The Forces Changing Real Estate Forever: Five Years Later

The real estate industry—

what changed

and what didn't.

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FIVE YEARS AGO I wrote "The Forces Changing Real Estate Forever" (*WRER,* Spring 1997). That paper summarized my views on the future of commercial real estate markets, views that I had formulated over twelve years as an observer of the real estate industry. The reception given this paper was both surprising and rewarding. Surprising, because I felt that I was saying nothing particularly radical, but rather describing the economics that had long existed in most other capital-intensive industries. Rewarding, because the paper became part of strategic decisions being made in real time by leading real estate companies. This paper coined the now-ubiquitous phrase “real estate is a capital-intensive industry.”

WHAT I SAID AND DIDN’T SAY

It is useful to summarize what I said and did not say in “The Forces Changing Real Estate Forever.” I argued that economic forces were changing the structure of the real estate industry and that there was no going back. Back to what? At that time many industry leaders felt that real estate would eventually return to an environment of 95 percent to 110 percent non-recourse debt financing, thus enabling highly fragmented ownership. Also, if such debt financing, long the industry’s lifeblood, returned for speculative development projects, real estate entrepreneurs could once again achieve wealth through development, regardless of economic value.

I also suggested a number of outcomes implied by the experiences of other capital-intensive industries: real estate was in the fifth year of an evolutionary transformation that would take twenty to thirty years to complete; real estate was not uniquely local in nature since *all* businesses are local; relatively modest cost advantages are important in every industry, including real estate, and being larger could provide significant competitive cost advantages; equity is an important component of appropriately capitalizing long-term assets such as real estate; the ownership and operation of “commodity” properties would be dominated by large publicly traded companies that would be able to most effectively access the large pools of capital required for ownership of sizeable pools of real estate; lower debt levels and lower payout ratios would increasingly characterize publicly traded real estate companies. I also suggested that development required a skill and risk profile different from the operation and ownership of stabilized properties, so public real estate companies would not be major developers. I also wrote that information flows would notably improve as the industry became increasingly influenced by large publicly traded companies, reducing—though not eliminating—the volatility of real estate cycles. Finally, once the real estate industry had experienced a significant movement towards publicly traded companies, I speculated, it would not return to the fragmented, privately dominated industry of the past.

Subsequent to the publication of “The Forces Changing Real Estate Forever,” people attributed to me statements that I did not make, either in the paper or in companion papers and speeches. For example, I did not say that all, or even most, real estate would be publicly owned; that bigger real estate companies were necessarily better; that the cost advantages associated with size, better liquidity, and better access to capital markets were "huge;" that the industry's transition would be a rapid one; or that being a large or public company was "a silver bullet" that solved all problems and should be the goal of every property company.

It surprises me that many people thought I said these things, because I had tried to be clear about my thesis. For example, in speeches and companion papers I repeatedly used the analogy of basketball players, noting that while bigger can be better, size is no guarantee of success. I also frequently noted that "a big, poorly run company is just a big wasted opportunity."

THE "FORCES"

Five years ago I noted that primary among the "forces" that were changing real estate markets was the control of capital dramatically shifting from commercial banks and life insurance companies to pension funds and mutual funds. For example, in 1970 the combined asset base of commercial banks and life insurance companies accounted for 53 percent of all U.S. assets, while the combined asset base controlled by pension funds and mutual funds was a mere 14 percent. By 1997, assets under control had radically changed to 35 percent at commercial banks and insurance companies, and a staggering 44 percent at pension funds and mutual funds.

This dramatic shift in the control of the nation's capital is of critical importance for the real estate industry, as the industry's high degree of capital intensity means that it must constantly access large amounts of capital. Of particular significance is the fact that pension funds and mutual funds invest in both equities and debt, primarily via highly liquid, mark-to-market assets, while commercial banks and life insurance companies have historically employed primarily non–mark-to-market debt instruments. I felt that the shift of capital control from institutions that utilized non–mark-to-market debt vehicles to those that invested heavily in publicly traded equities and corporate debt was a powerful "force" that would require real estate companies to evolve in order to attract the necessary capital. The primary instruments in this regard would be publicly traded real estate company equity, commercial mortgage backed securities (CMBS), and unsecured commercial real estate company debt.

