of a professional sports team as an economic enterprise before you respond.

In 1995 if the complete major league baseball season had been played, 162 games instead of the 144 because of labor disputes, the gross revenues of just one team, the New York Yankees, would have exceeded \$100 million. The average for all baseball teams was \$56 million. The National Basketball Association's member teams had similar average gross revenues, and professional football teams have gross revenues, on average, of less than \$70 million. Businesses of this magnitude are certainly valuable and important in any economy, but as part of any economy, they are quite small. Indeed, the gross revenues of a typical state university campus in an urban area is about \$300 million or at least five times larger than the typical major league baseball team or NBA franchise. Few regard their local university as a "growth engine," capable of producing hundreds of millions of dollars of economic growth. Yet, in reality, these college campuses produce a far greater impact on their economies and are far larger businesses than professional sports teams. Sports teams are not economic growth engines, nor can they, given their size, produce large economic effects in any economy. It is therefore not

surprising that many scholars have not found significant statistical linkage between the presence of a team or the building of a new facility and economic growth. If teams are appreciated for the small recreational businesses that they are, then the size of their developmental impact on an economy is relatively easy to understand.

Job Creation And Professional Sports Teams

Given the rather small economic impact just described, you probably have guessed that professional sports teams also are small contributors to overall job growth. Within the typical professional sports team there may be as many as 60 athletes, a coaching staff of 10 and another 20 people in the front office. The presence of a team also means the creation of numerous part-time jobs at the ballpark or arena. Plus, in the area adjacent to the facility, there are or will be jobs that are created from the opening of new restaurants and retail outlets. Although a portion of these jobs will offset losses in other sections of the region (from the substitution of one form of recreation or dining for another), some new jobs will result. On balance, the presence of a team might lead to the creation of about 150 full-time jobs. As a percentage of the work force in a typical area, this will account for less than onehalf of one percent of all private sector jobs. If the public sector invests \$100,000,000 in a new stadium and arena to create roughly 200 full-time jobs, the cost of each new job is \$500,000. This would hardly be considered a prudent investment of the public's resources for job creation.

The Revenues Earned By Government

Governments can and do receive additional revenue from the economic activity created by teams and the facilities they use. These increased revenues are generated from property, sales and income taxes paid as a result of the new economic development created. However, since the new growth is likely to be quite small, something in the \$15 million range, the annual increment in tax revenues received is likely to be quite small. A portion of this money will generate income and sales taxes, but most likely the total will be less than \$500,000 given the tax rates used by most states. Some local governments also administer income and sales taxes, but funds from these taxes also will be small. The property taxes generated by new facilities also are usually modest. If the facility is owned by a government, it is exempt. In other instances, favorable exemptions are usually part of the public sector's contributions.

Related Development

Some communities that develop new ballparks or arenas are more interested in a targeted impact than broader-based economic growth. For example, both Indianapolis and Cleveland sought to revitalize their downtown areas through the construction of sports facilities. Indianapolis actually implemented and sustained an amateur and professional sports program across three decades that was designed to anchor development in its downtown area. This program included the building of Market Square Arena (the current home of the Indiana Pacers), the RCA Dome (home to the Indianapolis Colts) and Victory Field (home to the city's AAA minor league baseball franchise). Indianapolis' program included building a large downtown mall, downtown housing, several office buildings, a major theater for its symphony, a new convention center, numerous hotels, restaurants and theaters, a new zoo, a state park, a new state government office center and several museums. In addition, there was an extensive expansion of Indiana University's campus in Indianapolis (IUPUI) which also is adjacent to the downtown area. These policies and programs were implemented by three different mayors across 30 years. Cleveland's efforts, although quite substantial, were a bit more modest than the program implemented in Indianapolis. Cleveland built two large sports facilities, Jacobs Field and Gund Arena, a new theater district, two downtown shopping malls, a revitalized entertainment and restaurant area and at least two new museums. Cleveland State University also is adjacent to one edge of the downtown region. The projects in Cleveland, unlike those in Indianapolis, are distributed in a larger geographic area so as to permit more development across the coming decades if the expansion of the downtown area continues.

While it is too soon to completely evaluate the impact of Cleveland's redevelopment programs, the longer term of Indianapolis' effort permits an evaluation of a redevelopment program that is based on sports to rebuild a downtown area and stimulate an economy. Indianapolis' new downtown, defined by the numerous structures built, did replace a decaying core section with one that is vibrant. This outcome, however, did not bring substantial economic development to the city, the region or the downtown area:

In relying on sports, Indianapolis' efforts were probably not unlike Louisville's emphasis on the arts to anchor downtown development and Baltimore's emphasis on tourism and the location of the home of the Baltimore Orioles. While there were important achievements which should be attributed to Indianapolis' sports strategy, on balance, it seems fair to conclude there were no significant or substantial shifts in economic development. Simply put, the sports strategy did not achieve its objectives. In 1992, sports accounted for approximately 1.1 percent

of the private sector payroll in downtown Indianapolis and about 3.1 percent of all jobs. In addition, even if all hotel and restaurant jobs are assumed to be a direct result of sports, just 4.3 percent of the private sector payroll was produced by these parts of the private sector economy. As such, other communities' leaders should be quite cautious with regard to possible pay-offs from a sports development program.

The sports and downtown development policy in Indianapolis was part of a series of outcomes that contributed to a partial stabilization of jobs in the downtown area. Although the downtown core's share of regional employment opportunities declined, the absolute number of people working downtown remained relatively unchanged from 1980 to 1990 and above 1970 levels. While this is clearly an important achievement, a portion of the success was due to the expansion of Indiana University and the public sector and the continued growth of downtown Indianapolis' largest employer, the Lilly Corporation.

With these points in mind, the best that can be said for Indianapolis' sports strategy is that it was marginally successful in creating a small number of jobs. Attendance at sporting events did generate a number of service sector and hotel jobs. This growth did create, on an annual basis, more than 100 million new payroll dollars. The growth in service sector jobs may have been related to the relatively high proportion of attendees at sporting events in Indianapolis from outside the region.

This important outcome must be contrasted with other stark realities. The Indianapolis metropolitan area grew faster than the city in terms of new jobs created and total payroll growth. Overall, average salaries in Indianapolis declined in comparison with the salaries in other cities where Indianapolis' leadership believes they compete. Indianapolis slipped from having the second highest average salaries among these ten communities in the 1970s, to fourth or fifth depending on whether the basis of comparison is the city or the metropolitan region. In addition, the entire impact of sports, under the best of circumstances, would amount to only 1.1 percent of the Indianapolis economy.

The Intangible Benefit Of Publicity From Sports

There is no denying that the presence of sports teams creates a good deal of publicity for a city. But does this publicity, or the presence of a sports team, lead to economic development? There is no evidence presented by academicians or consultants to illustrate that the presence of a team either attracts firms or higher income individuals. Business

location firms have reported that sports teams do not influence locational choices, and numerous surveys on the value of sports teams as a factor in choosing a site for business development indicate that numerous other factors are far more important. In a study of both residential and business activity within a metropolitan area where cities competed for teams, no city was able to capture the benefits of being the home to a team:

It comes as no surprise that sports teams produce important image, civic pride and quality of life benefits for all communities in a region. There is also a very small economic impact from a team that enhances a region's economy. However, the decentralized and integrated nature of America's urban economies makes it impossible for any single city to capture a disproportionate share of these benefits regardless of their size or their tangible and intangible nature. As a result, it is very unlikely that any single city investing in sports will be able to capture a substantial portion of the benefits generated. At the regional level, however, image and quality of life benefits may create a shared investment by all cities in professional sports and be a prudent addition to the region's asset base. For any individual city, however, there is insufficient economic, quality of life or image benefits to warrant a large investment. Indeed, given the dispersion of benefits, there is an incentive for other cities in a region to encourage another community to make an investment and then become a free rider enjoying the relatively small gains without supporting the risks taken.

