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Real Estate, Economics and Technology: Architects of the Future World

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Commentary

In our previous Commentary, we turned our focus outside of the asset class, looking at a number of "externalities" that have a significant impact on the real estate market. In addition to macroeconomic factors, we noted the greater convergence between the real estate and capital markets that occurred during the 90s was having a pronounced impact on the overall functioning of the real estate market. Since this trend was continuing, we argued that professionals should keep a close eye on both markets, looking for leading and lagging indicators that will ultimately spill over into the real estate market. In our exploration of other externalities that bear watching, we identified several major trends that were having a material impact on the real estate market. These trends included: globalization, consolidation, securitization and technological innovation. We concluded that real estate appraisers and other professionals should be aware of these externalities-and other emerging trends-since they will continue to have a significant effect on the real estate market. In this issue, we will concentrate our attention on the latter trend, technology, which has the potential to revolutionize the business, consumer, and governmental sectors. Ultimately, these changes will ripple back to the real estate market. Our discussion of technology will help set a framework that appraisers can use to help develop their own position on the impact of technology on real estate markets.

This column is organized into several components. First, we will review the overall economic market, exploring the current conditions and looking for signs as to what the outlook will be over the next 6–12 months. Second, we will explore the ongoing technological revolution, using the moniker of *e-business* over the more common *e-commerce* label. We believe that the *e*-business label is much broader and more accurately describes the scope of the technological revolution that will affect space users, space producers, infrastructure providers and market facilitators. Third, we will review the institutional real estate market, exploring both the supply and demand side of the equation. Finally, we will present our outlook for the real estate market over the intermediate term.

The Economic Environment Economic Growth

As expected, the U.S. economy entered 2000 on a strong note, riding the wave of economic prosperity that has characterized the domestic economy throughout its record-winning streak. When talking about the U.S. economy, the term "bubble" keeps cropping up, even working its way into the *Economic* Report of the President. While the economy and the stock market demonstrate some of the symptoms of a bubble that has overexpanded, there is little evidence that we are actually in one in the classic sense of the term. However, certain sectors do appear to be overinflated, and subject to some risk of bursting or at least showing more stretch marks than in the past several years. Oil remains the major wildcard in the economic outlook, with energy prices expected to continue to move up. The real question in the near term will be the weather. An early and mild spring would alleviate some of the temporary shortages, a harsh spring would exacerbate the shortage. The supply side should actually pick up in mid-year as some producers break ranks, taking some of the pressure off the economy.

It's important to remember that this is an election year, and we can expect a lot of rhetoric about tax reforms and new initiatives. As usual, we can discount much of what comes out of the candidates. However, several issues might receive some action:

the marriage penalty tax, the social security earnings test, and preferred earnings for educational savings to help prepare the labor force for the new economy. In terms of growth prospects for the U.S. economy, the outlook is generally positive. Economic conditions remained strong going into the second half of 1999 and GDP growth is expected to pick up steam moving back into the 4% range. In reality, the economy exceeded expectations in the 4th quarter, led by solid economic fundamentals, moderate Fed rate increases, strong consumer confidence, and a non-recurring Y2K-induced surge in spending. In 2000, the GDP growth rate should decline moderately to a more sustainable level, but will still push the 4% threshold. There are few indications of a recession, with more upside risk than downside.

Inflation/Interest Rates

During the first half of 1999, inflationary pressures continued to build on several fronts, creating upward pressure on prices. As expected, the Fed showed little hesitancy to step in and preempt inflation last year, and has punctuated that fact in early 2000. The Fed has also made it clear that it will act again at the slightest provocation, with most assuming two more increases in interest rates by mid-year before the Fed retires into the stands to watch the election. Interest rates should continue to increase moderately in the near term and then remain relatively stable to moderately higher. Thus, inflation is expected to remain in check over the near term. To date, the labor market has not had the inflationary effect some feared, due in part to greater productivity and changing participation rates. However, the labor market remains a concern, especially in markets and sectors dependent on "knowledge workers" who are in a particularly tight market.

