

Real Estate Market Update, Outlook, and a Behavioral Look at the Technological Revolution

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Commentary

In our Commentary in the second quarter issue, we concentrated our future-oriented comments on the potential impact of technological advances on the real estate industry. We noted that technological advances (including e-commerce and e-business, which have received the most attention) have the potential to revolutionize business, consumer, and governmental behavior, ultimately rippling back to the real estate market. Our discussion of technology was intended to set a framework that real estate professionals can use to help develop their own opinion on the likely impact of technology on real estate markets and values. Over the past several months, we have been inundated by a wide range of papers on the ultimate impact of technology on real estate. Unfortunately, rather than helping to clarify the issue, many of these discussions have either been too superficial to help quantify the potential impacts, or have been too extreme to provide a reference point for assessing the most likely impacts of technological innovation. Thus, rather than turning our attention to other macro trends, we will present a behavioral framework that will build on the foundation in the previous issue to help readers quantify and anticipate the impacts of the technological revolution on real estate.

This column follows the same basic structure of our previous commentaries, providing an analysis of the key trends that impact the valuation scene and presenting the outlook for the next six to twelve months. We begin with a review of the overall economic market, sifting through the election year rhetoric to develop a likely scenario for the near- to intermediate-term. We then delve more deeply into technological trends and our behavioral approach. We review the current institutional real estate market and its position in the cycle, covering the sup-

ply/demand and investment/performance aspects of the equation. Finally, we present our outlook for the real estate market over the intermediate term.

The Economic Environment

Economic Growth

The U.S. economy continues to show signs of a slowdown, as evidenced by the third consecutive monthly decline in the Conference Board's index of leading economic indicators in July. The labor market, one of the driving forces behind the strong economy and inflationary pressures, continues to lose steam. This loss in momentum is reflected in a decline in payrolls and a slight increase in unemployment. Indeed, during August, non-farm employment growth actually fell, led by the end of employment of temporary U.S. Census workers, a major strike in the communications industry, and declines in manufacturing employment. Similarly, the build-up in inventory levels and the downward revisions to business investment signal a softening economy. In the manufacturing sector, economic activity declined in August after eighteen months of sustained growth. Of particular note is the fact that the higher interest rates that the federal government orchestrated translated to slower growth in the interest-rate-sensitive manufacturing and construction sectors. On the other hand, technology spending continued to increase, especially in business-related hardware sales. In the PC industry, price cuts, oversupply, rising consumer confusion over the benefits of super-hardware configurations, and concern over the frenetic pace of obsolescence has caused some consumers to step back and defer new purchases. While the economy should still continue to grow during the fourth quarter and into 2001, the pace of growth should be lower than prior rates. Thus, the soft landing for the economy should remain on track, with the Gross Domestic Product

moderating to the 3.5% to 4% level over the next 12-15 months, with some upside potential for higher near-term growth.

Inflation and Interest Rates

Evidence of the slowing economic picture for this fall came on the heels of the Fed's decision to leave interest rates alone, suggesting that the economy may be sufficiently cooling to allow the Fed to delay any further interest rate changes. Further, the surge in productivity in the second quarter pushed the annualized rate to the highest level in 17 years, removing some of the pressure to hold wages or pass rising labor costs on to consumers. On the other hand, oil remains a wild card that will be closely watched. This scrutiny was illustrated by the unexpected decline in inventory accumulation that triggered immediate price adjustments in early fall. The near-term outlook for energy prices will depend on economic conditions, weather factors, and OPEC. Outside of the energy component, price increases should be moderate and remain in line with changes in general economic conditions.

The Stock Market

During 2000, the stock market has lived up to expectations, providing a dynamic, ever-changing roller coaster ride for investors. As in the past, stock market pundits continue to line up on both sides of the boom/bust equation; the only common denominator is the promise of more swings in both directions and a repeat of various industry sectors falling in and out of favor. Some investors are turning their attention to stock picking, resigning themselves to the fact that indexed approaches will be fraught with peril as investors exhibit their finicky nature and move from one sector to another. At the overall level, P-E ratios are expected to moderate as profit margins are eroded by rising costs and expenses and the market "migrates to the mean," or converges on long-term averages, albeit at slow rates. The technology sector will continue to be interesting, especially in the consulting arena where the initial rush to market is over and businesses begin to rethink IT expenditures in light of corporate strategies and long-term goals. The bloom is off the rose in terms of many dot-com IPOs, and technology investors continue to place more emphasis on bottom-line profits.