A second "force" was the considerable consolidation that had occurred in the U.S. financial sector. In fact, the number of commercial banks declined from more than 13,500 in 1970 to fewer than 9,600 in 1996. Similarly, in 1970 the largest 100 banks controlled 49.7 percent of all bank assets, while by 1996 this share had grown to 61.7 percent. The impact of this consolidation on the real estate industry cannot be overstated. It meant that there were fewer "friendly local bankers" with the mission of supporting local development. Local real estate operators no longer had an inside track to the capital they needed simply by virtue of belonging to the local country club, church, or charity. Increasingly, national, and even international, financial support bases would be essential as capital markets globalized. This was clearly a "force" that encouraged bigger, more transparent companies with strong balance sheets to emerge.

The final "force" that I felt would radically change the real estate industry was that business basics would ultimately prevail. While one could not predict exactly when this would occur, history showed that it would occur. To me, business basics meant that speculative developments could not command 95 to 110 percent debt levels priced at single A bond spreads. It meant that real estate ownership required substantial equity, particularly for development, that firms would need to focus on their core competencies, and that operators with vision, access to rationally priced capital, the lowest operating costs, and good risk management would ultimately be the most successful, eliminating the weakest competitors.

This was a harsh message to an industry raised on high levels of debt and speculative development. I stated that no longer would the industry be financed by financial gimmicks (such as unsustainable tax write-offs), mispriced debt, overleveraged properties, or inside deals with local bankers. To survive and prosper in the future would require substantial equity, exploitation of one's comparative expertise, and greater operational efficiency than one's competitors. Gone was the era when 100 percent loans allowed developers to develop and own an array of property types. In a world that required at least 25 percent equity, real estate participants would have to decide where to allocate scarce equity and how to attract large pools of it.

My message was that not all industry participants were going to survive, much less prosper, and that many players needed to figure out how and when to exit. I noted that there are only two ways to exit: when you want to or when you have to, with the former option being clearly more profitable. Ultimately, my message was that the leaders of the industry would embrace these changes while the losers would yearn for a world that would never return.

REPORT CARD

So how have events played out? A few numbers are illustrative. At the end of 1996 the largest publicly traded real estate company was Simon Property Group (after its acquisition of DeBartolo), with a total equity market capitalization of $3.1 billion and a firm value of $5.4 billion. As of year-end 2001, the largest publicly traded real estate company was Equity Office Properties, which had a total market capitalization of $10.8 billion and a firm value of $23.4 billion. Similarly, at the end of 1996, the total equity market capitalization of all publicly traded equity REITs was $78.3 billion, while as of year-end 2001 it stood at $147.1 billion. It is interesting to note that this increase in value is primarily attributable to the extraordinary increase in the number of assets owned by U.S. publicly traded companies. Since 1996 the percentage of warehouse space owned by publicly traded companies has risen from approximately 3 percent to almost 10 percent. Public ownership of office space has risen from 1.8 percent to approximately 7.6 percent, public ownership of apartments from 4.6 percent to 8 percent, and public ownership of strip retail from approximately 8.3 percent to 13.5 percent. The percentage of publicly owned hotels has grown from approximately 8.3 percent to almost 20 percent, and public ownership of malls has grown from approximately 22 percent to nearly 35 percent.

In 1996, twenty-one publicly traded real estate companies had market caps in excess of $1 billion. Today, more than 20 REITs have market caps in excess of $2 billion. Even more telling is the fact that seven (non-hospitality) publicly traded U.S. real estate firms are now listed in the Business Week Global 1000, led by Equity Office Properties, the 351st largest company in the world (179th in the United States). Similarly, the S&P 500 now includes three (non-hospitality) real estate firms, with additional representation in other broad stock indices. Publicly traded real estate companies collectively own approximately roughly 17 percent of all investable real estate asset value in the United States, and account for approximately 35 percent of the equity positions in investable U.S. real estate.