Subsidies And Investments

There is a good deal of money to be made from and in sports. Franchise values remain high and clearly escalate if a team is fortunate enough to play in a new arena or ballpark with luxury suites, club seating and other amenities that generate income. Players, too, are making a great deal of money from sports. Salaries continue to escalate and multimillion, multi-year contracts are now common. Although less than 20 years ago a player earning \$1 million per year was extraordinary; today, only \$100 million contracts seem to generate astonishment. Money also is being made by the mass media which continues to be interested in broadcasting more and more sporting events and news shows to a worldwide market.

Who is not making money on sports? The cities and states that have made tax money available to build arenas and ballparks for teams seem to be among the select group that is not profiting from sports and the building of new facilities. Indeed, given the profits being realized by most teams and the salaries earned by players, and the relatively

small gains accruing to local economies and governments, the tax dollars committed to build sports facilities represent a form of welfare for the rich. This welfare results from the public sector's lowering the cost of the facilities to owners and players while permitting the teams and their athletes to retain the income generated by the facilities. The sports business is robust; most participants earn a substantial return on their investments or from their labor. The communities that invest their dollars earn very little. As a result, the tax dollars do nothing more than increase the pot of money which is fought over by athletes and team owners to reduce their costs for building a stadium. Some of the most economically privileged people in America are receiving welfare and using these dollars to substantially increase their access to even higher profit and salary levels.

Welfare reform proposals for the unemployed recently have been approved by Congress; virtually every state is considering changes in policies and practices to limit welfare. It is time to extend these ideas and policies to professional sports teams and their facilities. There is no return to the public sector or a region's economy that is worth or can justify the commitment of tax dollars for building an arena or ballpark. It is time for a new contract with America that calls for the elimination of welfare to team owners and players. It also is time for cities to realize the low level of economic returns that are generated by teams and their facilities. It is time to begin treating professional sports like what they really are, the business of entertainment.

Sports is exciting. It creates profits for owners and players and those profits are robust enough to pay for the facilities the teams need and use. Given the small size of the economic gains produced when teams come to areas or when new facilities are built, the provision of tax dollars for teams and their ballparks is nothing more than a subsidy that creates higher incomes for players and more profits for owners. The myth of the economic development which comes from sports is far greater than the reality of that growth.

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WHY INVEST IN REAL ESTATE: AN ASSET ALLOCATION PERSPECTIVE

by Petros S. Sivitanides

A t the aftermath of the poor performance of real estate during the late 1980s and early 1990s, institutional investors question whether there is any justification to include real estate in their portfolios. Inflation hedging capabilities and diversification benefits have been the most commonly cited rationales for such inclusion. Within this context a relevant question is whether the diversification argument still holds. In order to answer this question, the study presented in this article uses the NCREIF data to explore the implications of historic patterns of returns.

The potential problems of the NCREIF return series, especially when used for mixed-asset portfolio allocations, have been extensively discussed in the literature. Such problems, primarily attributed to appraisal-smoothing, include downwardly biased real estate risk estimates and potential distortion of interasset correlations.1 The magnitude of such biases, however, is questionable.² Furthermore, any distortions of interasset correlations because of appraisal-smoothing may not necessarily favor real estate since they may overstate the strength of its correlations with other investment vehicles. The rationale here is that removal of the appraisal-smoothing effect may introduce more randomness in the real estate return series thereby contributing to lower correlations between the returns of real estate and other asset classes. While this article does not correct for appraisal-smoothing biases, it attempts to gain a preliminary understanding of what the up-to-date NCREIF return series implies when compared to the returns of other popular asset classes, such as stocks and bonds, for different holding periods.

The Data And Methodology

For the purpose of this analysis, annual returns for stocks, bonds and real estate were drawn from the NCREIF Property Index for the period 1978-1995. The index is set to 100 for the fourth quarter of 1977, and it is based on before-management-fee quarterly returns of individual properties held by the voting members of the National Council of Real Estate Investment Fiduciaries (NCREIF). As such, the individual properties that compose the NCREIF portfolio may change overtime either because of changes in the NCREIF membership or changes in member portfolios.

To examine the issue, historic returns are reviewed and three series of average return, risk and

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Table 1
Annual Historic Returns

Year	Stocks	Bonds	Real Estate
1978	6.60%	1.20%	16.00%
1979	18.39%	2.27%	20.78%
1980	32.41%	3.00%	18.06%
1981	-4.90%	7.32%	16.63%
1982	21.58%	31.09%	9.44%
1983	22.43%	7.99%	13.31%
1984	6.10%	15.00%	13.04%
1985	31.57%	21.33%	10.10%
1986	18.21%	15.60%	6.63%
1987	5.17%	2.30%	5.49%
1988	16.50%	7.59%	7.04%
1989	31.43%	14.24%	6.21%
1990	-3.19%	8.28%	1.47%
1991	30.55%	16.13%	-6.07%
1992	7.68%	7.58%	-4.34%
1993	9.99%	11.03%	0.57%
1994	1.33%	-3.50%	6.85%
1995	37.50%	19.24%	8.93%
Average Standard	16.08%	10.43%	8.34%
Deviation	16.83%	10.97%	7.89%

Source: NCREIF

correlation measures are derived for each of the three asset classes. The first series assumes an 18-year holding period, the second a 5-year holding period and the third a 10-year holding period. Notice that the data allow for 14 five-year periods and for 9 ten-year periods. For each period efficient frontiers are derived using the standard meanvariance model. Ten optimal portfolios, at equally spaced return intervals between the lowest and highest return portfolio, are calculated for each efficient frontier. The composition of these optimal portfolios, as it pertains to real estate allocations, is then closely examined and the ex-post strategic implications are identified.

Optimal Asset Allocations Based On The 18-Year History

The performance of the three asset classes from 1978-1995 is portrayed in Table 1. According to the information in this table, in the past 18 years stocks provided the highest average return, that is, 16.1 percent, followed by bonds with a 10.4 percent average return. Real estate provided the lowest average return, that is 8.3 percent. It is interesting to note the smooth cyclical movement of real estate returns from the high teens in the late 1970s and early 1980s, down to the lowest levels in 1991, and their gradual return back to more healthy levels by year-end 1995. This pattern reflects the slow

pace in which real estate markets adjust toward equilibrium and suggests that real estate may be more predictable than stock and bond markets whose returns do not appear to follow any pattern.

As expected, the risk levels of these three asset classes, as measured by the standard deviation of their historic returns, are inversely related to their average returns. Thus, real estate appears to be the least risky asset with a standard deviation of 7.9 percent. On the contrary, stocks are the most risky with a standard deviation of historic returns of 16.6 percent. Bonds fall in-between with an 11 percent standard deviation of historic returns.

The optimal portfolio mix depends not only on the return and risk characteristics of these assets, but also on the extent to which their performances, over time, fluctuate in a dissimilar way. Put differently, the inclusion of real estate in the optimal portfolio also depends on how its returns correlate with the returns of stocks and bonds. According to modern portfolio theory, inclusion of minimally, or even better, negatively correlated assets in a portfolio can minimize overall portfolio risk. Although portfolio expected return is equal to the weighted average of expected returns of individual assets, its variance is actually the weighted sum of the covariances of the individual assets. As such, the standard deviation of portfolio returns can be less than the weighted sum of the standard deviations of individual assets if these are not perfectly correlated.3 On the basis of this rationale, it is arguable that real estate should be part of institutional portfolios, since it has an almost zero correlation with stocks, that is 0.04, and a negative correlation with bonds, that is -0.21. The relatively high positive correlation between stocks and bonds (0.49) provides further validity to this argument.