On a mixed note for the stock market, venture capital (VC) continues to grow and should remain

a healthy catalyst to the overall market. However, in the tech sector, the VC moniker may become more synonymous with "vulture capital" over the next six to twelve months as the shake-out in technology companies continues. This situation is more than a little familiar to real estate professionals who witnessed how "vulture funds" stepped into the real estate arena in the early 90s. Indeed, many fledgling companies may feel like they landed on the set of "Survivor," and are trying to hang on while others are booted off the island of new wealth. Within the technology sector, investors are expected to continue to favor infrastructure and service providers over Websites that are content-oriented. In the current economic and political environment, election rhetoric should have a moderate impact on the stock market, with investors focusing on other market indicators and seeking more creative, targeted means of continuing to benefit from economic prosperity. However, moderating profit margins and slowing price increases in light of more global competition will place downward pressure on the domestic market, bringing it more in line with long-term trends and valuation.

Consumer Confidence

Consumer confidence slipped in August after an upward revision in July. This fluctuation echoes the lack of clear direction that has become characteristic of consumer attitudes. This situation is likely to continue as concerns over a slowing economy and higher interest rates are juxtaposed against the strong job market and election rhetoric. The good news for retailers is that the moderation in consumer confidence has not bled into purchasing plans; consumers are still expected to step up to the cash register, although not with the enthusiasm of recent years. The weakening or plateau in consumer confidence levels should translate to another promotional and even-earlier holiday season as retailers try to entice consumers to buy early before further erosion in consumer confidence takes its toll.

Retail Sales

The pattern of retail sales in 2000 has been reminiscent of the stock market, with an early burst in sales that fell off the pace in the second quarter. Higher interest rates have created a drag on sales growth, although strong consumer confidence continues to support moderate gains. Same-store chain-store sales,

especially department store sales, were moderately positive during the first half of the year. This lackluster performance was attributed to weakness in the apparel sector and a lack of any "must have" fashion leadership. These weaknesses were followed by a poor seasonal sector and a soft back-to-school season. Overall, results through the first three quarters of 2000 have placed added pressure on retailers to regain momentum going into the holidays.

Internet sales have continued to expand, with traditional and non-traditional retailers fanning the flames in search of market share. However, the sobering stock market and increased emphasis on profits has begun to back some dot-com retailers up against the wall as they seek to recover from loss-leading, market-making activities. Although some observers pointed to delivery times for the 1999 holiday season as "make or break time," this season will prove to be an even more important milestone. This importance stems from the fact that it comes on the heels of cost-cutting among dot-coms. Furthermore, this year's batch of e-consumers represents the "early adopter" wave that will be less tolerant of delays than the innovators of prior years. Thus, a relatively error-free season will be critical to the sustainability of the momentum enjoyed by the new retail channel and the overall Internet phenomenon.

E-business Trends and Their Linkage to Real Estate

Overview

As we predicted earlier this year, e-commerce has been the subject of numerous debates during 2000. Indeed, many real estate professionals, consultants, and service providers have developed formal positions on the implications of the trend and have begun to implement their response programs. On the surface, such proactive approaches might seem admirable, especially to those who are looking for some clear direction as to where this is all headed. However, to those of us who have been actively pondering the many issues that have been swirling around, it appears that the more we wait, the less we actually know. This humbling experience can be attributed to the fact that we are clearly dealing with a revolution, one that is characterized by discontinuous, abrupt discoveries and innovations. In turn, these dynamics have led to a seemingly endless series of new paradigms and response paths. For example, in the rush to get "connected," many property manag-

ers are focusing on hard wiring solutions to avoid functional obsolescence. While that is still the "state of the art," the impending explosion in wireless connectivity should be on the radar screen, especially in situations in which existing or likely tenants are not currently focused on connectivity.

The volatile market situation created by the e-business phenomenon reflects a dramatic departure from the previous evolutionary changes that we have all experienced. Under the more controlled or gradual structural changes of the past, those who developed and implemented early response programs generally emerged as industry leaders and were richly rewarded for being able to capitalize on new opportunities. Given the manageable nature of changes surrounding these evolutionary processes, action plans could be tweaked to respond to minor changes in the overall environment or knowledge base. Unfortunately, such logical, disciplined approaches break down in the face of the current technological revolution. Thus, we are faced with a difficult dilemma: either adopt technology trends when they emerge, or wait until there is clear indication as to where the trend is really headed. While this latter option might seem prudent and would be acceptable in most scenarios, in the current environment it could expose participants to a series of wipeouts that could destroy their market niche, or prevent them from capitalizing on the windfalls that might pop up along the way. Given this realization, we believe it is important to step back and lay out a behavioral model that real estate professionals and investors can use to help mold a technological response system that is customer-oriented, appropriate, and economically rewarding.