Further evidence of the role of public real estate is that the average trading volume of the NAREIT Composite index is approximately $15 billion each month. This compares to the $25 billion to $40 billion of private transactions that occur annually. Also, while a handful of public real estate companies have gone private (for example, Irvine Apartments), these have been—as I hypothesized—exceptions to the rule. Taken together, these figures demonstrate a large change in a remarkably short period of time.

In addition to the dramatic growth of publicly traded real estate companies, there has been a considerable—though more difficult to document—increase in the concentration of private real estate owners.

For example, between 1996 and 2001 the largest fifty apartment companies' ownership of U.S. apartments increased from 11 percent to 17 percent. Most of these large apartment companies remain private; however, the "forces" that are creating larger public companies are also driving the creation of larger private companies.

Similarly, the equity pools controlled by the major real estate private equity funds play an increasingly important role on the real estate landscape. Real estate private equity funds are now the largest owners of privately held real estate in the United States. My estimates indicate that the real estate private equity funds of the largest twenty sponsors control approximately $100 billion of U.S. real estate, again demonstrating the "forces" driving the equitization and the consolidation of real estate capital, and the push of capital to those with scale, managerial ability, and investment vision. When I wrote "The Forces Changing Real Estate Forever," I realized that real estate private equity funds would be a permanent feature of the real estate landscape, but the maturation of the CMBS market has made these funds much more powerful than I anticipated. Real estate private equity funds and publicly traded real estate companies have equitized the industry, together accounting for roughly 50 percent of the equity ownership of U.S. real estate, and *de facto* defining the U.S. real estate equity landscape.

I was correct that the industry would not return to the days of excessive leverage. In fact, today's highly leveraged real estate owners would have been thought underleveraged a mere decade ago. For example, the relatively highly leveraged ownership positions of real estate private equity funds utilize approximately 55 percent to 70 percent debt, while debt levels for publicly traded real estate companies hover between 40 percent to 50 percent. In contrast, a "conservatively" leveraged property in 1990 was at least 80 percent, and more typically 90 percent to 110 percent leveraged. Debt coverage ratios have improved even more dramatically, even for the most aggressive borrowers, compared to a decade ago.

The rapid maturation of the CMBS market and use of unsecured corporate bonds have also linked the pricing of real estate risks to that of the broader debt markets. The amount of outstanding CMBS debt has risen from approximately $120 billion in 1997 to approximately $325 billion today. As predicted, this growth has meant that balance sheets similar to those in other capital-intensive industries now characterize the real estate industry.

The large volumes of publicly traded real estate debt and equity have created a large analyst community that scrutinizes the supply and demand fundamentals for the major property markets. This information flow has put a damper on the optimism of developers and development lenders. The continuous public market pricing of debt and equity has also raised awareness among capital providers of the cost of capital for new developments. In this regard, real estate is becoming more like other capital-intensive industries. However, as evidenced by the excess capacity in the telecom infrastructure industry, being exposed to the scrutiny of publicly traded debt and equity markets does not guarantee that excess supply will not occur. But it has served, albeit imperfectly, to keep excess supply conditions in most real estate markets better than during past cycles.

A fundamental premise of "The Forces Changing Real Estate Forever" was that substantial levels of equity would be required for the ownership and development of real estate. This has been the case. This equity cushion is proving its worth during the current real estate market supply-and-demand imbalance. Even though vacancy rates have been driven to levels not seen since 1993, the fallout in the real estate market has been limited. Delinquency rates on mortgages are roughly 1.5 percent today versus 8.5 percent in 1993, and properties continue to throw off substantial positive cash flows to owners.

If real estate were leveraged in 2002 as it had been in 1992, the distress in the real estate industry would be substantial. When property values fell in the early 1990s, it wiped out the equity slivers of many owners. In contrast, today's reductions in cash flows and property values have reduced, but hardly eliminated, all equity value. As noted in "The Forces Changing Real Estate Forever," it is important that long-lived real estate assets be matched with substantial amounts of the longest liability—equity—because when downturns occur there is no way that owners can adjust their cost structures to maintain profitability. To harvest the long-term value of properties requires substantial equity cushions in order to see one through the inevitable hard times.

