From Young Turk to Dead Wood

Twenty-five years of real estate at the Wharton School.

PETER LINNEMAN

I CAME TO the Wharton School in 1979, having spent the two previous years on the faculty of the University of Chicago. For eight years after receiving a Ph.D in economics, my teaching and practice focused on applied economics and finance. Prior to 1985, my real estate experience consisted of several papers on the homeownership decision and the role of housing in household portfolios. I had also worked on several sale-leaseback transactions as part of corporate buyouts.

In late 1984, Wharton's Dean, Russell Palmer, requested that I evaluate Wharton's real estate efforts, believing them to be an embarrassment that must either be eliminated or improved to a level commensurate with Wharton's reputation. When I informed Russ that I knew nothing about commercial real estate, he said that he simply wanted an evaluation of whether it was better to eliminate or grow our real estate program. After analyzing the current real estate offerings, I realized that they were far below Wharton standards. The real estate effort was led by a seventy-two-year-old anti-intellectual adjunct professor whose idea of academic rigor was a course teaching students how to drive nails in a West Philadelphia rehab (an activity for which even high schools would not give credit). It was the equivalent of running a flea market at the corner of 55th and Fifth. I reported to the Dean that real estate was a serious subject with significant research opportunities, one that would be professionalized over the next two decades, and since Wharton was in the business of research and professional business education, I recommended that he create a new program. In March 1985, Russ asked me to take on the responsibility of creating a new high-quality real estate program. I repeated that I knew nothing about real estate and was not a fundraiser. With a smile, he assured me that neither my lack of expertise nor the lack of funds would be problems. In my youthful ignorance, I accepted his offer.

While ignorance may be bliss, it is hardly the way to build a high-quality program. To fill my expertise void, I assembled an extraordinary Advisory Board chaired for its first four years by the legendary Alfred Taubman. Alfred agreed that the existing program was a disastrous appendix to the Finance Department, and needed to be completely revamped. In the early years the Advisory Board included loyal alums Myles Tannenbaum, Arthur Fischer, Gene Kohn, Marty Raynes, Mort Zuckerman, and Sylvan Cohen, as well as industry leaders Dan Galbreath, George Peacock, Ron Terwilliger, Peter Bedford, Shelley Seevak, Mel Simon, Claude Ballard, Al Sussman, Bob Larson, Chris Budden, Jerry O'Connor, Martin Bucksbaum, Arthur Hedge, Steve Manolis, Frank Bryant, and Tom Klutznick. Quite a rare assemblage of knowledge. Alfred Taubman quickly split the Advisory Board members into five committees: Curriculum, Research, Placement, Membership and Executive. For almost four years, these committees met quarterly, and frequently monthly. These frequent and intense sessions were a rare collaboration of industry and academia, and formed the foundation of the program's unique level of industry support and respect.

We realized that if real estate were to prosper as a field of study, it would have to ultimately become an independent department, like Finance, Accounting, Marketing, or Management. In this regard, it was also important that we not only teach students majoring in real estate, but