A Behavioral Framework for Assessing Technology-Induced Changes

The previous discussion might suggest that we are facing a daunting task in which it will be difficult, if not impossible, to succeed. Although navigating revolutionary change is never easy, we believe the task is neither insurmountable nor fruitless. Indeed, those who are successful in their efforts to respond to technology-induced changes and can adjust to new waves of change should be richly rewarded in terms of being able to move in the right direction. These technology adopters who stay tuned to new discoveries should also be able to avoid going too far down a dead-end path. To establish such a behavioral frame-

work, it is important to recognize how pervasive the technological revolution really is. That is, it is creating sweeping and irreversible impacts on the triad of space producers, space users, and facilitators. The challenge is to develop a dynamic framework that isolates the changes across each of the members of this triad. This framework should also help develop models that suggest how the various changes will play out in the real estate industry that is dealing with capital-intensive, long-term assets that are juxtaposed against the movement toward a more virtual continuum triggered by the technological revolution.

Although the "behavioral approach" to real estate espoused by Richard U. Ratcliff and carried on by James A. Graaskamp has been partially adopted by the industry, it has also yielded to more pragmatic, descriptive models. These applied models tend to concentrate on what happens or will happen, rather than on why certain things happen or don't happen. In the case of the technological revolution that is still being played out and market responses not yet determined, a behavioral approach is critical to the decision-making process. That is, to predict market outcomes and valuation impacts, one must identify the key parties who will be affected by technological changes, and then develop a sufficient empathy with those parties to project how they will be likely to respond to various technological changes and innovations.

The magnitude of potential changes can be grasped by reflecting on the dramatic changes in the way most of us do business as a result of the growth of the Internet. With few exceptions, most of us are working in ways that were completely unforeseen a few short years ago. More importantly, in most cases our customers, suppliers and competitors are working in new ways and have new and greater expectations. In some cases, this technologically-induced change has been hands-on, reflected in the investment in new computers, networks, Internet connections, data sources, and software. In other cases, changes have been less direct, as in the increased reliance on the greater flow of information that technology has made possible. Examples of these new waves of information range from instantaneous real-time news and weather flashes to breaking political, business, and economic stories. In addition to improved timeliness, technology has triggered a stratification of information, with cable, Internet, and satellite channels focusing on a myriad of special

topics or themes. Furthermore, the scope of inputs that we could process in making decisions has grown exponentially, creating a situation in which decision-makers can be inundated with information. To illustrate the benefits of the behavioral framework, it's useful to explore how technology can be viewed through the eyes of each member of the producer, user, and facilitator triad.

Space Producer Responses to the Technological Revolution

There are three major classes of space producers with respect to the real estate process: developers, investors, and infrastructure providers. Since each of these entities operates on a cash-solvency basis, their justified adjustment to technology can be reduced to a two-pronged approach. First, how does it impact on the profitability of various real estate-related investments? This question refers to the level of net income a particular property or portfolio can generate, the durability of that income stream, the expense ratio necessary to sustain the net income, and the residual value of the asset upon releasing, refinancing, or sale. Second, how can technology be used to improve entry-level performance? In this context, producers are interested in such benefits as greater efficiencies, improved productivity, market expansion of product and capital sources, the generation of new business lines, and the sustainability of particular income/value propositions.

Space User Responses to the Technological Revolution

One of the distinguishing characteristics of real estate that sets it apart as a unique asset class is its diversity of users and uses that cuts across a wide range of property sectors, space users, and financial structures. In the absence of some theoretical framework or decision model, this diversity can be overwhelming, especially when confronting such broad questions as the impacts of technological change on real estate demand. A behavioral approach is particularly appropriate in this type of inquiry. Under such a model, one begins with the identification of probable space users for a particular asset. Once the "most probable user" is identified, one can attempt to develop sufficient empathy with that user class to determine how technology will likely impact real estate consumption. Several property-specific examples illustrate this behavioral approach:

- **Office Sector.** A number of key products of the technological revolution that are impacting on the behavior of space users in the office sector are noteworthy. First, tenants are seeking flexible space to enable them to adjust to changing needs. Second, locational preferences are shifting as companies seek sites that best satisfy the collective logistical needs, both in terms of customers and suppliers, as well as in terms of employees. Third, more attention is being placed on the quality of space, with companies realizing that real estate can be used to increase productivity, enhance employee morale, and contribute to the efficiency of the overall enterprise. More enlightened companies are beginning to realize that in a scarce labor market, especially for knowledgeable workers, space can become an important component in the recruiting and retention of employees. Fourth, connectivity is becoming a key factor for many tenants. This takes two forms: speed as measured in terms of access to high-speed transactions, and stability or reliability as measured in terms of availability of alternative channels to ensure continuity of service. Fifth, technology is supporting the creation of more “back office” operations in cheaper space, including international options. Finally, technology is helping companies move away from the cookie-cutter, one-size-fits-all approach to offices, seeking to adjust spatial standards to the needs of functional areas.
- **Industrial/Warehouse.** A wide range of space users are encompassed in the industrial/warehouse sector, ranging from heavy industrial manufacturers to high-end R&D users. This breadth complicates development of a technology-assessment program. Fortunately, many of the technology-induced innovations that are receiving attention (e.g., automated warehousing, product tracking, production modeling, and direct order-processing) have been on the scene for a number of years. Thus, to some extent, this sector will undergo a number of technology-induced changes that are more evolutionary than revolutionary. That is, independent of the new e-business models, many industrial users have already increased the use of automation, improved fulfillment processes, and enhanced supply chain management models. To stay on top of such trends and actually get ahead of them, attention should be paid to the more innovative users of space and movers of goods. Such users include the hybrid “bricks and clicks” companies that are changing warehouse utilization by moving from cross-docking of pallets to cross-docking of individual goods and direct shipping to consumers. Another source of insight can be gleaned from the shipping and logistics sectors, where locational preferences of some users are shifting. For example, many space users in time-critical shipping have shifted to locations that offer improved airport accessibility, introduced systems to track shipments on a real-time basis, and introduced hub-and-spoke distribution models. This latter trend provides an opportunity to explore how a behavioral approach can give some insights that can be extended to other user groups. For example, with respect to home delivery of grocery goods, some companies have opted for massive distribution centers on the outskirts of major cities. While this might have some scale economies, the viability is questionable in congested urban markets where a more appropriate choice might be a distribution model that is built on more dispersed outlets. In this environment, technology can clearly impact in site selection models and required design features (e.g., super-flat floors). It will also translate to preference for more flexible leases and greater tenant mobility.
- **Retail.** A lot of mistakes were made early in quantifying the impact of e-commerce on retail. Fortunately for established chains, it is becoming clear that hybrid operations that combine the advantages of “clicks” with the infrastructure and distribution of “bricks” can create a formidable response to technologically induced changes. Within the stores themselves, technology has introduced a number of innovations, ranging from self-checkout via scanning systems to virtual expansion of product lines beyond those that physically fit within the walls of the retail outlet. On another front, revamped buying and distribution systems are compressing the supply chain and closing the gap between the raw goods provider and the consumer. Finally, retailers are learning how to “mine” their growing body of customer data by learning how to better understand their needs, anticipate their preferences, and satisfy their appetites. Thus, ad-

vances in technology may actually turn out to be a friend of retailers and malls. However, this rosy outlook will not materialize unless retailers, developers, and suppliers make the appropriate adjustments, address emerging issues and aggressively exploit opportunities.

- **Apartment.** The demographic profile of renters in many markets that are attracting or pursuing technology-related job growth suggests that this property type could be one of the most significantly impacted by the technological revolution. Indeed, for the past 15 to 18 months, some of the more proactive apartment managers have been promoting "smart apartments," with multiple Internet connections, digital controls, electronic security, and a myriad of other technological enhancements. Similarly, these owners realize that the stability of Internet, phone and electrical power is becoming a critical issue to some technology-oriented tenants. For many of them, downtime is not just an inconvenience, but a risk that imposes on their productivity and threatens their livelihoods in the 24/7 world in which they live and work. In addition, some markets see locational preferences of tenants shifting to respond to employment, entertainment, and retail trends that have all been impacted by technology. Within the apartment unit itself, some tenants are seeking to upsize to provide a home/office space that can accommodate the need and/or desire to work at home or surf the net. Some apartment communities are beginning to knock off some of the innovations in the hotel sector, setting up business centers and Internet cafes to replace the day care centers from the past wave of demographic change. In addition, in response to a more mobile work force associated with an Internet economy, some projects are adjusting their mix of furnished apartments and services to accommodate temporary tenants, while others are building more flexibility in lease terms and re-vamping the tenant referral and mobility systems. Given the rate of change in tenant demand, some of the larger, more professionally managed apartment managers are turning their attention to their tenants, seeking to "mine" their knowledge base. These managers are seeking insights that will allow them to anticipate

