LEADERSHIP ONE-ON-ONE

Real Estate Issues: Questions and Answers with Mark Zandi
Peter C. Burley, CRE, and Mark Zandi, Ph.D.

The Morphology of the Credit Crisis
Hugh F. Kelly, CRE

A Missed Assessment of Real Estate Debt Risk:
How the Credit Rating Agencies and Commercial Bank Regulators Missed the Assessment of
Real Estate Debt Risk, Creating the Largest Real Estate Bubble in U.S. History
Marc R. Thompson, CRE, with analyst support by Ian C. Broff, CFA

Public Homebuilders Look to Build in 2010
Brian J. Curry, CRE

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Active Private Equity Real Estate Strategy
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Peter C. Burley, CRE

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Looking Back and Ahead at the Market: Real Estate Issues Questions and Answers with Mark Zandi
Participants: Peter C. Burley, CRE, editor in chief, Real Estate Issues; and Mark Zandi, Ph.D.
Consumers and businesses have teetered in the economic storms of the past year. Many have collapsed. And, very little has been left unaffected by the worst economic downturn since the 1930s. There are signs that commercial real estate will suffer significant damage that could jeopardize the potential for a broader economic recovery. Peter C. Burley, CRE, editor in chief of Real Estate Issues, caught up with Mark Zandi, chief economist of Moody’s Economy.com, this past fall, to gain insight into recent developments in the U.S. economy and expectations for the coming months. In an email conversation conducted over a period of several weeks, Burley and Zandi exchange thoughts, questions and answers on where we have been, where we are now, and where we may be heading.

The Morphology of the Credit Crisis
Hugh F. Kelly, CRE
The viral spread of risk from the rather limited segment of the economy holding subprime residential mortgages to the approximately $60 trillion Credit Default Swaps market will go down in history as one of the most deadly of financial epidemics. Though not fully unwound, by any means, some of the lessons in the morphology of the credit crisis can already be drawn. In this article, the author proposes, perhaps controversially, that the imperative of growth that drives U.S. business played a crucial role in the metastasis of credit problems. The sustainable limits of growth will surely be a key area of study if a repeat of the crisis is to be avoided.

A Missed Assessment of Real Estate Debt Risk: How the Credit Rating Agencies and Commercial Bank Regulators Missed the Assessment of Real Estate Debt Risk, Creating the Largest Real Estate Bubble in U.S. History.
Marc R. Thompson, CRE, FRICS; with analyst support from Ian C. Broff, CFA
A missed assessment of real estate debt risk is the root cause of both the savings and loan crisis in the early 1990s and the mortgage-backed securities crisis currently observed in the marketplace. A high risk of probable default developed as aggregate debt increased above annual average increases in both gross domestic product (GDP) and Consumer Price Index (CPI) measures over a number of years. This article discusses how the probable risk of default increases each year when the loan aggregate growth rate is higher than the average rate of GDP and CPI, and explains why issuance years 2005, 2006, 2007 and 2008 have a high risk of probable default years in all real estate secured debt in U.S. markets. The author also offers a methodology to prevent the problem from occurring in the future.

Public Homebuilders Look To Build in 2010
Brian J. Curry, CRE, MAI, SRA
The U.S. housing market began its precipitous decline in 2006–2007. As late as the winter of 2009, the outlook for any new near-term construction was bleak, to say the least. However, beginning in the late spring of 2009, public homebuilders began buying residential lots in certain markets intending to build and sell new homes. Despite conflicting metrics in housing supply and demand criteria, public homebuilders are indeed buying lots and building homes in targeted submarkets. This article summarizes the basic elements of housing supply and demand and the perception on part of the builders actively pursuing lots to increase new for-sale housing inventories.
Regional Economics – View from the Middle
Robert Bach, CRE, and Simone Schuppan

This article reviews commercial real estate market conditions in the Chicago area and provides a forecast of conditions for 2010. Authors Bach and Schuppan take a look at the office, industrial, retail and investment markets, with insight into vacancy rates, rental rates, lease rates, and local tax hikes and incentives. The authors also provide their view of the futures of local retailers and who will survive the current economic downturn, as well as the state of investment transaction volume and which investors may have to sell properties.

Going from Mark-To-Market to Mark-To-Make Believe
Robert J. Pliska, CRE, CPA

Federal regulators released their guidelines “Policy Statement on Prudent Commercial Real Estate Loan Workouts” with the stated purpose of providing transparency and consistency to commercial real estate workout transactions and the availability of credit to sound borrowers. While the regulators’ intentions were honorable, the policy could create the opposite effect. The ability to extend loans and not report losses may be just disguising reality. Present a “good story” through various accounting methods and financial institutions are able to obtain substantial time to hopefully correct their loan problems. However, this approach most likely will result in simply extending their problems. This article addresses concerns about the policy, with a focus on the need “to get back to reality, consistency and good reporting.