Table I: 100 Founding Members of the Wharton Real Estate Center

Anonymous	Gerald Finn	Benjamin Lambert	Donald Siskind
Claude Ballard	Arthur Fischer	Alan Landis	Jean-Louis Solal
Robyn Ballard	Alexander Fisher	Gerald Levy	David Solomon
R. Gary Barth	Robert Freedman	Edward Lipkin	Sheldon Solow
Peter Bedford	Joseph Freeland	Michael Lowenkron	Peter Spies
David Binswanger	Lizanne Galbreath	J. Steven Manolis	Phillip Stephens
Neil Bluhm	Jeffrey Gault	David Marshall	Jack Stoltz
Edward Blumenfeld	Ted Ginsberg	Frank McBrearity, Jr.	Brian Strum
David Brown	S. Howard Goldman	Alan Miller	Albert Sussman
Martin Brown	Michael Gregoire	James Noteware	Samuel Switzenbaum
Frank Bryant	Richard Gunthel	Jeremiah W. O'Connor, Jr.	Myles Tanenbaum
John Buck	Kevin Haggarty	Jeffrey Orleans	Carl Tash
William F. Burge III	Kiyoaki Hara	Edward Pantzer	A. Alfred Taubman
Citistate Corp. Ltd.	Henry S. Harrison	George Peacock	J. Ronald Terwilliger
Arthur Cohen	Norman Hassinger, Jr.	Arthur Powell	Garrett Thompson
Sylvan Cohen, Esq.	Lewis Heafitz	Martin Raynes	Robert Toll
R. James Connors	Arthur Hedge, Jr.	John Riordan	Dan Tomlin, Jr.
James Cranmer, Jr.	M.G. Herring, Jr.	Marshall Rose	Donald Trump
Frank Creamer, Jr.	Richard Jacoby	Stephen M. Ross	James Vinson
Gary Decker	N. Richard Kalikow	Ronald Rubin	Philip Wachs
Deutsche Bank Capital Corp.	Stephen Karp	Joseph Russo	Bernard Weissbourd
Kevin Donohoe	Donald A. King, Jr.	Allan Schuster	Lawrence Wilson
Blake Eagle	Thomas Klutznick	Jay Shidler II	Xerox Corporation
Thomas Eastman	Shigeru Kobayashi	Shimizu Corp.	The Yarmouth Group, Inc.
William Fain, Jr.	Takaji Kobayashi	Sheldon Seevak	William Zeckendorf, Jr.
Max Farash	A. Eugene Kohn	Stephen Siegel	Samuel Zell
Michael Fascitelli	Jeffrey Kosow	Melvin Simon	
	Norman Kranzdorf		

also offer courses that broadly served business students. The result was a program with sufficient depth for undergrads and MBAs majoring in real estate, even as the vast majority of student demand derived from students not majoring in real estate.

The Advisory Board helped design a new curriculum to meet these goals, revamping existing courses and creating new ones. We put in place an industry outreach program, a student placement effort, and a research agenda. By 1989, we had made enormous progress, but we were plagued by a substantial inherited budgetary deficit, since Wharton had conveniently forgotten its pledge to raise funds for the program. This deficit was eliminated only when we took hold of our funding destiny and raised $500,000 through the generous $5,000 contributions from the 100 Founding Members of the Real Estate Center. Also, Arthur Fischer joined with the Lauder family to support the construction of Lauder-

Fischer Hall, which became the home of the real estate program for over a decade. In short, the Advisory Board overcame the dual challenges of my ignorance and lack of funds.

CYCLES OCCUR WHEN YOU LEAST NEED THEM

In the early 1990s, just as the Wharton program was gaining momentum within and respect without, the real estate industry collapsed. This not only affected our financial support base but also made student placement almost impossible, even as our courses, enrollment, curriculum, and research took root. A critical moment in the history of the Wharton real estate program occurred in 1990, when we realized that if we successfully weathered the next five years of industry turmoil—"staying alive 'til '95," as Sam Zell famously put it—we could become the preeminent program in the world, since most of our competitors would lose support and falter. So, at a time when most real estate programs did less, we ramped up our activities, even while tightening our belts. We expanded courses, enlarged research output, increased industry outreach, and strengthened student placement efforts. We also inaugurated Wharton's annual spring conference, which remains a major industry event to this day.

By the time the real estate industry rebounded in the mid-1990s, the Wharton Real Estate Center had indeed established itself as the industry "thought leader." As real estate strengthened, so did our placement success, curricular growth, research impact, and financial support. In 1997, we established the *Wharton Real Estate Review* with Witold Rybczynski as co-editor, to serve as our voice. We also transformed the real estate program into a full-fledged department, hired young faculty to solidify our research and curricular efforts, and received a generous $10 million gift from Sam Zell to create the Samuel Zell and Robert Lurie Real Estate Center at the Wharton School.