To demonstrate this proposition, an asset allocation model including these three asset classes was optimized and the efficient frontier was derived. The latter is defined as the set of combinations of the three asset classes that provide the highest return at different levels of risk; or, vice versa, the set of portfolios that can achieve given levels of return at minimum risk. Table 2 provides the composition of ten optimal portfolios on the efficient frontier spaced at equal intervals between the lowest and highest return portfolio. As seen, real estate is included in 9 out of 10 optimal portfolios. Its percentage allocations range from a maximum 63.3 percent in the lowest risk portfolio, which would have provided a 9.1 percent return, to 10.1 percent in the second highest return portfolio, which would have provided a 15.3 percent return. Furthermore, the most efficient portfolio, that is the portfolio that provides the highest return (in excess of the risk-free rate⁴) per unit of risk is portfolio D with a 43.7 percent allocation to real estate.

Table 2
Efficient Frontier Assuming an 18-Year Holding Period

Portfolio	Portfolio Composition					
	Stocks	Bonds	Real Estate	Return	Risk	Efficiency ¹ Ratio
Α	_	36.7%	63.3%	9.07%	5.73%	0.54
В	11.2%	32.3%	56.5%	9.85%	6.04%	0.64
C	22.5%	27.3%	50.1%	10.63%	6.78%	0.68
D	33.9%	22.4%	43.7%	11.41%	7.82%	0.69
E	45.2%	17.4%	37.3%	12.19%	9.07%	0.68
F	56.6%	12.5%	31.0%	12.98%	10.45%	0.67
G	67.9%	7.5%	24.6%	13.76%	11.91%	0.65
H	79.3%	2.5%	18.2%	14.54%	13.43%	0.64
I	90.0%	_	10.1%	15.32%	14.99%	0.62
J	100.0%	_	_	16.10%	16.60%	0.61

¹Calculated as the ratio of the portfolio return minus the risk-free rate of return (assumed to be 6%) over the portfolio risk. Source: Westmark Realty Advisors

These results suggest that in the past 18 years real estate's inclusion in mixed-asset portfolios would have significantly improved their risk/return profile. It also appears that even for high return investors with minimal concerns about risk, it would be optimal to include some real estate in their portfolios. These results, however, should be viewed with some skepticism because they implicitly assume an 18-year holding period, well over the typical holding period for real estate which is 3-10 years.

Optimal Asset Allocations For Five-Year Holding Periods

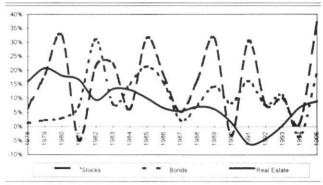
In order to explore whether modern portfolio theory provides any basis for real estate's inclusion in mixed-asset portfolios with shorter holding periods, we calculated returns, standard deviations and correlations for each of the three asset classes for 5-year intervals. Given the 18-year span of the data under consideration, it was possible to calculate such measures for 14 five-year periods. The correlations of annual returns during each of these

Table 3
Interasset Correlations Based on Five-Year Average Returns

Beginning of Period (Year-end)		Correlations			
	End of Period (Year-end)	Real Estate and Stocks	Real Estate and Bonds	Stocks and Bonds	
1977	1982	-0.01	-0.90	0.16	
1978	1983	-0.08	-0.89	0.04	
1979	1984	-0.04	-0.91	0.00	
1980	1985	-0.84	-0.89	0.53	
1981	1986	-0.27	-0.44	0.25	
1982	1987	0.22	0.27	0.61	
1983	1988	0.06	0.63	0.71	
1984	1989	0.62	0.77	0.87	
1985	1990	0.76	0.25	0.66	
1986	1991	-0.24	-0.57	0.80	
1987	1992	0.05	-0.24	0.84	
1988	1993	0.04	0.01	0.92	
1989	1994	-0.73	-0.84	0.70	
1990	1995	0.07	-0.16	0.90	

Source: Westmark Realty Advisors

Graph 1Annual Real Estate Returns vs Annual Stock and Bond Returns



Source: NCREIF

five-year periods are presented in Table 3. As this table indicates, the pattern of correlations between five-year average stock returns and five-year average real estate returns, has been very volatile ranging from -0.84 to +0.76. Similarly, the correlation coefficient between real estate and bonds ranges

from -0.91 to 0.77. Both coefficients, however, have been fluctuating around zero or significantly below it most of the time. The few occasions during which real estate is positively correlated with stock and bond returns are rather coincidental. As indicated in Graph 1, the time-path of real estate returns is quite smooth with an identifiable cyclical pattern, while the time-paths of both stocks and bonds are very volatile with no systematic comovements with real estate.

Using the estimated returns, standard deviations and correlations, 14 efficient frontiers were generated, each described again by ten optimal portfolios spaced at equal intervals between the lowest and highest return portfolio. Thus, a total of 140 optimal portfolios was derived. Table 4 summarizes how many of the ten optimal portfolios, describing each of the 14 efficient frontiers have a nonzero allocation to real estate and its minimum allocation. Also presented is the comparative risk level of the portfolio with the minimum non-zero allocation to real estate. This column expresses the risk level of this portfolio as a percent of the difference between the maximum and the minimum risk

Table 4

Real Estate Allocations in 5-Year Period Portfolios

	End of Period (Year-end)	Number of Optimal Portfolios with a Non-Zero Real Estate Allocation	Portfolio with Minimum Non-Zero Real Estate Allocation			
Beginning of Period (Year-end)			Real Estate Allocation	Portfolio Return	Comparative Risk Level ¹	
1977	1982		10	76.0%	14.5%	0%
1978	1983		9	17.3%	17.6%	80.4%
1979	1984		9	13.1%	15.3%	85.8%
1980	1985		9	8.9%	16.2%	88.4%
1981	1986		9	0.7%	19.1%	70.3%
1982	1987		9	3.7%	16.0%	85.4%
1983	1988		8	10.0%	14.0%	71.1%
1984	1989		9	11.1%	19.1%	88.2%
1985	1990		5	12.2%	9.2%	24.7%
1986	1991		4	7.2%	9.5%	21.4%
1987	1992		4	4.0%	10.4%	7.7%
1988	1993		5	5.8%	10.8%	4.3%
1989	1994		8	0.4%	7.9%	48.9%
1990	1995		7	2.9%	13.1%	60.0%
		Total	105			
		Average	8	12.4%	13.8%	52.6%

 $^{^{1}}$ This was calculated as $(R_{p}-R_{\min})/R_{\max}-R_{\min}$, where R_{p} is the risk level of the optimal portfolio with the minimum non-zero allocation to real estate, R_{\min} is the risk level of the minimum-risk optimal portfolio and R_{\max} is the risk level of the maximum-risk optimal portfolio.

Source: Westmark Realty Advisors

Table 5
Real Estate Allocations in 10-Year Period Portfolios

			Number of Optimal	Portfolio with Minimum Non-Zero Real Estate Allocation		
Beginning of Period (Year-end)	End of Period (Year-end)		Portfolios with a Non-Zero Real Estate Allocation	Real Estate Allocation	Portfolio Return	Comparative Risk Level ¹
1977	1987		9	13.6%	15.4%	81.5%
1978	1988		9	11.3%	16.2%	84.1%
1979	1989		9	3.3%	17.3%	85.7%
1980	1990		7	11.3%	12.9%	39.3%
1981	1991		7	6.1%	15.2%	43.9%
1982	1992		4	7.2%	11.5%	12.9%
1983	1993		5	4.9%	11.5%	9.9%
1984	1994		6	5.7%	10.9%	41.1%
1985	1995		5	8.9%	10.1%	30.7%
		Total	61			
		Average	7	8.0%	13.4%	47.7%

¹See note in Table 4.