RESOURCE REVIEWS

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Active Private Equity Real Estate Strategy
Reviewed by Scott Muldavin, CRE

In his review of CRE David J. Lynn’s recently published book, Active Private Equity Real Estate Strategy, CRE Scott Muldavin takes us through various chapters and concludes the book “…effectively achieves what it intends, providing readers with an inside look at the kinds of issues, investment factors and other considerations that go into private equity real estate decision-making at one of the world’s largest real estate investment management organizations.”

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The Next 100 Years: A Forecast for the 21st Century
Reviewed by Julie M. McIntosh, CRE

In reviewing this geopolitical perspective by author George Friedman of the next several decades and beyond, CRE Julie McIntosh recalls the days of school children hiding under desks in the event the U.S. would be “nuked.” Today, and over the next several decades, we are and will be behaving differently for various reasons, depending on nations and how their leaders respond to self-interest and external events, according to the author. Calling this book “…a great tool for understanding the current world and relationships and thinking about how it all relates to the past, giving us a possible roadmap for the future,” McIntosh gives the book a “thumbs up.”

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About The Counselors of Real Estate
THIS IS THE TIME OF YEAR that my “love-hate” relationship with Colorado leans heavily toward the latter. Where I live, in a remote valley at the foot of the Rockies, the ground is frozen and brown, lying fallow with scattered patches of the last snowstorm that remind us it won’t be long until we will endure yet another frozen onslaught from the north. The trees lean leafless and lifeless against the winds, which blow here with bitter purpose.

The melancholy days are come, the saddest of the year,
Of wailing winds and naked woods and meadows brown and sere.
Heaped in the hollows of the grove, the autumn leaves lie dead;
They rustle to the eddying gust, and to the rabbit.

–WILLIAM CULLEN BRYANT

It is another four months, at least, until any measurable warmth manages to gain purchase at 7,000 feet. When it does, we will have a fleeting few moments of lush, green, warm, sweet summer, punctuated with magnificent pounding thunderstorms, herds of whitetail and elk, and countless birds of endless variety. Until then, we simply wait.

I’ve spent many hours focusing on the cover photo of this edition of Real Estate Issues. I’ve studied it. Not so much the lone figure on the bench as she reads the news (or is it the help wanted ads?). Instead, my attention turns mostly to the dog. Dogs are, for all of their faults, wonderful creatures. They find pleasure in just about anything at just about any time. Always ready to play, regardless of the season or the terrain. Forever inquisitive, they are in constant search of something to play with, sniffing, rooting, scratching at the ground or the snow, ever certain that the next game or toy is within easy reach. I think the dog in the picture wants to play. Surely, he is looking for a squirrel to chase. But, alas, all of the squirrels are hunkered down in their nests guarding their nuts. They will be out in due time, when it is safe and warm. For now, the squirrels are chicken, and the dog is out of luck.

In the real estate business, we have been like the squirrels, I think. Hunkered down, guarding our nuts. Waiting for a safer, warmer season to venture out; to dig holes in the warm ground, to plant new trees or to be chased by a friendly dog. Little wonder, really. It’s hard to imagine a colder, more fearful time. Credit is effectively frozen. Occupancies shrinking. Revenues dwindling. Values skidding. Best to preserve our resources, lest the season tightens its grip. But, spring will arrive, as it always does, and I wonder: what will we have done with all those nuts? Are we going to eat them, plant them or just hoard them? Eat them and stay alive? Plant them and grow more trees? Hoard them and…and, what? Just have them?