changes and new trends among their own clientele that will be lost on those who must rely on secondary data. As in most other property types, the bottom line of these trends in the apartment sector lies in the ability to determine how to respond to technology. At the same time, these responses should be adjusted to tenant demands, since many segments will not directly respond to many technological changes. Clearly, no one approach will serve all apartments.

Market Facilitator Responses to the Technological Revolution

Due to the unique nature of the real estate asset class and the durable nature of property, the market is supported by a range of "facilitators" who operate within or across the various life-cycle stages of an investment. These stages include planning, production or acquisition, management or operation, and disposition or repositioning. Within each stage, a number of functional experts are involved in the process, as exemplified by the planning stage, which involves support from such experts as planners, market researchers, feasibility analysts, appraisers, environmental consultants, engineers, architects, lawyers, and cost estimators. Similarly, contractors, lenders, inspectors, project supervisors, property managers, asset managers, brokers, leasing agents, accountants, and a myriad of other professionals are necessary to support real estate investments throughout the complete life cycle. Within each of these professions, technology is triggering a wave of changes in processes and "best practices." To function effectively in this environment, one must understand the potential contribution of technology in order to determine what can and should be done to adequately support real estate decision-making.

In the real estate industry, as in many other industries, technological advances and greater market sophistication are triggering a rise in client expectations in the level of professional services provided. These rising expectations are occurring on a number of levels. First, customers are demanding better service support that addresses current issues and incorporates a vision of the future. Second, customers are looking for quick response systems with real-time information flows. Third, customers expect to see the benefits of greater efficiency, seeking services that provide a higher value proposition than in the past. Finally, customers want to be treated as strategic

partners. As such, they expect more awareness of their particular situation and seek services that are "customized," but depend on relatively seamless feedback.

Aside from changing the traditional relationship between customers and service providers, the technological revolution is also creating a growing demand for new classes of real estate-related advice and decision support. For example, the now obvious need for greater connectivity in offices and the continual emergence of new technologies suggests that owners should look at building risers and high-tech controls as critical components of value. Rather than treating them lightly or ignoring them, these potential profit centers should be viewed as revenue generators. At a minimum, they should be approached from a risk-management perspective to avoid vesting them in the hands of third-party providers who could hold tenants or a building owner hostage, undercutting the net income and eroding value. Over a short period, the market will reflect an expectation of a certain level of connectivity as a basic tenant right and there will be no tolerance for substandard or expensive service. This is illustrated by the use of elevators; no prudent owner would turn over operation to a third party who could charge a toll for what is essentially a basic service. In the case of connectivity, this could be especially damaging in a soft market where an owner who outsourced control placed themselves at a disadvantage in bidding for tenants. Ideally, existing professionals will develop the skill sets to offer such advice, and appraisers, analysts, and investors will factor such variables into cash flows. However, failure to understand such technology-induced issues could open the door for a new range of service providers. One can envision a situation in which these new voices garner attention by operating as "riser advisors" who become instant heroes by cautioning owners not to "blow their stack," but to retain control and use connectivity as a competitive advantage.

Real Estate and Capital Markets

Real Estate Capital Markets

During the first three quarters of 2000, the real estate capital markets have been stable to positive. This overall healthy picture resulted from a combination of strong investor interest, solid demand fundamentals, and generally moderate additions to supply. During the balance of the year and into 2001, in

the absence of any major unanticipated shocks to the system, we believe these general conditions will continue to hold. However, there will be some additional moderating of both investor demand and overall real estate market conditions. This softening will translate to a slight downward trend in real estate returns as the market continues to migrate toward more sustainable long-term levels.