Source: Westmark Realty Advisors

level characterizing each efficient frontier. The measure was calculated as follows:

Comparative Risk Level =
$$(R_p - R_{min})/(R_{max} - R_{min})$$

where,

R_p = Risk level of the portfolio with minimum non-zero real estate allocation

 R_{min} = Minimum risk level of efficient frontier

R_{max} = Maximum risk level of efficient frontier

Given the above formula, a comparative risk level of 50 percent would indicate that the risk born by the portfolio with the minimum non-zero real estate allocation would lie exactly in the middle of the risk span of the efficient frontier.

As seen in Table 4, 105 optimal portfolios, representing 74 percent of all optimal portfolios, include an allocation to real estate. Real estate shows up in at least 8 of the 10 optimal portfolios in each of the first 8 efficient frontiers. These efficient frontiers refer to five-year periods beginning at any year from 1977-1984. The comparative risk level of the optimal portfolio with the minimum non-zero real estate allocation is above the 70 percent mark in any of the 8 efficient frontiers. This suggests that even for investors with low risk aversion and high targeted returns it would be optimal to include real estate in their mixed-asset portfolios during the period 1977-1984.

During the subsequent four years, the number of optimal portfolios including real estate decreased to 5 or less. At the same time the comparative risk level of the portfolio with the minimum real estate allocation fell significantly, ranging from 4.3 percent (for the five-year period 1988-1993) to 24.7 percent (for the five-year period 1985-1989). This suggests that during those four years the inclusion of real estate in mixed-asset portfolios would be optimal only for low-risk investors. Notice, however, that, for the five-year periods beginning in 1985 and 1988, there are five portfolios with a non-zero real estate allocation. This indicates that for investors willing to accept a return equal to the midpoint of the return range, encompassed by the efficient frontier, it would still be optimal to include real estate in their mixed-asset portfolios.

Finally, the number of optimal portfolios that include real estate during the periods 1989-1994 and 1990-1995 increases to 7 and 8, respectively, while the comparative risk level of the portfolios with the minimum real estate allocation increases to 49 percent and 60 percent, respectively. These results, again, point to the appropriateness of real estate's inclusion in mixed-portfolios by investors with at least moderate risk concerns.

In Table 4, looking at the summary statistics for the 14 five-year efficient frontiers, it appears that over the past 18 years, medium-term institutional investors holding stocks and bonds would, on average, improve the return/risk profile of their portfolios and earn a 13.8 percent return at abovemoderate risk levels if they allocated 12.4 percent of their funds in equity real estate.⁶ The important conclusion here is that medium-term investors, willing to settle for the midpoint of the return range of the efficient frontier, would have included real estate in their portfolios in 12 of the 14 five-year holding periods or 86 percent of the time. Furthermore, investors with at least moderate risk concerns (roughly a 50 percent comparative risk level) would have included real estate in their mixed-asset portfolios in 10 of the 14 five-year periods, or 71 percent of the time. These statistics suggest that medium-term investors with at least moderate concerns about risk should think hard before making any decision to exclude real estate from their portfolios.

Optimal Asset Allocations For 10-Year Holding Periods

In order to obtain some strategic insights regarding the inclusion of real estate in the portfolios of institutional investors with longer holding periods, the same analysis was repeated for 10-year holding periods. Again, given the 18-year span of the data, it was possible to calculate return, risk and correlation measures for 9 ten-year periods. Table 5 summarizes how many of the ten optimal portfolios, describing each of the 9 efficient frontiers, have an allocation to real estate, its minimum non-zero allocation and the return and comparative risk level of the portfolio with the minimum real estate allocation. As indicated in Table 5, 61 optimal portfolios, representing 68 percent of all optimal portfolios, include an allocation to real estate. Real estate shows up in at least 7 of the 10 optimal portfolios in each of the 5 ten-year efficient frontiers for holding periods starting at any year within 1978-1991. The comparative risk level of the portfolios with the minimum real estate allocation in these 5 efficient frontiers, ranges from 39.3 percent to 85.7 percent with two portfolios being below and three above the moderate risk level of 50 percent.

Optimal allocations to real estate for the tenyear holding period 1982-1992 decrease significantly as it appears in only 4 optimal portfolios. The percentage of optimal portfolios including real estate during the three subsequent periods ending in 1993, 1994 and 1995, increased to 50 percent, 60 percent and 50 percent, respectively. The comparative risk level of the portfolios with the minimum real estate allocation in these 4 efficient frontiers ranges from 9.9 percent to 41.1 percent.

Looking at the summary statistics for the 9 tenyear efficient frontiers in Table 5, it appears that over the past 18 years institutional long-term investors holding stocks and bonds would, on average, improve the return/risk profile of their portfolios and earn a 13.4 percent return at moderate risk levels by allocating 8 percent of their funds in equity real estate.

In sum, the analysis of optimal portfolios for the ten-year holding periods indicates that investors willing to settle for the midpoint of the return span of the efficient frontier would include real estate in their portfolios during 8 out of the 9 periods under consideration, or 89 percent of the time. Furthermore, in 7 of these 8 periods investors would assume lower-than-moderate risks. Overall, appears that long-term risk averse investors, aiming at lower-than-moderate risk levels (representing a 30 percent comparative risk level), should have included real estate in their portfolios 7 of the 9 tenyear holding periods, or 77 percent of the time. Investors willing to assume higher-than moderate risk levels should have included real estate in their mixed-asset portfolios 33 percent of the time. The important conclusion conveyed in Table 5 is that long-term investors who are willing to accept moderate return levels on the efficient frontier, or are unwilling to tolerate more than one-third of the diversifiable risk, should think hard before excluding real estate from their portfolios.

Conclusion

The historic patterns of real estate returns, as exemplified by the NCREIF return series, provide interesting strategic insights regarding the optimal structure of mixed-asset portfolios in the past 18 years. First, both short- and long-term investors who are willing to accept moderate returns, as signified by the midpoint of the return range on the efficient frontier, should have included real estate in their portfolios at least 85 percent of the time. Second, medium-term investors, willing to tolerate as much as 50 percent of the diversifiable risk, should also have included real estate in their portfolios 71 percent of the time. Finally, long-term investors who are willing to tolerate as much as 30 percent of the diversifiable risk in favor of the prospect of higher returns, should also have included real estate in their portfolios 77 percent of the time. The major implication of these results is that analysts advocating, short- and long-term investors with moderate target returns, medium-term investors with at least moderate risk concerns and long-term investors with serious risk concerns to exclude real estate from their portfolios, should demonstrate why the next five or ten years will present circumstances which have been rare in the past 18 years.

This study has by no means exhausted the issue of real estate's role in mixed-asset portfolios. Moreover, its findings should be viewed with caution as potential problems embedded in the NCREIF return series, due to appraisal-smoothing

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biases, may have distorted the asset allocation results in favor of real estate. Further, analysis of optimal real estate allocations in mixed-asset portfolios is needed to correct for such potential biases.