On the real estate front, rising interest rates should continue to spill over to the mortgage market, triggering a moderate rise in residential and commercial rates. This increase should temper demand, although the consumer wealth effect will continue to propel the residential market. Similarly, the strong economy and corporate growth will continue to stimulate the demand for new commercial development, although the pace will be tempered modestly due to rising costs of capital. Despite some increases on the institutional front, the weighted cost of capital (i.e., debt and equity) might actually come down, as investors back off their high equity yield requirements, moving down the risk frontier to more corelike investments. The Treasury is expected to be a buyer in early 2000, preferring to retire longer-term securities, thus shortening the duration of outstanding issues and setting the stage for more fluctuations in the bond market.

Stock Market

One of the key questions that investors have struggled with over the past several years has been whether the stock market will finally "correct" or whether it will continue to defy gravity and sustain its upward trend. Last fall, we noted that predicting the market would only get more difficult as the market continues to baffle traditional thinking. Since that time, however, a traditional explanation has caught some attention. This "traditional" argument is based on learning theory extended to market risk. That is, the modern investor-both those in the market and the "shoulda-beens" who stayed on the sidelines-has simply learned that their traditional perception of risk in the stock market has been overstated. This argument is bolstered by the fact that since the early 90s, the stock market has actually outperformed bonds pushing 9% real returns. At the same time, they have also had lower volatility while the bond market has become less stable. With respect to the stock market, the apparent revision of the rules continues to befuddle prognosticators. However, it is expected that there will be winners and losers, with the high fliers continuing to soar until the ripples spread across the in-crowd, forcing attention to safer, more traditional players. In the meantime, investors will continue to barbell their portfolios, betting on the high flyers, building up cash positions as a hedge, and eschewing much of the rest. As such, the more mature companies and the broad indexes will be under pressure, rendering the Dow's 10,000 barrier vulnerable. The technology sectorespecially the high flyers with less dependence on borrowed capital and a growth story-will be immune to such pressure. However, investors will be quick to retreat to "old economy" stocks if momentum appears to shift away from technology. The end result will be similar to the NCAA's March madness. Unfortunately, investors won't be able to call timeouts to revise their game plans as it gets down to the wire as they can on the court. Thus, throughout 2000 there will be a number of lead changes between "old" and "new" economy stocks as investors pounce on the apparent "winner."

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When viewed through "real estator's eyes," recent history in the REIT market might give some insight into the future of the stock market. As many are aware, after their re-birth in the mid-90s, REITs burst on the scene as growth stocks, gobbling up real estate at accretive rates and growing at record rates. It should also be noted that much of this phenomenon was attributable to serendipitous market timing. That is, many of the major players who went public had been stuck in the trough of the market with little or no access to capital to carry them through. These players did a masterful job of getting out ahead of the train, recapitalizing their holdings, and jumping into the market with newfound capital. With limited competition, they were able to grow at phenomenal rates, with almost all deals accretive to earnings as a result of high yields and the low cost of capital. As the market recovery played out and competition came into the sector, "accretive" was harder to find. At this point, REITs began to try to reposition themselves as "income" stocks. As might be expected, yield-driven, hot capital sources had little interest in income, especially with the overall equity market providing such high returns. A similar scenario may play out in the broader market, forcing investors to revisit their asset allocations. This is already occurring to an extent, as investors are losing patience over negative earning dot-coms, and are seeking at least the prospects of earnings.