In October 2008, this economic winter was rapidly approaching. That month, I attended an economic conference in Washington, the key topic of which was the rapidly developing financial crisis. Speaking at the conference were Fed Chair Ben Bernanke; FDIC Chair Sheila Bair; former Treasury Secretary Larry Summers, Princeton Professor Paul Krugman, and a host of other experts and policymakers. It was a serious conference about a serious situation. And the outlook was grim. Winter was swirling fast upon us. Lehman Brothers had failed and the financial markets were in danger of falling through the ice, pulling the entire economy with them. Looking back through my notes from those meetings, and recalling the discussions with Bernanke, Bair and others, I remain, today, convinced that TARP was absolutely necessary, as were subsequent bailout and stimulus efforts. Questions that remain at the end of 2009 are: how successful have those efforts been in thawing the credit markets or the economy? When will we see an end to this financial winter? Are there any signs of spring? What is going to happen to our business over the next few months, quarters or years?
At The Counselors of Real Estate Midyear Meetings in New York last April, Moody’s Economy.com Chief Economist Mark Zandi gave us his perspective of the depth and breadth of the crisis and its impact on the property markets. He also offered some thoughts on what we might look for as signs that this recession was beginning to thaw and what recovery might look like in the months and years ahead. So far, he has been pretty close in his assessment and his outlook. Still, I thought it a suitable exercise to revisit recent trends and developments and to elicit Mark’s current thinking and his outlook for the future. For several weeks this past fall, I hounded Mark by email for his assessment of conditions at year-end 2009 and his thoughts for 2010 and beyond. The resulting conversation, “Real Estate Issues: Questions and Answers with Mark Zandi,” offers some new insight that should help us understand where we are and where we may be headed in the months to come. My take: eat a few nuts, hoard a few but plant the rest.

Of course, it would be helpful to fully understand how we got into this mess in the first place. Two authors in this issue offer some guidance in that direction. First, in “The Morphology of the Credit Crisis,” CRE Hugh Kelly asks, “How could even a flawed product like some ... of the subprime residential mortgage loans have transmogrified into a debilitating epidemic affecting the entire credit market and the world economy?” Kelly argues that securitization helped to disguise the level of risk in debt portfolios, and that, while risk may be particular to each individual asset, what remains in a debt portfolio is “systematic risk... the risk that is common to all assets in the marketplace.” Kelly guides us through the subprime mortgage crisis and shows us how systematic risk was severely mispriced in the marketplace, helped by a “flawed performance by the rating agencies.” With an estimated $600 billion in subprime mortgage bonds outstanding at the end of 2007, subprime risk spread “widely across the world geography of investors.” The repackaging of subprime debt into CDOs helped to fuel the fire, as did consumers who traded their own mortgages like commodities. Kelley concludes that “some of our choices could be much better informed were we to commit to a broader understanding of decision-making, good and bad,” and that we pay dearly when we assume “that what goes up will continue to go up.”

Certainly, as Kelly points out, a huge factor in the crisis was the reliance by investors on debt ratings of mortgage-backed securities issued by the credit rating agencies, the Nationally Recognized Statistical Rating Organizations (NRSROs). In his article, “A Missed Assessment of Real Estate Debt Risk,” CRE Marc Thompson (with analyst support from Ian Broff) points to those ratings and offers suggestions on assessing risk in debt securities and their underlying assets. Thompson finds some of the roots of the current crisis in the patterns of debt issuance and default during the past decade as “commercial banks became incrementally aggressive over time to maintain market share, as CMBS was growing as a formidable competitor in the market.” As competition for market share grew, says Thompson, both credit rating agencies and “commercial bank regulators missed the assessment of real estate debt risk during this high debt growth period.” Thompson proposes an Accumulated Aggregate Debt Loss Probability Rate methodology to assess risk on MBS issuances and other loan originations. Had the credit rating agencies explored the risks in aggregate debt and assessed that risk more accurately, Thompson contends, commercial banks likely would have been more conservative in their lending practices and limited the growth in debt, possibly averting the crisis in the first place.

Among the consequences of the recession has been a dramatic decline in new building, commercial or residential. Many homebuilders having suspended actual building operations are holding land assets as they await more favorable conditions. But, a number of publically traded companies are beginning to see opportunity. As Brian Curry, CRE, points out in “Public Homebuilders Look to Build in 2010,” builder confidence bottomed out in January 2009 at levels not seen in more than 25 years. But, a number of publically traded homebuilders have since re-entered key markets with aggressive purchasing strategies, signifying growing optimism on the part of some builders going into 2010. Curry contends that with “limited new supply entering the market in the short term, builders who are able to acquire and control building lots in locations with limited supply have greater confidence in the ability to sell product.” Uncertainty continues, of course, with respect to the chief demand generator of employment growth and the supply implications of still-rising foreclosures. And, as Curry points out, “further softening in home prices and demand could put aggressive pro formas with narrow return criteria at risk, and should the housing downturn continue unabated, those same builder/buyers may become sellers once again.” Nevertheless, he suggests that “builders with rolling option lot take-downs will have the flexibility to react accordingly.”