- **Private Equity Market.** The private real estate market was active during the first half of 2000 and is expected to remain vibrant over the next six to twelve months. The interest in core investing will continue to develop, although investors who have begun to receive capital distributions from the first waves of opportunistic investing made in the mid-90s will demand above-market returns. To satisfy this demand and capture proceeds for new investments, portfolio managers and advisors will continue to seek out new ideas and opportunities, with development and redevelopment receiving the bulk of attention. On the other hand, the "hot" money that was drawn to real estate on the basis of sheer performance from sources that do not view real estate as a unique asset class will turn away from the domestic market. As we projected, institutional returns trended downward in the first half of 2000. This situation is unlikely to change, although returns will still hold above long-term averages over the near- to intermediate-term. The good news for the real estate industry is that once the U.S. equity market corrects and/or begins to migrate down to more "reasonable" levels, investors who approach real estate as an asset class are expected to increase their relative allocations. That is, despite a moderate softening in expected performance, risk-adjusted total returns will remain significantly above the threshold required to support institutional asset allocations to domestic real estate.
- **Public Equity Market.** In the first half of 2000, Real Estate Investment Trust (REIT) returns were relatively strong, outperforming the major equity indices. This pattern continued during the summer, although the market cooled off in August and returned some of its gains. Within the REIT industry, the strongest performance group among companies clustered into quintiles on the basis of market cap was the second

quintile, while the top six companies that comprised the top quintile lagged in average returns. Among the property sectors, lodging and resorts experienced the highest returns, although it should be noted that the sector was rebounding from a very disappointing decline in 1999. In the major food groups, industrial/office led the pack, followed by residential, diversified, and retail. Within the retail sector, regional mall REITs experienced the greatest swing in performance, racking up the highest total returns. This correction was attributable to a more balanced view among investors and a growing recognition that Internet retailing and traditional retailing can co-exist. The office and industrial sectors were neck-and-neck with the highest total returns, reflecting the strong economy and increased demand related to dot-com tenants and the overall repositioning of economic activity on the heels of the e-business revolution. The apartment sector had above-average returns in the first half of 2000, attributable to a combination of higher mobility of households triggered by new job opportunities and higher interest rates that placed ownership at a relative disadvantage in terms of tenure choice. These factors also combined to allow the apartment sector to record the highest gains in Funds From Operations (FFO), and enable the sector to continue to beat the index as it did throughout 1999. Looking ahead, the public real estate sector is expected to remain a solid play overall, as stable real estate market fundamentals become more attractive relative to the much more dynamic, and volatile, equity market. The REIT Modernization Act that will kick in on January 1, 2001 should also help boost the industry as long as REITs use the liberalization to create taxable subsidiaries that complement and diversify business lines as well as create synergies and enhance customer service. The reduction of the required payout ratio from 95% to 90% will also help the industry to provide access to additional capital and reduce dependencies on the broader market.

- **Commercial Mortgage Market.** During 2000, the commercial mortgage market unfolded as expected, with sources and uses of capital fairly well-balanced. The year began with a modest

decline in commercial mortgage rates, although volume did not pick up as expected since borrowers were under little pressure to refinance and many anticipated even lower rates. On the commercial mortgage-backed securities (CMBS) front, the inverted yield curve in which short-term rates were higher than long-term rates, coupled with volatile spreads, skewed investors toward shorter-term offerings or floating rates. In this environment, both loan originations and new securities issuances occurred at a modest pace. In the second quarter, commercial rates trended upward, creating more uncertainty, widening spreads, and dampening loan demand. On the other hand, CMBS activity increased, with rising investor interest in the lower trenches helping create greater liquidity in the sector. During the summer, spreads came down in response to limited demand. In general, originators continued to favor shorter-term loans, creating a shortage of longer-term notes. After a slow August, mortgage activity is expected to pick up, both for whole loans and CMBS investments. Looking forward, the relaxing of the constraint on pension fund investing in higher-risk mortgage-backed securities under ERISA amendments is expected to increase liquidity and further stimulate the market. When coupled with a relatively healthy spatial market, the CMBS market is expected to continue to gain momentum, with volume picking up over the recent decline. Moving into 2001, the commercial mortgage market should continue to sail on calm seas, with demand and supply in relative balance and risk exposures remaining in the moderate range.

- **Foreign Investment.** Over the next twelve to eighteen months, one of the basic macroeconomic principles—migration to the mean—should begin to play out on the global frontier. Basically, this principle implies that in the absence of compelling structural forces or sustainable changes in competitive advantage, markets that outperform other markets will tend to migrate back to the averages. Certainly, the U.S. economy and the U.S. stock market have outperformed the averages, both relative to other countries and relative to long-term historical levels. As such, some economists and a growing number of investors expect the domestic mar-

ket to cool off, especially relative to some of the other countries that have been overpowered by the U.S. market. If this trend occurs, or if the market begins to discount its potential, some foreign investors could begin to rethink U.S. real estate investment strategies. However, for many investors, several factors mitigate this potential impact. First, most active foreign investors are long-term players, seeking solid core-like returns rather than hoping to tap into shorter-term opportunistic returns. Second, in many foreign countries, economic outlooks, currency issues, and the settling-in process surrounding the Euro cloud domestic prospects. Finally, although returns are softening, the low probability of a major downside exposure bolsters risk-adjusted returns for U.S. real estate investment.