Consumer Confidence

Toward the end of 1999, consumers seemed fearless, bouncing back from a slight hesitation in October to catapult the Consumer Confidence Index to record levels. Despite the Fed, this record was shattered in January, with an increase in consumers' feelings about their present situation and, more importantly, their expectations. This exuberance caught some off-guard, but shows little signs of abating. To us, it's almost like the "Who Wants to be a Millionaire?" TV series has trickled over to consumers who, like many, may have the cart before the horse. In reality, however, consumers do have a lot going for them on the wealth side, and are expected to continue to allocate a significant portion of their windfall to the consumption side of the equation. We expect consumer confidence to continue strong during 2000, although gains should moderate and the level might well plateau.

Retail Sales

In early fall, we noted that strong consumer confidence, low inflation, low but slightly rising interest rates, and rising concern over Y2K should further bolster retail sales translate to strong year-end sales. We also noted that there may be a let-down in retail sales in early 2000 as consumers pause to catch their breath. The scenario went pretty much as planned, although consumer spending at year-end outpaced most predictions with the three-month annualized rate coming in over 14%. Despite the slow-down in January, the fundamentals are favorable for strong retail sales throughout the year. Certainly, the record levels of consumer confidence give little indication of any retrenchment in sales. Even the auto sector, with the exception of scattered slowdowns in the gas-guzzling SUV segment, should do well with manufacturers doing their best to pique the interest of consumers. Political rhetoric will have little fertile ground on the consumer front, with candidates expected to try to ride the wave and reassure consumers that the good times will continue under their regimes. Although consumers continue to ignore the savings side of their balance sheets, there is little to suggest that this situation will change over the near term. Thus, despite the impact of rising interest rates, the continued build-up of consumer debt, and a slowing of the wealth effect, retail sales should continue to be healthy as the economy perks along.

Emerging Industry Trends: E-Business Overview

During 1999 two technology terms rose in infamy: Y2K and e-commerce. Both of these terms promised to have a dramatic impact on the U.S. economy. Indeed, to listen to some, the Y2K bug threatened to undermine the very roots of the U.S. economy, while e-commerce signaled the demise of traditional bricks and mortar retail. As we settle into the new millennium, the Y2K crisis has passed. Interestingly, those who invested heavily in preparing for it, as well as those who largely ignored it, have both seemed to survive. However, the e-commerce movement has proven to be much more enduring than Y2K, and has shown little signs of burning out. Indeed, it has become clear that the label itself does not adequately capture the real essence of the technologically-driven changes. Thus, the term e-business has sprung up as a broader category that enfolds e-commerce, as well as the ancillary business,

education, and cultural areas that are undergoing a technological revolution. We recognize the importance of this technology-related trend and the need to provide it with an easily discernable label. However, we also believe that over the next 3 to 5 years if not sooner—the *e* prefix will be dropped from all words, including *e-business*. Rather than tacking on other prefixes and/or suffixes to signify some dimension of the trend, it will be subsumed in all we do. Thus, in the future when we talk about business, real estate and other professions, the *e* will be integrated into the various disciplines. In the meantime, we will use the term *e-business* to cover the broad arena of technology-induced changes.

Technology and Real Estate

Although no one knows how far the e-business and technological revolutions will go and how they will play out, it is clear that they will trigger a number of changes. This in turn will have significant value implications for commercial real estate, changing the nature, level and stability of income streams currently built into discounted cash flow models. Although the real estate market will still continue to focus on multi-period cash flow analysis, until the market "declares itself," it is premature to begin to make adjustments to current valuation models. The exception may be in the retail and industrial sectors, where the threat of e-business wipeouts have increased perceived risks and have placed upward pressure on required yields. However, once the cloud begins to lift, or gives appearances of lifting, the market reaction will be swift. In this environment of uncertainty, it is important for appraisers acting in both valuation or consulting capacities, to have a framework for tracking technologically induced changes (e.g., hardware, software and information/ data). While one could be somewhat sanguine and conclude that the impact of technology impact will be confined to the retail (e-commerce) and industrial (logistics and distribution) sectors, in reality the changes will ripple across all property types, markets and service providers.