By the end of 1997, the efforts of our supporters, our faculty, and our students made Wharton's real estate program into an "overnight success"—after twelve years. The Center's Advisory Board had evolved seamlessly to incorporate a new generation of industry leaders, avoiding the classic trap of "first in and never out" leadership. This leadership evolution was completed when Joe Gyourko replaced me as Center director, leading the program to new heights over the following thirteen years. The result is that after a quarter of a century, Wharton's Real Estate Department and the Zell-Lurie Real Estate Center are synonymous with quality, creativity, and intellectual leadership. No longer a flea market, it is a Tiffany educational experience.

AN INDUSTRY GROWS UP

The evolution of real estate at Wharton mirrors the professionalization that has taken place over the past twenty-five years in the industry. In 1985, real estate was an opaque industry, largely built around tax gimmicks and only secondarily concerned with real estate fundamentals. I remember reading the prospectuses of real estate tax syndicates in 1985 wondering how any of these deals would ever make money, as opposed to simply sheltering other income from taxes. And in fact, few of those deals ever made money as real estate.

As the tax syndicates came to an end, real estate development continued unabated in spite of extraordinarily high levels of vacancy. For example, for the last four years of the 1980s, office vacancy rates remained in the high teens even as the U.S. economy boomed. This reflected the persistent belief in the value of speculative development. I recall attending my first Urban Land Institute meeting in 1986, where leading developers opined that Michael Milken's junk bonds were destroying America because they allowed companies with cash flow and real assets to leverage themselves up to 50 percent LTVs and 1.5 times interest coverage ratios. Yet in the next breath these same developers lamented the fact that they could get "only" 110 percent loan-to-cost (including development fees) non-recourse mortgages for their completely speculative developments. When I protested that this made no sense, they told me "Peter, you don't understand." Unfortunately, it turned out that I understood all too well that the excessive leveraging of speculative cash streams would end badly when economic growth ceased. And end badly it did, as the recession of 1990 revealed that the speculative development emperor had no clothes. Overnight, capital abandoned real estate, instantly changing major developers from masters of their universe to pariahs. Not only did they lack tenants, but capital sources were completely uninterested in their fates. Debt was unavailable at any price, while traditional equity providers avoided commercial real estate like the plague.

In this environment, attracting new equity sources required a previously unimaginable level of transparency. The savviest developers created publicly-traded REITS, and changed their stripes from excessively leveraged private entities to low leveraged public entities. Private equity funds were created to invest institutional capital in real estate, mirroring the corporate buyouts funds that had existed for over a decade. Together, REITs and private equity funds tapped new equity pools, allowing the industry to de-lever, and transforming it into a capital-intensive industry with a capital structure broadly consistent with the norms of corporate finance.

Coincidentally this "corporatization" played to Wharton's long-established strength in economics, strategy, industrial organization, and corporate finance, allowing us to provide some insights on what was happening to the industry. As the industry transformed, we published research analyzing the future of real estate, return expectations for real estate investment vehicles, corporate real estate ownership, how capital flows and the economy impact the real estate industry, and planning and design issues. It was during this period that we introduced the phrase "real estate is a capital-intensive industry" to describe the keys to the industry's future. In short, we assisted the industry's transformation while raising the level of industry discourse and transparency both in and out of the classroom.

CHALLENGES REMAIN

A major difference between real estate and corporate buyout private equity funds that remains underappreciated is that most real estate assets are very small businesses, worth \$5 million to \$200 million. As a result, a private equity fund that successfully completes a \$100 million transaction each month places only roughly \$400 million in equity annually (at 2 to 1 leverage). This is a prolific pace to execute with care and diligence. A more realistic pace of six \$50 million transactions annually places only \$100 million a year in equity. This is in marked contrast to the corporate buyout world, where there is an almost infinite supply of companies and subsidiaries worth \$1 billion or more, and where leverage runs closer to one to one. As a result, a corporate buyout firm doing a \$1 billion transaction every three months places \$2 billion in equity annually, an order of magnitude in excess of that achievable by a real estate private equity firm.