LESSONS LEARNED

Over the last five years there has been a substantial shift in institutional real estate investments to fully integrated operators, as large portfolios have shifted from the control of specialty property mangers (many of whom have either gone out of business or been merged out of existence) to public real estate companies. As superior operations became the primary way to increase value, and institutional investors were offered the opportunity to invest in the best operators via publicly traded stock, money shifted from specialty managers to operators.

Yet institutional investors continue to make direct real estate investments to a much greater degree than I predicted. This reflects the interplay of three factors. The first is that, until recently, most publicly traded real estate companies were too illiquid for major investors in real estate. However, as these companies grew and their floats expanded, they attracted a broader pool of equity investors. Similarly, their inclusion into broad stock market indices has lowered this hurdle. I saw this problem five years ago, and realized it was part of the evolutionary process.

A second reason for continued direct institutional ownership is the tyranny of the status quo: what exists has a tremendous ability to continue, since many people have vested interests in maintaining current conditions. A vivid example of this phenomenon is the promotion of the "four-quadrant" concept of real estate investing. The four-quadrant idea argues that institutional investors realize superior portfolio performance by maintaining a balanced portfolio of publicly traded real estate debt, publicly traded real estate equity, privately owned real estate debt, and privately owned real estate equity. The argument is that each category generates a unique, and largely uncorrelated, return profile. As "proof" of the unique return profiles of publicly traded versus privately owned real estate, supporters compare the NACREIF returns series for private real estate versus the NAREIT return series for public companies (see Table I). These alternative return series appear to show that the total returns recorded for the publicly traded companies are dramatically different in every year from those recorded by privately owned properties, that the returns show very little correlation, and that privately owned property returns are notably less volatile. In fact, the closest

Table I Annual Total Return Indexes

	NARETT	NCREIF	DIFFERENCE
1993	19.7%	1.3%	18.4%
1994	3.2%	6.4%	3.2%
1995	15.3%	7.5%	7.8%
1996	35.3%	10.3%	25.0%
1997	20.3%	13.7%	6.6%
1998	-17.5%	16.1%	33.6%
1999	-4.6%	11.1%	17.7%
2000	26.4%	12.0%	14.4%
2001	13.9%	7.4%	6.5%

these two series came to providing the same return was in 1994, when the difference was 320 basis points, an amount equal to the return recorded by public companies that year, and 50 percent of the return recorded by private properties. The average difference in the total returns from 1993 through 2001 was 1450 basis points, with the largest difference occurring in 1998 (3,360 basis points). From 1993 to 2001, the publicly traded index indicates a superior total return of 14 percent (or 1.6 percent per annum) relative to that of the privately owned index.

Should one conclude from these data that publicly traded and privately owned real estate have substantially different return patterns? The answer is no. A realistic comparison of these data merely reveals the irrelevance of the NACREIF series for analyzing property returns. While it is believable that publicly traded and privately owned real estate pricing are not always perfectly synchronized, it defies credibility that they could differ by as much as reported in Table I, as large pools of "hot" money exist that would arbitrage such sizable differences across these categories. It is also unbelievable that following the Russian crisis of 1998, when the market saw a massive flight to liquidity and quality, and many real estate sales fell apart, private real estate returns were the best of the decade (16.1 percent) while public real estate returns were the worst of the decade (negative 17.5 percent). This result proves only that the appraisal driven NACREIF index does not accurately reflect the return performance of privately owned real estate, as no one really believes that private real estate owners achieved a 16.1 percent return on their assets in a year when property liquidity disappeared and prices fell.

The return characteristics of publicly traded and privately owned real estate are necessarily closely interlinked, since buildings don't know—or care—if they are publicly or privately owned. Returns are determined by the interaction of the supply and demand for space (which is the same whether the building is part of a public or a private portfolio), and the pricing of risky cash streams. The pricing of the cash streams derived from real estate are effectively the same (up to arbitrage margins) whether the cash stream is publicly or privately owned.