Technology: Consolidation, Globalization and Securitization

Before we discuss the impacts of technological change on the real estate sectors, it is useful to note how they interact with the major industry trends we discussed in the last issue.

- Consolidation. With respect to consolidation, technology has been a facilitator of change. With respect to its driving influence, technological advances and their impact on ability to exploit economies of scale have led to some of the consolidations that have rippled across industries and businesses. At the same time, the higher front-end and support costs associated with technology have forced some mergers to provide access to capital and/or infrastructure necessary to compete in the new business world. In terms of facilitating change, technological advances have made it possible to integrate consolidated business operations into a cohesive whole. This support ranges from improved communication support to enhanced management tools.
- Globalization. On the global front, technological advances have been one of the key facilitating forces that make worldwide operations possible. Unlike the past where long distances and dramatically different time zones made it difficult to operate globally, technology has added a virtual dimension that has reduced many of the logistical problems. With respect to communications, e-mail and discussion threads have made it possible to create asynchronous environments that all but eliminate telephone tag and have the added benefit of archiving conversations, creating an audit trail for projects and issues. Some global companies go even further, creating 24-hour environments that exploit time zones to turnkey projects on a fast track basis. With respect to information, technology has opened up a number of data sources that make it possible to capture a basic level of local insight to complement a global vision.
- Securitization. With respect to the trend toward securitization, the technological revolution impacts on a number of fronts. In terms of information flows, the Internet and other sources of information make is possible to track public companies via wire searches, news releases and articles, as well as to get SEC filings, all without cost. Most REITs have also set up their own websites, providing a controlled environment of information flows to investors and the broader market. A number of services are springing up to make such information easily accessible (see the Georgia State Real Estate Research Center

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website at www.gsu.edu/rerc). In addition to information flows, the technological revolution is spilling over into the various property sectors and tenants, creating secondary impacts on REITs by affecting the functionality and market value of underlying assets.

Technology: Real Estate Vendors and Service Providers

The impact of the technological revolution on the real estate industry will be more pronounced than on many other industries. This is because the underlying real estate asset base is durable, capital intensive, and fixed in location, while the needs of space users are for more flexible lease deals and the appetites of capital providers are much more fluid and malleable. Going forward, this potential disconnect between supply and demand will create the need for enhanced information, greater efficiencies, and more strategic professional services. Ideally, professionals will develop the skill sets to offer such advice and appraisers will factor such variables into cash flows. However, the failure to understand such technologically-induced issues could open the door for a new range of service providers.

Technology and the Property Sectors

As suggested, the impacts of technology on the real estate industry will be pervasive, cutting across services, markets and sectors. Although history is still being written, real estate professionals must begin to discount future impacts in current valuation and decision models. To provide some direction to those efforts, it is useful to briefly review how technology may affect the various property sectors and identify some of the key issues.

• Retail. Of all the basic property types, retail was the first to fall under the technology cloud. Early in the game, it looked like the new wave of retail.coms would take over, with clicks making bricks functionally and economically obsolescent. This threat was amplified by the initial response of many retailers, which was one of denial, or the belief that Internet shopping would be no more significant than catalogs had been in the past. After taking it on the chin for a bit, the "bricks" side of the business responded, ramping up Websites and entering the e-commerce fray. Thus, 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, addressing issues and exploiting opportunities.