With respect to U.S. investor allocations to global real estate, we expect demand to continue to be moderate to positive. In particular, the first-wave of investors who have already committed to global programs will step back and look at actual performance. These experiences will be closely watched by those who were intrigued by global marketing efforts, but weren't willing or able to test the waters. On a positive note for global investing, softening prospects for the U.S. economy relative to other countries, greater transparency in global markets, and the emergence of more disciplined analytical models favor continuation of the trend. Absent some major disappointments for the first-wave investors, those who have committed to international investing should remain on track. However, even these investors will become less deferential to advisors and money managers than in the past where many of them approached the global scene from a purely opportunistic stance. Going forward, they may exert their veto powers to avoid markets and opportunities for which risks cannot be quantified to their satisfaction. This added discipline, which mirrors their approach to domestic real estate will: 1) create the demand for better global research, 2) require more empirical support to justify promised returns, 3) dictate the need for more direct access to information, and 4) lead to the creation of investment structures that establish greater accountability for advisors and other facilitators. Data vendors, analysts, and researchers are expected

to respond to this increased market sophistication by improving information flows and decision-support. An example of the development of new global information systems is presented on the Real Estate Research Center website in the Robinson College of Business at Georgia State (www.gsu.edu/lerc).

Real Estate Outlook

In terms of the overall U.S. real estate market outlook, the "steady state" plot continues to unfold, with the same characters and market drivers dominating the scene. In terms of trends, core institutional real estate investors with solid, existing assets should continue to experience total returns above long-term averages, although the cyclical spreads over long-term rates will decline. We also expect to see greater differentiation within the property sectors as marginal assets that provide pure commodity space begin to lag behind superior assets. As 2001 unwinds, this trend should become more obvious, triggering a new wave of sales activity as investors seek to cash in on realized gains and avoid further dilution in total holding-period returns.

At a national level, commercial construction activity levels in 2000 have been in line with the strong U.S. economy overall, as well as with growth in real estate demand. As with the economy, construction continued to slow during the third quarter after a significant decline in July. As of mid-year, the annualized rates of public, residential, and non-residential construction were revised downward, due in part to higher interest rates. In the future, construction activity will pick up moderately as new capital flows to the sector. In particular, we expect to see a number of new development funds as advisors and managers seek higher returns to satisfy the aggressive hurdle rates set by some investors. However, at the same time, we expect investors to be more selective and to resist the lure of pure marketing stories that do not exhibit some strategic twist or exploit some competitive advantage. Examples of such approaches that might be "bought" by investors include development activity that exploits existing relationships or entitlements, providing a competitive advantage that cannot be replicated by the broader market.

In terms of property sectors, we expect the following conditions to prevail over the near term:

- **Office Market.** The office market has remained relatively healthy throughout 2000, reflecting a

general plateau or balanced state of affairs. Both construction and absorptions trended down in the first half of 2000, resulting in only moderate changes in overall vacancy levels. Part of the decline in construction completions in the office market in early 2000 reflected the lagging effect of a decline in starts in the second half of 1998 when the public markets went into turmoil. In mid-2000, the pace of office starts picked up, although activity in the second half of the year is expected to moderate as the economy cools off. In the technology sector, the explosion of dot-com companies kept many markets on the edge of their seats and whetted the appetites of developers. However, the preference of many technology firms for facilities that made clear lifestyle statements and reflected their self-image skewed demand away from new "trophy" buildings and dampened office starts. Thus, in many technology-oriented markets and sub-markets, construction activity was focused on infill sites with renovation and rehab potential rather than new supply. This demand shift also resulted in tighter vacancy rates in downtown markets, while suburban vacancy rates were relatively unaffected. However, a significant number of technology companies were also attracted to emerging suburban locations rather than established sub-markets. In the future, the shakeout occurring in dot-coms will also refocus underwriting on creditworthiness of tenants. When combined with an overall economic slowdown, more cautious investors should help hold the supply/demand equation in relative balance. The bottom line is that the overall office sector should provide competitive returns with moderate downside risk. However, commodity space and space that cannot be economically modified to meet changing needs will lag relative to the overall market. Investor activity is expected to remain strong, with a growing number turning to higher quality investments as they implement core strategies.