The NACREIF data series is a nontradable concept, analytically similar to a Wall Street equity analyst's target valuations of publicly traded companies. However, it is important to remember that actual returns feed your family, while analyst estimates are good only for lighting the fire in your fireplace.

A final reason why many institutional investors continue to directly own substantial amounts of real estate, even though it is more burdensome and less liquid than public company ownership, is that many institutional investors desire the artificial lack of volatility associated with non-mark-to-market pricing. This demand may even grow in view of the recent increase in the volatility of public markets. While mutual funds and pension funds have driven money into mark-to-market instruments, there remains a far greater demand for non-mark-to-market vehicles than I appreciated five years ago. The existence of the NACREIF Index, which recorded low volatility and no negative returns over the last nine years, allows institutional investors who directly own real estate to claim that they have achieved lower volatility in their returns. But this is merely a sleight-of-hand trick. Will this exercise in self-deception change? Over time, of course it will, but it will take much longer than I initially thought.

IS BIGGER BETTER?

Have the last five years proven that larger firms are necessarily more efficient? Of course not. However, local real estate businesses have successfully been nationalized, and companies operate at scales previously thought impossible. The "forces" stimulated academic research that has explored real estate scale economies. Though limited, this research reveals evidence of scale economies achievable at least up to firm sizes of several billion dollars. Some direct insights on the presence of scale economies are obtained by comparing key cost components at major real estate firms back then to those of today. Table II compares overhead cost as a percent of revenues, net operating margins, and unsecured debt

Table II REIT Snapshot

Year-End (as indicated)						
Company	Ticker	Year	SF or Units	# of Properties	G&A Revenue	NOI Revenue
Boston Properties	BXP	1997	18,177,660	92	4.29%	63.2%
Carr America Realty	CRE	1996 (a)	13,400,000	170	9.14%	68.6%
Equity Office Properties	EOP	1996	32,200,000	90	4.55%	55.9%
Equity Residential	EQR	1996	67,705	239	2.06%	66.9%
General Growth Properties	GCP	1996 (a)	59,400,000	76	0.83%	57.0%
SimonProperty Group	SPG	1996	64,700,000	124	3.57%	72.3%

(a) YE 1996 data, except unsecured debt spread, which is as of YE 1997.
(b) NOI = revenues plus recoveries less property expenses and G&A ~EBITDA.

spreads for selected firms. While many other metrics are possible, these three go to the core of the scale economies I suggested in "The Forces Changing Real Estate Forever."

Each of these companies is substantially larger in 2001 than in 1996, and each company saw its overhead as a percent of revenues decline while net operating margins increased. At a 10 multiple, 1 percent improvement represents $10 million in value per $100 million in revenue. In addition, those firms with unsecured debt instruments saw their spreads narrow where each 100 basis points is worth $10 million per $100 million in debt. In short, at least at a number of major property companies, the scale economies I described appear to be at work. The challenge for these firms is to continue this success in order to maintain and enhance their competitive positions in the marketplace.

Five years ago I argued that consolidation would occur slowly, and would be particularly forceful during bad times. My thesis was simply that when everybody makes money easily, the less efficient make smaller profits but can still survive. It is only as weak markets compress margins that the less efficient are squeezed out. We are on the cusp of the first widespread market weakness since I wrote "The Forces Changing Real Estate Forever." As vacancy rates and concessions have risen rapidly in the face of weakened property market fundamentals, company cash flows are being challenged. Office markets in Silicon Valley, San Francisco, Austin, and suburban Boston

	Year-End 2001				
Unsec Debt Spread	SF or Units	# of Properties	G&A Revenue	NOI Revenue	Unsec Debt Spread
LIBOR + 125	40,700,000	147	3.71%	66.1%	Euro + 105-170 bps or Prime + 75 bps
LIBOR + 90	20,300,000	254	7.67%	70.1%	LIBOR + 70 bps
LIBOR + 162.5	127,000,000	165	3.50%	64.4%	LIBOR + 60-90 bps
LIBOR + 75	224,801	1,076	1.64%	68.7%	LIBOR + 63 bps
LIBOR + 100	135,000,000	163	0.75%	63.6%	LIBOR + 103 bps
LIBOR + 90	1187,000,000	252	3.16%	77.1%	LIBOR + 65 bps

will provide tests of my thesis. The hotel market is similarly ripe for consolidation.