NOTES

- See Geltner (1989), Geltner (1991) and Giliberto (1993). Wheaton and Torto (1989) also suggest that appraised values may have been systematically biased because of consistently erroneous income growth expectations.
- 2. Geltner (1989) argued that appraised values may understate the volatility of real estate returns using an assumed appraisal process. The extent to which this assumed appraisal process resembles the appraisal process actually practiced by the majority of appraisers has been questioned by some analysts (Wang et. al., 1992). Furthermore, Quan and Quigley (1991) point out that alternative assumptions regarding the appraisal process can result to more volatile appraisal-based returns. Finally, Webb, Miles and Guilkey (1992) present evidence indicating that estimated transactions-driven portfolio returns have approximately the same volability as appraisal-driven returns.
- 3. See Bodie, Kane and Marcus (1993).
- 4. A risk-free return of 6 percent was assumed.
- 5. Notice that the minimum allocation is a function of the number of optimal portfolios calculated. Calculation of a greater number of optimal portfolios would help identify smaller minimum allocations. The risk and return differentials between the portfolio with the smaller minimum allocation and the ones reported here would depend on the curvature of the efficient frontier. The greater the curvature the greater this difference.
- 6. This number should not be interpreted as the optimal minimum allocation to real estate. As indicated in Footnote 5, this is an artificial minimum as it strictly depends on the number of portfolios calculated per efficient frontier. Theoretically, this percentage can be driven very close to zero if an appropriately large number of optimal portfolios is calculated for each efficient frontier.

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LEGAL UPDATE

by Morton P. Fisher, Jr., CRE

A number of important legislative developments are underway which will have a dramatic and long term effect on real estate and its values and valuation. Several of the most significant legal actions, which are interest-related to The Counselors of Real Estate, are federal laws dealing with bankruptcy reform, brownfields, new lender liability protections under CERCLA, telecommunications, foreclosure, good faith and fair dealing, and the electronic age.

Bankruptcy Reform As It Relates To Real Estate

The Bankruptcy Review Commission, mandated by the 1994 amendments to the Bankruptcy Code, is expected this year to make its recommendations for changes in the bankruptcy laws related to real estate. The changes are motivated primarily by lending institutions which have suffered in time and money from the delay in foreclosure and the take back of properties secured by loans in default. As most Counselors know, the filing of bankruptcy by a borrower will result in the automatic stay of a foreclosure and other legal actions against the borrower, such as the appointment of a receiver. Another strong motivation has been the claim of shopping center landlords that retailer bankruptcies have given retailers an unfair advantage by permitting a retailer in bankruptcy to reject undesirable leases and to profit, or permit others to profit, from the assignment of desirable leases.

In December 1996, the Bankruptcy Commission held hearings in Washington, DC where the leading real estate associations participated in a panel discussion on single asset real estate bankruptcies. The panel members represented the interests of the American College of Real Estate Lawyers, the National Association of Real Estate Investment Trusts and the International Council of Shopping Centers. Although it is premature to predict the precise recommendations which will be made, it is predictable and almost certain that any recommendations will be structured to streamline, economize and speed up real estate bankruptcies. It is less clear whether the claims of secured creditors (lenders) will be any better protected from a so-called cram down.

Significant to The Counselors is that such changes, if adopted by Congress, may benefit and impact real estate. And, if certain recommendations are adopted, e.g., the debtor's ability to bring new value to the table, the services of a Counselor of Real Estate (CRE) will almost always be required.

Morton G. Fisher, Jr., CRE, of Ballard Spahr Andrews & Ingersoll, in Baltimore, Maryland, has lectured extensively on commercial leasing, real estate financing, public/private partnerships, shopping center developments and agreements with architects and contractors. Fisher has served as chair of the American Bar Association's Section of Real Property, Probate and Trust Law and he is a past president of the American College of Real Estate Lawyers.

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Brownfields

Another significant development is the ongoing passage of brownfield legislation underway by many states. Brownfields are abandoned, vacant or underutilized properties which cannot be readily recycled because they are contaminated. Brownfield programs, authorized by state law, provide incentives for the owners and potential owners to undertake voluntary action to clean up contaminated properties in return for protection under state law. Such voluntary programs will frequently include a Phase I environmental assessment and a Phase II program where warranted and remedial action, which, if approved by state authorities, will relieve the owner or potential owner, from liability through the issuance of a no action letter.

Here, too, CRE services will be needed to advise owners and potential owners of brownfields regarding the impact on valuation for real estate tax assessment purposes. Brownfields are likely to be prominent in the redevelopment of older cities. Already shopping centers and power centers are under construction in brownfield sites in Chicago and other cities.

New Lender Liability Laws

Two years after a federal court ruled that the Environmental Protection Agency's Lender Liability rules were not consistent with the Comprehensive Environmental Responsive, Compensation and Liability Act, (CERCLA), Congress legislated the same protection which had been proposed by the EPA. The act, known as the Asset Conservation Lender Liability and Deposit Insurance Protection Act of 1996 (Lender Liability Act), amends CERCLA to limit the liability of fiduciaries and lenders. Although the act does not achieve the total goal of limiting liability for owners, it is significantly beneficial to lenders. The act provides that the term "Owner or Operator," upon which rests virtually all the lender liability cases under CERCLA, "does not include a person who, without participating in the management of a vessel or facility, holds indicia of ownership primarily to protect its security interest in the vessel or facility."

And, very much like the ill-fated lender liability rule, the lender liability act defines the term "participating in management" with some degree of certainty and offers examples of actions that, taken alone, do not constitute participation and management. The act also benefits lenders who foreclose on properties. Many court decisions held that foreclosing lenders were not entitled to the security interest exemption because once they foreclose, they no longer held only "indicia of ownership." The act provides that a lender may foreclose upon, operate, release or sell its collateral and wind down the affairs of the borrower as long as the lender

intends to divest its collateral "at the earliest practicably, commercially reasonable time, on commercially reasonable terms, taking into account market conditions and legal and regulatory requirements."

Finally the Lender Liability Act lists nine separate categories or activities which do not constitute "participating in management," the problem which many lenders had difficulty with under CERCLA. The sum and substance of the act is that lenders have a great deal less to worry about when they enter into a loan on, foreclose on, or own for purposes of disposal properties which are environmentally unclean. The Act does not give lenders all that they wished, but it is certainly a very big step forward.

Laws Relating To Telecommunications

One of the lesser known laws enacted by the 1996 Congress is the Telecommunications Act of 1996. This act requires the Federal Communications Commission (FCC) to create statutory rules and regularendering unenforceable community association restrictions impairing individual homeowners' receipt of transmissions. As originally written, the regulations intended by the act would have dramatically impaired the ability of developers and lessors to place restrictions on the erection and maintenance of telecommunication devices. Of special interest to The Counselors, such regulations would have dramatically impaired the ability of developers to create aesthetically pleasing communities. They would have precluded community association boards of directors from attempting to preserve property values by enforcement of architectural restrictions which restricted antennas and other communication receiving devices.

The proposed rules under the Telecommunications Act of 1996 are under attack by many organizations as being overly liberal in permitting telecommunications devices without restrictions. It remains to be seen whether the proposed rules will be enacted. Of special interest to The Counselors is that a new cottage industry has developed where Counselors can provide advise to clients on the placement and valuation of communication devices which range in purpose from communications through satellites to everything from airliners to households. It remains to be seen whether the regulations under the act will be as liberal as currently envisioned.

The New Proposed Federal Foreclosure Law

Of all the state laws which have remained individual in character, perhaps the foreclosure laws have been especially unique. Each state has had its own laws and procedures regarding foreclosures, and they vary widely from state to state. Now, federal foreclosure laws are here, and more may be on the way. In October 1995, the House of Representatives

made a last minute amendment to HR 2491 that added a federal Non-Judicial Foreclosure Law. The Federal Foreclosure Law was an instant away from becoming law as part of last minute budget negotiations. Ultimately the provision was removed from the final budget bill. However, as a proposal, a Federal Foreclosure Law remains very much alive.