- Industrial. The technological revolution also promises to revolutionize industrial space, especially warehouses that have attracted institutional investors. Clearly, the industrial sector is undergoing dramatic change, both in response to direct technological innovations in the warehouse, as well as to secondary changes triggered by new business-to-business (B2B) and businessto-consumer (B2C) models. To stay on top of these trends, attention should be paid to the more innovative users of space and movers of goods. However, it should be noted that not all industrial space must be technology-driven; substantial parts of the market will continue to concentrate on down and dirty, low cost storage. To identify such opportunities, attention will have to be paid to location, function and market roles.
- Offices. Several years ago, the promise of technology led to predictions that there would be a material decline in the demand for office space, placing a ceiling on the recovery of the sector. This argument was based in part on the assumption that virtual officing, office hotelling, and home officing would become the norm. In addition, it was assumed that changing logistical preferences and technology-related design requirements would render much of the existing stock functionally obsolescent. While some of these trends have emerged, the end result has been nowhere near what the doomsayers predicted. Indeed, the demand for office space has continued to increase, due in large part to the strong economy, especially the technology-related sector.
- Apartments. In the early stages of the technology revolution, little attention was paid to its impact on the apartment sector, with many assuming that a multifunction switch hung on an existing phone line would satisfy tenants' needs for connectivity. It soon became clear that knowledge workers and households in general would begin to adjust their housing preferences and demands to respond to technological opportunities. In hindsight, this trend should have

been anticipated, since the demographic profile of apartment residents makes them the epitome of the knowledge worker. Thus, the market should anticipate their demand for technologyenabled living and their desire for instant gratification of these and other perceived needs

• Hotels. The hotel sector came under early fire from technophobes who argued that technology would supplant the need for travel, with video conferencing and other innovations dampening the need for face-to-face contact. Furthermore, technology promised to connect businesses to businesses, and businesses to customers in such a manner that personal sales would become a thing of the past. While some of these trends have emerged, they have not had the dire consequences that were projected. Indeed, many players in the hotel sector have been able to get ahead of the technology curve, developing offensive programs to turn threats into opportunities rather than sitting back in a defensive posture.

Real Estate And Capital Markets Real Estate Capital Markets

In this commentary, we have focused a lot of our attention on the impact of technology on real estate. We believe this in-depth discussion within our financial views commentary is warranted by the pervasive, but as yet unknown, impacts that technology will have on real estate values. Despite this ambiguity, real estate professionals must begin to link technological changes to property markets. This caveat is based on an extension of some of our research that suggests that we may need new models to accurately project real estate values, that we are undergoing a regime switch in which the individual drivers and their interactive effects may be changing. However, it is still important to stay linked with the overall real estate market. In the balance of this article, we will step back and provide a brief overview of the real estate and capital markets. We will begin with the real estate capital markets and conclude with the property sectors.

In general, we believe that the real estate capital markets will be healthy during 2000, benefiting from continued investor interest, strong demand fundamentals, and moderate supply. More specifically:

• Private Equity Market. The private real estate market was very active through year-end 1999, a trend that we expect to continue in 2000.

Although investors will still be intrigued by total returns, core investing will become the dominant theme for many institutional players. This interest has already manifested itself, as National Council of Real Estate Investment Fiduciaries (NCREIF) returns continued to fall over 5% in 1999, although still above long-term averages of slightly over 11%. Interestingly, the performance of all sectors converged in the 11-12% range, with the exception of retail that continued to lag but was actually up over 1998. The balanced U.S. market will continue to attract offshore capital, with most investors seeking established properties with the prospects for solid, but unspectacular, returns. In terms of domestic capital flowing offshore, we expect that more conservative players will remain on the sidelines, waiting to see how the early players fair. Opportunistic investors will continue to look for offshore investment activities and will maintain their aggressive style. Back home, they will continue to seek out more exotic opportunities and will have a close eye on their public counterparts, looking for opportunities to swoop in at below net asset values.

• Public Equity Market. The public real estate equity market continued to struggle in late 1999 with the National Association of Real Estate Investment Trusts (NAREIT) Index reporting negative returns for the year. This disappointing performance was even more frustrating for public market proponents since it continued to lag the private real estate market and the broader stock market. In terms of sectors, apartments led the pack, joined by the industrial and office sectors, with positive returns for the year. On the other hand, the losers included specialty, health care, lodging, and retail. In January, the composite index was off from the short-lived December "rally," but still on the positive side. During 2000, REITs should benefit from stable real estate market fundamentals and a strong economy. The REIT Modernization Act that will kick in on January 1, 2001 should boost second half REIT performance. The most important feature of the act is the creation of taxable REIT subsidiaries that will allow REITs to diversify business lines. These changes should also allow REITs to capture the leakage of business to third parties by allowing them to offer

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more complete services to tenants. The reduction of the required payout ratio from 95% to 90% will also help the sector, providing access to much needed capital and providing some insulation from pressure on current earnings.