The result of this imbalance was that as institutional investors sought to concentrate their commitments in mega-funds, and mega-fund operators sought additional fees, real estate private equity firms outgrew their capacity to successfully invest unless everything went right in both the economy and the capital markets. And everything certainly did not go right after 2006. It has become clear that mega-funds are extraordinarily difficult for real estate, as real estate is primarily comprised of many small firms in relatively inefficient markets.

We continue to be surprised by the ongoing success of open-end real estate funds. In our view, open-end funds are "designed to fail," as the only way they can satisfy liquidity spurts is to maintain 30 percent to 50 percent of their assets in cash. But maintaining such cash balances means that investors pay real estate fees and promote for money market performance. Yet if an open-end fund fails to maintain these high levels of cash, it is impossible for it to meet the inevitable liquidity spurt. Similarly, the demand for separate accounts by large institutional investors seems to reflect an institutional demand for non-mark-to-market pricing. That is, although these investors say they want mark-to-market pricing, separate accounts allow them to forestall facing up to their reduced real estate portfolio values. This is demonstrated by the fact that our research at Wharton reveals that REIT pricing leads private pricing and marks by twelve to eighteen months.

HAVE WE LEARNED ANYTHING?

We have learned much over the past twenty-five years. The most important lesson is that the real estate industry is first and foremost about people and relationships, and only secondarily about bricks and mortar. I have been blessed over these twenty-five years with the opportunity to meet and befriend some of the most remarkable business people in the world. Not only are they great transactionalists and knowledgeable real estate professionals, but they are generous and giving human beings. They have helped shape my view of the world and my approach to business. They have shown me that while real estate is definitely "about money," it is by no means "all about money."

I have also learned that there will always be booms and busts in both real estate supply and demand, as well as capital flows, far beyond what can be predicted. This is because predictions necessarily smooth reality. As a result, when capital flows and real estate fundamentals are both at peaks, it is an unsustainable condition, as at least one (if not both), of these real estate value drivers will soon "unexpectedly" reverse course. Similarly, when both real estate fundamentals and capital flows are at their bottom, they too will "unexpectedly" reverse. While the precise timing of these reversals is unpredictable, it is predictable that value cycles will occur. The implication is that far more equity is required to weather the downs than is usually available.

Cycles in real estate values and vacancy rates are not things of the past. While transparency in the industry has improved, most properties are simply very small businesses that are greatly impacted by the movements of both the economy and capital flows. Even the best designed and best operated buildings suffer when the economy loses millions of jobs and no one has any confidence in the future, while the worst property operated by the worst operator attracts tenants and excessive amounts of capital in the best of times. While Wharton has helped the industry to be much more aware of the importance of macro factors on the fate of their properties, this awareness is still in its infancy and will only grow in the next twenty-five years.

AND SO A GOODBYE TO WHARTON

I have always admired great athletes who retired near the peak of their performance. Since they didn't "stay too long," the memories of Jimmy Brown, Sandy Koufax, and Barry Sanders burn brighter than perhaps even their magnificent achievements. Hence, as I walk away from thirty-two years at Wharton, and thirty-four in academia, I hope that I have not stayed too long. Blessed by great colleagues, smart and forgiving students, and industry friends who have taught me everything I know, I am proud that I have been a small part of transforming both Wharton and the industry. But the best—and the worst—is yet to come as this amazing industry continues to evolve. So enjoy the journey.

A Scholarly Appreciation of Peter Linneman

One economist's influence on the academy and the real estate industry.

JOSEPH GYOURKO

READERS OF THE *Wharton Real Estate Review* know Peter Linneman from his business writings and links to the real estate industry. Most, if not all, of his considerable insights derive from his training and research as a professional economist. On the occasion of his retirement from the Wharton School faculty, it is fitting to highlight Peter's most important academic research of a long and influential career.

After receiving his undergraduate degree from Ashland College, Peter went to the University of Chicago, where he received a Ph.D. in economics in 1977. His first academic appointments were at that university, as a fellow in the Center for the Study of the Economy and State