If passed in its proposed format, the Federal Foreclosure Law would preempt all state laws and provide for a fast and final private foreclosure of federal agency home mortgages and deeds of trust. The bill would apply to all federal loans, both commercial and residential, including loans held by HUD, SBA, VA and FMHA and GMNA. In short, the bill is a precursor of a Federal Foreclosure Law, which would preempt the states' laws. There are many defects in the proposed Federal Foreclosure Law. Much controversy exists regarding the need for such a law and whether a Federal Foreclosure Law would apply to all foreclosures or only so-called federal foreclosures.

Good Faith And Fair Dealing

The doctrine of good faith and fair dealing has become an established part of real estate law and contract law. It has supplanted the legal principal that two parties of relatively equal bargaining power are free, in a legal sense, to slug it out; the winner is the winner and the loser is the loser, no matter what terms they agree upon. In some respects, the doctrine is similar to the rules of boxing: no low blows, no kicking, no butting and all participants must play by the Marquis of Queensberry rules.

Whether or not this is a good idea is not the question. The point is that the doctrine of good faith and fair dealing requires the parties in a real estate transaction to deal fairly with each other, to not take unfair advantage of each other and to act reasonably in their negotiations when carrying out previously agreed upon arrangements. For example, when a lender and borrower assign a commitment, both parties are subject to the doctrine of good faith and fair dealing when negotiating the loan documents. The doctrine has obvious appreciation in situations where a landlord's consent is sought for approval of an assignment or a subletting.

Although the doctrine of good faith and fair dealing imposes an obligation of reasonableness upon the parties, it is left open for the courts to decide, on a case by case basis, whether the parties played on a level playing field and whether they were fair and reasonable with each other. In the previous doctrine of buyer beware, the borrower was at the mercy of the lender as was the developer on the anchor tenant. Today, no matter what side you are on, you need to be reasonable and you need to negotiate in good faith.

The Electronic Age Raises Ethical Dilemmas

In the electronic age, virtually every agreement produced is probably susceptible to being discovered in some manner. Is it fair and ethical for a law firm which represents developers to pass from one developer to another the specific economic and other lease terms relevant to the same national tenant? The electronic age presents numerous major legal issues for lawyers and nonlawyers regarding what information can be exchanged and the safeguards which must be imposed to obstruct or impede the ability of an outsider to obtain information.

Then there is the situation regarding car phone usage. There are already several cases where law firms and attorneys have been held responsible for revealing confidential information which was picked up from a car phone and the provider of information failed to identify that a car phone was in use. In an age where Dick Tracy's wrist watch telephones and faxes have become a reality, the law of confidentiality raises difficult and pressing issues. The Counselors could play a major role in working to establish the rules and ethics that deal with such issues.

Proposed Changes To The Forms Of The American Institute Of Architects (AIA)

The most prevalent of the architect and contractor agreements are the forms produced by the AIA. These forms have changed approximately every 10 years. The 1997 revisions to the forms are close to being finalized, and they will have a major impact on the following areas: the financial information furnished to the contractor by the owner; the contractor's responsibilities to review design drawing and to advise of discrepancy; responsibility for jobsite safety; targeted dispute resolution and consolidation and joiner in arbitration; a mutual waiver by the owner and contractor of consequential damages; payment for changes in the work; responsibility for hazardous conditions and materials; the correction of work after substantial completion; termination by the owner for convenience; and provisions intended to avoid inequities to subcontractors which result from the application of the bankruptcy laws. For anyone who deals with the AIA forms, the changes will be dramatic and will impact the real estate industry.

Conclusion

Significant changes are taking place within the real estate industry with more to come. Changes could impact the types of services provided by CREs along with presenting new challenges. In many instances, change could result in greater demand by clients on the services, skills, experience, knowledge, professionalism and networking capabilities for which CREs are recognized worldwide.

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CRE PERSPECTIVE

Fore Thought

by Franklin Hannoch, Jr., CRE

In December 1994, the Appellate Division of the Superior Court of New Jersey affirmed an earlier opinion and judgment of the Tax Court of New Jersey regarding the value of a private memberowned country club for tax assessment purposes. The complaint was filed by the taxpaver following a municipal-wide revaluation, in which the club's real estate tax burden was increased threefold. The judgment of the Tax Court that was affirmed on appeal reduced the new assessment by approximately 45 percent, but its finding of facts sets a troubling precedent. The affirmation was based largely on case law that holds: "Findings by a trial court are ordinarily sustained on appeal when supported by adequate, substantial and credible evidence." The Appellate Court also recognized that the Tax Court is "accorded special expertise," and if dissatisfied with the proofs, can arrive at "its own opinion of true value"..."Providing it is based upon evidence in the record."

Highest And Best Use

What is troubling about this case is the finding in regard to highest and best use. Typically, for tax assessment purposes, property is valued as it is used by the owner. Here, the court held that the highest and best use was for residential subdivision into 79 one-acre lots. The judge opined that country club use was not maximally productive, and cited the text book criteria of physically possible, legally permissible, financially feasible and, as mentioned above, maximally productive.

The witness for the country club found that the highest and best use was as a public golf course, but conceded that the acreage could be divided into 79 one-acre lots at a much lower per lot value than the defendant's \$500,000 to \$725,000. On appeal the parties agreed that the land could accommodate 79 lots and the Appellate Court in its opinion said, "The trial judge found the highest and best use of the property was for conversion to single-family residential development,

and this determination is not challenged on appeal. The parties stipulated that 79 one-acre housing sites could be developed on the property."

What country club can meet this test and retain its recreational use? To carry this view to an illogical conclusion, all country clubs should be valued for tax purposes as residential subdivisions thereby making it totally uneconomic for them to survive. The defendant's expert concluded that the land alone was worth \$18,450,000, or \$233,500 per raw lot. Even though the trial court found less, this is equal to an annual tax of \$516,600. Assuming a 250 person membership, the annual land tax per member alone is nearly \$2,100.

Open Space Benefit

The Court's view is far too short-sighted. If the subject, in existence for over 80 years, had been developed as a residential subdivision, it would diminish the value of the surrounding property that not only enjoys the open space amenity but also the opportunity to affiliate. This concept is not unlike the transference of value from anchor department stores to mall tenants in a super regional shopping center. Not only does the elimination of the club impact negatively on surrounding property, but the proposed use would tax the municipal budget for additional services and possible capital expenditures such as a new school.

Rather than tax country clubs out of existence, municipalities should zone them to preclude other than recreational use or in some other fashion acquire the development rights in order to prevent alternate use. Open space is desirable. Governments go to great expense to acquire it. Country clubs provide it free of charge.

There is another aspect to this issue that appears not to have been addressed by highly competent valuation witnesses, learned counsel, the Tax Court judge in his bench opinion or the Appellate Court in its review and affirmation. The

Franklin Hannoch Jr., CRE, MAI, a second generation member of both The Appraisal Institute and The Counselors of Real Estate, has taken an active role in the leadership of both organizations. As chairman of Hannoch Appraisal Company in Livingston, New Jersey, he has specialized in litigation and litigation support of all kinds over a 45-year career. Hannoch has been a witness in a number of matters that make up the real estate case law in New Jersey.

country club in question covers some 184-acres, the bulk of which, including 16-1/2 holes of the course, are located in one municipality. The remaining acres are situated in an adjacent community and contain the prestigious club house, pro shop, lockers, tennis courts, swimming pool and utility buildings for course maintenance. Only the assessment on the golf course portion was challenged, because it was there that tax lightning struck due to revaluation.