• Commercial Mortgage Market. The moderate increase in mortgage rates in 1999 helped dampen new construction activity, helping sustain market balance. Despite a tighter credit market, there was no shortage of funds to support the active transaction market. Indeed, the demand for mortgages did not meet the supply of funds earmarked for mortgages by institutional lenders. This situation reflects a combination of tempered demand for new loans as well as a slow refinance market, since few 10year deals that would normally mature now were written in the real estate depression in the early 90s. Despite plentiful supply, originators should continue to show restraint and maintain conservative underwriting standards. Mortgage rates should be relatively stable during 2000 with some upward pressure, although the inverted yield curve with long-term yields below shortterms confounds the situation. Confusion in rates is leading to a preference for shorter term financing, with some shifting to floating rates. Rates should continue to move up to the mid-8% range, depending on the magnitude of Fed intervention and overall economic conditions. The CMBS market bounced back somewhat in 1999, exceeding expectations in terms of volume but down substantially from the record in 1998. The market is expected to be relatively solid during 2000 although the lack of investor interest may dampen volume.

Real Estate Outlook

The overall U.S. real estate market continues to enjoy relative balance due to the combination of a strong economy and moderate construction activity. The outlook for 2000 is generally solid, although returns will continue to float back down to longterm averages. Overall construction levels in the 4th quarter were strong with a jump in December, boosted by residential and non-commercial activity that took advantage of the moderate weather conditions. In terms of property sectors, we expect the following conditions:

- Office Market. Office completions were flat in the 4th quarter, due to a decline in starts in latter 1998 when the public market began to stumble-both REIT and CMBS-and capital sources tightened up. While the overall office market will remain healthy in 2000, some markets and sectors will experience softening. Overall, new construction activity will be tempered, although the dot.coms will fuel new starts. Some investors will begin to question the credit quality of tenants, with concern rising over the risk associated with housing the new "gazelles." The suburbs should receive the bulk of new construction, with activity in the CBDs concentrating on renovations and modifications to meet renewed demand. Public/private joint initiatives, coupled with infrastructure investment should provide further catalyst to downtowns, continuing the dramatic reversal from several years ago. Office vacancy rates are flattening out but trending slightly upward, with more softening in suburbs in which pipelines got ahead of the curve. Investor activity remains strong, with many turning to higher quality investments as they implement core strategies.
- Retail Market. The traditional bricks and mortar retail sector continues to show signs of stability, in spite of all the uncertainty surrounding the sector. This situation can be attributed in part to the continuation of the bull consumer market that has offset many of the underlying capacity problems. Despite strong sales, some retailers have been forced to revisit recent initiatives, turning back to their core businesses and refocusing on unit profitability. Retail construction activity remains flat, with little impetus to new construction due to capacity issues. Uncertainty over the impact of e-commerce is also contributing to slower activity on two fronts. First, the impact of e-commerce on traditional bricks and mortar demand is unknown and hangs over the market. Second, the Internet has intercepted the creative energies of many traditional retailers as they seek to develop their own "clicks" strategy. This trend is expected to continue, as retailers begin to realize that they actually have an advantage over virtual competitors due to their infrastructure and logistical positioning. Retail vacancy rates are holding to slightly up, due more to slowing of construc-

tion than a rising of tenant demand. Institutional investors are expected to remain concerned over the prospects for the sector, adversely affecting public and private sector investment demand. One component of the retail market that will pique investor interest is the resurgent retail/ entertainment sector, especially in the context of the new urbanism movement that has gained momentum in a number of markets.