• **Retail Market.** After several years of angst associated with the uncertainty caused by the e-commerce revolution, the retail sector returned to a more balanced state during 2000. Retail occupancy rates exhibited moderate improvement in many markets, attributable in part to a decline in retail starts and relatively stable but unspectacular retail sales growth. In the public domain, the

mall sector benefited the most from increased interest as it became more clear that larger facilities will continue to play an important role in the overall retail market. In a similar manner, the quick adoption of technological advances, including e-commerce, by supermarket chains will help the smaller grocery-anchored retail segment and reassure investors that they have not lost their competitive nature and will make the appropriate adjustments to survive and flourish in a more virtual world. In addition, investors are becoming more comfortable with the response of traditional retailers to the emergence of e-commerce competitors. This position was bolstered by the wake-up call the stock market gave to dot-com operators with little prospects for profits. While the shakeout in virtual competitors will continue to play out, traditional retailers are expected to pick up on the "lessons learned" and integrate economically-justified technological advances in their operations. This should further strengthen the retail market, although it will create the need for changes in store design, configurations, and locations. On the other hand, moderating retail sales growth associated with the cooling-off of the economy will place additional downside risk on the sector. This risk will be especially pronounced for facilities that do not, or cannot, satisfy the spatial needs of a leaner, more responsive, more efficient retail delivery system. Institutional investors are expected to approach retail investments in a guarded manner, although the days of redlining the sector or under-allocating for it should be past. However, the success of retail/entertainment facilities will be closely watched by investors and analysts, especially on the heels of recent turmoil among theater chains struggling with excess capacity and weak balance sheets.

• **Industrial/Warehouse Market.** The strong economy and changing production and distribution models set the stage for balanced market fundamentals during the first half of 2000. Indeed, at a national level, industrial vacancy rates declined to a three-year low, benefiting from solid demand and moderate additions to supply. In general, warehouse construction levels picked up in early 2000, responding to balanced supply and increased demand. On the industrial front, construction declined in mid-2000, but was still above the depressed rates for 1999. Although the

economy is experiencing a soft landing, and economic growth should moderate, the overall demand picture for industrial space continues to look attractive as the impact of the e-commerce revolution on the industrial market becomes clearer. Despite lingering concerns over more supply-chain issues, institutional investor demand in the sector is expected to result in even higher allocations compared to other property types. This renewed interest will be predicated on the ability to come to a better understanding of the demand of drivers, and to translate that insight into strategic investment and management plans.

- **Apartment Market.** Although the overall economy began to slow in mid-2000, the demand for new housing showed few signs of abating. In terms of tenure choice, households began to adjust their housing choices to respond to changing economic conditions and rising interest rates. In the closely-watched housing sector, these changes were quickly translated to the supply side, helping maintain market balance. For example, during mid-2000, single-family completions trended downward, matching the decline in starts and reflecting higher rates and lower affordability levels. On an overall level, multifamily completions also declined modestly. Going forward, strong demand and balanced market conditions should lead to increased construction activity in the sector. This relatively balanced outlook will continue to pique investor interest, both on the public and private side of the equation. In this environment, the apartment sector is expected to continue to provide competitive returns. Vacancy rates should hold steady, and rental increases should outpace inflation. However it should be noted that tenant demand would become even more differentiated, reflecting a greater diversity in households, work patterns, and lifestyles. Apartment investors and managers who can understand this diversity and appropriately segment the market should be able to develop strategic plans that enable them to outperform the broader market.

Conclusion

Looking forward to 2001, the near-term outlook for the commercial real estate market is generally positive. However, the recent modest downward trend in returns experienced across most property sectors should continue, although rates should hold above long-term levels. At the same time, further maturing of the asset class life-cycle stage should also set the stage for a greater spread in performance across property sectors and among individual investments. Thus, to respond to changing competition and supply and demand drivers, real estate investors should place even more emphasis on real estate fundamentals. This approach should take a strong "behavioral" orientation, to help understand how the demand, supply, and investment segments for various real estate facilities or services will respond to changing economic and market conditions, as well as the technological revolution. In this mature stage of the cycle, a firm grasp of market fundamentals and strategic planning will be critical to the success of investment portfolios. The good news is that, despite advances in data availability, the inherent inefficiency in the largely private real estate market continues to make it possible to beat the market and achieve above-par returns.

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