If the highest and best use of the 158-acres devoted to golf course was for residential subdivision, the value or equalized assessment value of the golf course improvements in the adjoining taxing district should have been deducted from the value of the land in the so-called higher use. In other words, the parties to this litigation did not recognize that they had made a "fractional appraisal."* ("An appraisal of a unit in itself without regard to the effect of its separation from the whole," said the late Byrl N. Boyce, CRE, in Real Estate Appraisal Terminology.) It must be assumed that the club house, etc., are of no value if the golf course becomes a residential subdivision. For example, a one-family house on the most valuable commercial property in town is worthless when the land is put to its potential.

In the country club situation, when the land is subdivided into residential home sites, the specialized improvements have no value because the golf course they served is no longer there for the serving. You can't have it both ways, even on a hypothetical change of use. The appraiser has the option of giving no value to the improvements or deducting their worth from the land value and adding them in. In either case, the value is the same-only the allocation is different. The judge in this case, at the very least, should have deducted the full value of the improvements, even if located in another community, from his land value estimate as a subdivision, otherwise he has valued them twice.

In conclusion, it appears that when evaluating the highest and best use of a country club from the standpoint of maximal productivity, for tax assessment purposes, consideration should be given to the negative impact on surrounding property and municipal budgets in hypothetically changing the use. In this case the tax-payer had the opportunity to "take a mulligan" in an appeal to the higher court but, unfortunately, was unable to improve its lie.

*Author's Note: The existing use of improved property ceases to become the highest and best use when the value of the land alone exceeds the value of the land and improvements combined. At this point, it becomes economic to demolish the improvements and redevelop in a higher, better and more productive legal use.

POST SCRIPT: Since this article was written, an appeal was taken to the New Jersey Supreme Court, but certification was denied. Only the 1992 case was decided and appealed without success—but, according to New Jersey law, the original reduction in assessment was binding on the municipality for two additional years based upon the Freeze Act. The community challenged the applicability of the Freeze, left the original assessment intact, and that appeal is still pending. Meanwhile, the taxpayer has appeals pending in the Tax Court for subsequent years, so there still are opportunities to get on the right course.

New Technology

My Computer And Me

Bowen H. "Buzz" McCoy, CRE

The profound impact of the computer on our daily lives is probably more pervasive than we know. That little gate which is always either open or closed, or an "0" or a "1", has the potential of converting our psyches into binary instruments. Everything becomes overly simplistic: either "go" or "no-go", "yes" or "no". There is little room for ambiguity or paradox.

Yet, we may have overestimated the computer's impact on society's productivity. One of my friends, an economic historian, writes of long waves of productivity from innovation, with true productivity gains occurring at the end of the cycle. He likens the computer to the electric motor, saying that a quarter century after its invention, the electric motor was utilized in the manufacturing process to shed illumination on steam and water driven shaft and pulley systems of production. The true harnessing of electrical power in the factory system did not take hold for 50-75 years.

Likewise, the impact of the computer on productivity is a long time coming. In the service sector, in fact, the computer may have become anti-productive. As new hardware is developed with 35 percent annual improvements in processing efficiency, new software must be designed. By the time someone has mastered the current configuration, it becomes outmoded. The endless process of change continues. There is hardly a steady state when one can master the equipment and its countless applications.

I have no doubt that early on in the millennium, we will arrive at more standardized systems for processing information, and the true productivity gains, which occur at the end of a long wave productivity cycle, will be achieved. Control of the information base will afford dominant power in a business segment. Businesses which spend the capital and the effort to master this change cycle will be in control.

But why wait for the millennium? Indeed, some businesses already are experiencing these productivity gains, e.g., the air transport reservations systems. Therefore, I share with you the following story hoping that you, too, will be one of those dominant powers.

I've Always Been Online

I had always considered myself to be somewhat computer literate. My initial exposure to the computer began more than 35 years ago when I started my banking career at Morgan Stanley. There were 16 of us in the corporate finance department. We spent most of our time operating Friden's electro-mechanical calculators in the machine room, running present value investment calculations for oil pipelines and hydro-electric power schemes and even England's then proposed Channel Tunnel. It would take us days to perform a simple 30-year set of pro forma income statements, cash flows and balance sheets. The air was heavy, without air conditioning (and we smoked) and filled with the clatter of a dozen machines chugging through endless long division. Out of that inefficient and low pay cacophony came future CEOs of Morgan Stanley, First Boston, Smith Barney, U.S. Trust and the chief investment officer of the State of New Jersey. It also produced enough complaints that sooneven though we did not yet merit private telephones - permission was granted to hire a consultant and commence developing simple programs (later termed proprietary software) which we would

run in the evenings at the IBM service center in mid-town Manhattan. Later, when we were advising on Singer's acquisition of the Friden business, all the pro forma ratios were calculated by the client on its computer. I was summoned up to the old Partners' Room, handed the computer printout and told to check each computer calculation electroon an mechanical Friden. So much for productivity.

Those early years of modeling project finance on the computer served Morgan Stanley in good stead. A decade later, when I was responsible for the real estate unit, we did, in fact, have proprietary software on in-house mainframes which we utilized to calculate investment returns and model real estate assets and projects. In that regard, we always thought we had an edge on our competition. Over-spending on computers and proprietary software became a strategic direction for the firm, and it resulted in keeping the edge on such esoteric items as geometry trading and multiple currency clearing. The multiple currency clearing software provided the firm with a significant strategic edge when the seat became available on the Tokyo stock exchange.

My continuing exposure to the computer in the early years came by osmosis from my thenspouse who worked as a systems engineer for IBM. She was part of that powerful customer support system which IBM developed and ascended upon. I recall her story of the mail order customer who

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wanted to computerize accounts receivable for the first time. The elderly lady who was in charge kept the records handwritten on yellow ledger paper locked in her desk drawer. My wife dropped by several afternoons a week to visit with her and drink tea (with a lemon drop added). After several weeks the lady finally trusted my wife enough to unlock her drawer and give her the records, another breakthrough for innovation. A great benefit from the IBM experience was that our three children became facile on the computer while they were in primary school. Two daughters ended up on Ph.D. tracks, and one is a professor of physical chemistry at Ohio State.

Throughout my 27- plus years at Morgan Stanley, I was beautifully supported by an efficient administrative staff, including an increasingly powerful computer group. And finally, at the end, I had a terminal on my desk which used continually for data retrieval-stock quotes and news stories online. I recall talking on the telephone with the CEO of a communications company and reading him a broad tape announcement regarding his business, which he didn't know was out.

On My Own

It was in 1990, when I retired from Morgan Stanley and became an independent real estate and business counselor, that I realized how extremely dependent I was on having clerical support service. The terminal on my desk was not indicative of computer literacy. I had never become facile on the computer beyond retrieval usage.

After considerable deliberation, I opted for a single office in a high tech executive services building which provided mail processing, telephone answering with voice mail and word processing with desktop publishing services. The cost for all this, including the office space and parking, was less

than engaging a good full time executive assistant. I had rapidly downsized to an office staff of only one, me: and I was going to be totally dependent upon others, whom I did not know, for important functions of my business existence. Only they had the needed technological knowledge and skill. It was a rather vulnerable position. I could almost see the buzzards circling.