- Industrial/Warehouse Market. During the second half of 1999, the warehouse market experienced a rise in new construction activity, attributable to the combination of rising demand and moderate weather. On the other hand, industrial construction activity was relatively flat. The overall demand picture looks attractive, as companies are expected to install new distribution facilities to respond to the e-commerce revolution. The downside of this picture is a potential increase in functional and locational obsolescence of existing facilities as logistical models and distribution channels change. This uncertainty should also contribute to greater investor anxiety over the future of the warehouse sector, which could lead to an increase in yield requirements. Evidence of this concern is demonstrated by the increased rhetoric of public and private market participants attempting to put the changes in a positive light for investors. Despite rising concerns, the outlook for warehouse returns is generally positive, as institutional investors increase allocations to the sector. Investor interest in some of the new super-warehouse formats will be guarded, as investors focus on core, mainstream investments that have a proven track record. However, investors will focus attention on "smart facilities" that can facilitate greater inventory turnover and address the need for fulfillment solutions that enhance businessto-consumer linkages. Overall design preferences will be for greater flexibility, as well as for shallow cross-dock depths, wiring conduits adequate to carry the latest technologies, adequate truck access and ramps, and other features to accommodate new distribution models. Locational preferences will be for facilities that are well linked to transportation corridors, including a growing interest in airports, ports and intermodal transfer points.
- Apartment Market. Housing construction starts continued to increase in early 2000, rising to over 1.775 million units at a seasonally adjusted rate, although rising mortgage rates dampened the single family sector. Despite the prospects for rising rates, favorable demographics, increasing incomes and the wealth effect should lead to growing demand. The multifamily sector should benefit from rising interest rates, although construction activity should moderate potential gains. Vacancy rates should trend slightly upward, although rental increases will continue to outpace inflation. Tenant demand will be increasingly differentiated, due to greater diversity in households, work patterns and life styles. Concern over quality of life and a rising aversion to commuting will favor in-fill locations and selected suburban nodes. However, this shift will be slower than expected, creating some short-term imbalances in markets in which developers jumped on the emerging trend too early. Similarly, the elderly housing sector will bear close watching as consumers begin to exert their collective voice by selecting preferred formats and locations from among the increasing number of options. The maturing of this sector should be particularly interesting, as the diversity among the elderly becomes clearer. Overall, the multifamily housing market should continue to be healthy for institutional investors, although private market returns will continue to move down to historical averages.

Conclusion

The near-term outlook for the economy, real estate capital markets, and the various property sectors is generally positive. Although each of these dimensions has some downside risk, few observers are predicting any major trauma for the real estate asset class. Despite this rather sanguine picture, a lot is going on behind the scenes that bears watching by real estate investors. One of the key challenges that could disrupt the picture, or at least distort some of the sectors of the market, is the e-business revolution. Although there is a tremendous degree of uncertainty surrounding the impact of the revolution, it is clear that it will trigger a number of fundamental changes in the way we work and the way we live. While the seeds of change are just being planted, we are all on

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notice that they will have ripple effects on the real estate market. These effects will range from changing demand drivers that impact on the respective property types, to changing processes that impact on how the market operates. In this environment, it is imperative that real estate professionals develop proactive risk management systems to ensure that rewards are commensurate with risks. This caveat is especially true since they are operating in an asset class with a long-term, capital intensive foundation that, in many respects, is the antithesis of a virtual world that some envision as the future reality. James R. DeLisle, PhD, is director of the Real Estate Research Center at Georgia State University, Atlanta. In addition to his experience within the academic community, he has worked on the industry side of the real estate business. Dr. DeLisle has been a guest speaker at numerous industry conferences and has had his work published in various journals. He is also the president-elect of the American Real Estate Society. He received his BBA in real estate, MS in market research, and PhD in real estate and urban land economics from the University of Wisconsin.