I anticipate that the market share of public office companies, driven by consolidation pressures created by weak property markets, will be roughly 11 percent (up from 7.6 percent in 2001) by the end of 2005, while the hotel market share of public companies will rise to nearly 25 percent by the end of 2005 (up from roughly 20 percent in 2001).

DEVELOPMENT

The new model for development remains in transition. After decades of debt-financed development, the last five years have witnessed equity requirements of 25 percent to 50 percent. As noted in "The Forces Changing Real Estate Forever," combining development with stable real estate cash streams is generally a poor financial structure. For example, I believe that the primary reason that U.K. public property companies trade at large discounts to liquidation value is that while the English lease is an extremely low-risk asset, sought after by low-risk investors, most U.K. public property companies use these very low-risk cash flows to fund high-risk developments. As a result, investors are unable to access their low-risk cash streams due to the mismatch of low-risk cash stream and high-risk development. Imagine the extreme case of a development company that utilized the proceeds from a government bond fund to fund speculative developments. Certainly such a fund would trade at a substantial discount to its liquidation value, as its logical clientele—low-risk investors—would avoid it due to the development risk.

Another major challenge for public real estate companies with substantial development activities is the need to shut down the overhead burden of development when excess supply market conditions exist. All too often, these groups become self-perpetuating overhead burdens. Firms that fail to perform this shut-down will be severely punished by capital markets.

The best model for development would be for public real estate companies and private real estate equity firms to provide the bulk of the equity side-by-side with local developers. This structure allows the larger entities to leverage both their tenant base and capital market connections, while utilizing (on an incentivized basis) the entrepreneurial skills of local developers. This structure minimizes the risk for the public companies' cash streams while providing them access to growth via the acquisition of completed developments. However, I now realize that the development of regional malls should generally be done by large public firms, since regional malls cannot be speculatively developed. Given the nationalization of retailers, only a handful of mall companies possess the expertise, credibility, and tenant connections necessary to develop a regional mall. However, in view of the maturity of this product sector, the development of new malls will remain a small part of the operations of large public mall owners.

A major unanswered question is whether a development company can successfully exist as a stand-alone public company. While real estate development offers a higher risk profile than stabilized real estate, it does not provide a massive risk premium, because many people enjoy being developers. As a result, the margins earned on developments may not be large enough to attract large-scale capital into development. For many years this was the case in homebuilding. However, as debt has become less available, homebuilding has been increasingly dominated by the largest companies. Between 1993 and 2001, the market share of the top ten homebuilders doubled from 9.2 percent to 18.4 percent. It is possible that public "pure development" companies will evolve, particularly in the multifamily and warehouse sectors, where a sufficient flow of projects exists to provide the predictable cash streams desired by public investors.

WHERE DO WE GO FROM HERE?

The "forces" of economic rationality are here to stay, and change in the real estate industry is well under way, though in fits and starts. The practices found in other capital-intensive industries will continue to provide the roadmap for the real estate industry. Within five years, a real estate company will rank among the top 50 firms in the United States, and perhaps among the top 100 globally. More operational talent will be attracted into the real estate industry, allowing the largest, most efficient, and most creative owners (public and private) to increase their margins of competitive advantage. While development will remain largely a private activity, it will require ever-greater amounts of equity, thus forcing developers to form alliances with the large equity capital pools controlled by publicly traded firms and real estate private equity funds.

Not every firm will succeed (one need only remember Patriot, Meditrust, Prime, or Security Capital). More firms will get in trouble, and new firms with strategic innovations will appear. Slowly the tyranny of the status quo will erode. This is an exciting time to be in the real estate industry, as change offers opportunity. If you think the last five years have been dramatic, stay tuned for the next decade.