I had mastered voice mail. In fact, I lived by it, wished I had thought of it first, and actually was disdainful of messages which only asked for a call back without including the reason for the call. My typing skills were excellent. I still used my old electric Royal at home for certain tasks. (I have come to regard typing, along with public speaking, as one of the high school courses which best prepared me for life.) I could always call on that skill if the word processing function at the office became tedious or inconsistent. Typing skills would serve me well if I ever decided I had to get on the computer myself; but, this was not the time in my life to welcome another major project. In addition to starting a new business, I was committed to a challenging array of volunteering, teaching and professional tasks. Besides, I could afford to hire as much computer support as I needed. I would make it work.

Happy Birthday Baby!

In the first part of 1994 my wife went with me to an Urban Land Institute meeting in Scottsdale where we attended a lecture by Dr. Jennifer James, a behavioral psychologist from San Jose State, on the importance of staying in touch with the rapidly changing technological world. The audience appeared to be mostly 50-ish. Dr. James said we probably would live another quarter century, and if we did not have the will to master the computer, we would be left hopelessly behind, missing out on a rich and most exciting phase of our professional life. Six months later, on the morning of my 57th birthday, my wife gave me a beautifully wrapped box of computer disks and informed me about the day and hour the remainder of the gift would be delivered. She had retained a consultant to design the package which included the newest, fastest CPU, fax, laser printer, CD player, software and, most propitious, nine hours of one-on-one instruction from a computer coach whose office was just down the hall from mine. The buzzards had landed. Technology had caught up with me. I was being forced to master the computer. For one who had successfully avoided such intimacy, it was not a happy birthday.

Being naturally compulsive and having a relatively light summer schedule, I inhaled deeply and set about mastering my new gift. I bought a dozen manuals on Windows 3.1, Word, Excel, Power Point, the Internet, Compuserve, etc. I sadly and quickly came to the conclusion that for me the best manuals were *Windows*, *Excel* and *Internet for Dummies*. I scheduled my private instruction for three hours at a clip, two weeks apart, so during the in-between time, I could master what I had learned.

My instructor, Fleichelle, started at the beginning, granting me no credit for my independent study. Even then, all did not go smoothly. My sense of exploration and adventure got me in big time trouble. I attempted to master mouse-clicking and file master simultaneously and blew out all the installed software by clicking and dragging much of it into the netherworld of computerland. This cost me an additional six hours of re-installation time. I had vowed that I would never allow the PC to turn me into a typist. My speeches and articles would continue to go down the hall for desktop publishing. Despite this vow, I attempted to compose an article. After several afternoons of

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fruitlessly chasing consummate prose around and about the page and then losing it in the hinterlands of computerdom, I went home, poured a glass of Jack Daniels, and glared at my spouse. She is a fine woman, but she certainly misread me on this one. I wondered what kind of return policy she had negotiated.

But, Fleichelle did not give up so easily, and I am extremely grateful. Gradually, I began to experience some victories. The file I had saved the day before was still there the next morning. The words on the screen settled down. I was beginning to have some fun. Indeed, occasionally I was being chastised for making furtive clicking sounds on my computer keys while talking on the telephone. I graduated my nine-hour course with honors and reluctantly bid my instructor farewell feeling comforted that she was available to me by phone if I had any problems.

By the end of summer, I signed up for Compuserve. In the beginning, I tried out some of the forums; simple ones like the topic of religion. When I broadcast my desire to communicate with someone on the great German theologian, Dietrich Bonhoeffer, I learned it was not always so easy to talk in forums. Someone obviously did not want to discuss Bonhoeffer when I did, and I was "flamed" off the religion forum. Now I depend on Compuserve for news, weather, E-mail and stock quote updates throughout the day.

A bit later I attempted to get on the Internet. As recently as two years ago, this was still an adventure. Neither Compuserve nor AOL had Internet access. I had to go through a local supplier where access was controlled by a heavily accented gentleman who appeared to be completely self-assured and thoroughly antibusiness. After he had canceled my account several times, I was

overjoyed to see Compuserve had developed direct Internet access. Now I can easily access such organizations as Morgan Stanley, Harvard Business School, The Wall Street Journal, the SEC filings, the Urban Land Institute and The Counselors of Real Estate. Everyday new names are being added to this list.

Now, two years later, I compose all my speeches, reports and articles, as well as lists, messages, travel schedules, and the like, on my computer. I can prepare slides on Power Point, compose a document on Word and then Win Fax it anywhere in the world. I get special satisfaction Win Faxing my cigar man in Hong Kong. I am truly operating in the 24-hour global marketplace.

E-mail is an absolute delight. People who before would never write, fax me, nor seldom call, respond to an E-mail within the hour. My address book is growing by leaps and bounds. Sons and daughters of friends have found me lurking in forums and E-mailed their surprise and congratulations. I E-mail my daughter at Ohio State almost every day. I can honestly say E-mail has brought us even closer together. When our pastor traveled to a church-sponsored hospital in Malawi, we E-mailed through his lap-top from each location that had a phone line.

My favorite CD-ROM is "Monty Python." I enjoy "Bible Soft," which gives me a bible literacy I hardly deserve. After a trydealing day of with crustaceous secretaries and floating margins, it's a joy to turn to computer solitaire. Nothing is so fulfilling as the animated cards arching over the screen when I win the game. One of my manuals actually has instructions for cheating at computer solitaire.

I only allow myself to commence my browse of the Internet around 4:30 pm when I am in my office. It turns out that I am a Bookmark junkie. I have a couple of 100 exotic and fascinating sites logged into my Bookmark. I have visited them only briefly, to date, but they are all there for when I have the time. It is compelling to have at one's fingertips the latest Stanford women's basketball scores, the program for next year's New Orleans Jazz Festival, the Los Angeles freeway speed table, a prayer for the day and Time magazine. It is exciting to see the current state of flux in all this and to imagine how it will all evolve, especially with bona fide credit card security on the net.

Conclusion

So why do I tell this story? For me, it is my celebration that after 35 years, I am finally "online." I am constantly amazed that the computer is such an incredibly powerful tool. It has made me vastly more efficient in some tasks, but I am also totally nonproductive when I take a spin on the Internet. The stretch of learning I've experienced has been personally rewarding. I am proud to be among the 2 percent of those age 50 or above who operate on "the Net." My self esteem, having suffered innumerable lows, has regained its hopeful equilibrium.

For us professionals in the real estate industry, I am more convinced than ever we will see incredible productivity gains from all this over the next 10-15 years. Massive databases of rentals, costs, comparables and the like will be developed. As usual, the firms which make the investment and master the productivity cycle will control the business.

As for all of us aging sole proprietors, with a quarter century to go, I can only echo the good advice which I received. Jennifer James says we can no longer leverage off others. Now is the time for us to master the computer. If we continue to procrastinate, we will be left hopelessly far behind.

Experts & Consultants Guide to CRE Services

Service Categories

Acquisitions/Dispositions Appraisal & Valuation

General Acquisitions/Dispositions Environmental

Asset Management Capital Market Analysis International

Acquisitions/Dispositions
Corporate Outsourcing
Cost Management Strategies
General
In Russia
Latin American
Corporate Services
Market Analysis

Litigation Consulting Strategy

General

Expert Witness
Market Analysis
Pension Funds
Portfolio Analysis
Property Management
Property Tax Services

Real Estate

General
Commercial/Retail
Development
Office Buildings
Office/Industrial Parks
Research & Development
Residential-Multi-family
Special Purpose Properties

REITS Other

Bankruptcy
Commercial Real Estate
Finance
Dispute Resolution &
Problem Workouts
Fiduciary Breach
Expert Testimony
Golf Properties
Healthcare Facilities
Historic Restoration
Income Tax Services
Real Estate Securities
Strategic Competitor

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