Economic recovery will surely be a tough slog, as Mark Zandi points out. And, the first signs of an economic spring will probably be evident in energy- and technology-based economic regions, including the Bay Area and Austin. In other areas, recovery will likely follow national trends. We were curious how the economy and property...
markets were faring in the middle of the country, specifically in Chicago. So, we asked Bob Bach, CRE, of Grubb & Ellis and his colleague Simone Schuppan, to give us an update and an outlook from the Midwest. The “View from the Middle” gives us a rundown of the economy and the markets in the Greater Chicago area. “Market conditions are expected to soften further in 2010,” Back and Schuppan tell us, “before embarking on a recovery beginning in 2011.” Unlike the downturn of the early 1990s, they point out, the current “challenge” is not a matter of oversupply. Rather, it is a lack of demand. For the office market, Chicago has lost about 95,000 office-related jobs since late 2008, with only education, pharmaceuticals and government adding jobs in any measurable way. And, business uncertainty is likely to keep tenants from taking advantage of considerable available space, despite falling rental rates. Industrial markets have also seen falling lease rates, as much as five percent in 2009. That decline may slow as recent negative absorption of industrial space eases and, possibly, turns positive in late 2010. Retail vacancies have hit their highest levels in a decade, Back and Schuppan report, as new space continued to hit the market as the downturn began. Further, weakness in suburban housing markets have undermined performance among retailers in the suburbs, enabling retailers to shop for better, more upscale locations. In the more resilient apartment market, during the boom, “the focus was on high leverage and a well timed exit strategy because the profit was to be made when the property was flipped—the sooner the better.” Now, investors focus on first-year cash yields, as lower loan-to-value ratios and tighter underwriting standards prevail. And, a now-old story: Chicago faces a glut of new apartment completions along with a substantial number of condominium projects hitting the for rent market.

Travails in the commercial real estate market, and the potential for yet another blow to the economy have led policymakers to address the issue of distressed properties and, specifically, the matter of loan workouts in the sector. While the prospect of additional write-downs could severely undermine bank balance sheets, new guidelines proposed by the Fed, the FDIC and the Comptroller of the Currency could backfire, according to Robert Pliska, CRE, in “Going from Mark-to-Market to Mark-to-Make Believe.” Now, Pliska argues, federal regulators “seem to have decided to go along with the flow—to extend loans as long as they could…‘extend and pretend’ and ‘delay and pray.’ ” The results, he suggests, could be a greater lack of transparency and consistency—just the opposite of what new regulations intend—and could undermine transactions in the future by actually constraining credit to otherwise sound borrowers.

For resource reviews in this issue, we begin with Scott Muldavin, CRE, and his look at CRE David Lynn’s Active Private Equity Strategy, a “collection of market analyses, forecasts and strategy papers from ING Clarion’s Research & Investment Strategy (RIS) group.” Muldavin tells us that “Books on private equity real estate investment are rare, and even rarer is a book that spends less time defining terms and more time discussing the nuance and process of making private equity decisions. In this case, unlike in making sausage, the process is enjoyable to learn about.” It is interesting, as Scott points, out that Lynn is willing to include a chapter on the subprime crisis, its fallout and impact on commercial real estate, a telling moment on the fallibility of our forecasts and of our ability to recognize the severity of events before they hit us. There is enough from what Muldavin tells me about just that chapter to make want to read the whole book.

Another review comes from Julie McIntosh, CRE. McIntosh discusses George Friedman’s The Next 100 Years: A Forecast for the 21st Century. One may think we have had it rough in the last few years. But, if Friedman is right, we have some fairly significant social, political and economic tension coming down the road. Think “China, Japan and the Pacific Basin; Eastern Europe—Russia and the former republics of the Soviet Union; Europe with its recurring tensions; the Islamic world; and Mexico.” Critical labor shortages. Technology wars. Not necessarily pretty prospects. Definitely worth watching.

With this issue we welcome Mary Bujold, CRE, as associate editor. I look forward to another dynamic year as we continue to plan, improve and produce Real Estate Issues. I also thank (not nearly enough) Marc Louargand for his help and guidance as associate editor over the past year. And, thanks again to Carol Scherf, our managing editor, for her keen eye, her focus and her commitment to producing this premier journal.

I am waiting for hopeful signs of spring. Of emergent green shoots. Of life (and lifestyle) renewed. Of business better-than-usual. Of good times returned, or at least times better than we have endured these past two years.

All the Best,

PETER C. BURLEY, CRE
EDITOR IN CHIEF

“January, month of empty pockets! Let us endure this evil month…”
—SIDONIE GABRIELLE COLETTE
includes valuation, highest and best use analyses, market and feasibility studies, business plan counseling, acquisition and disposition strategies, litigation support, arbitration, investment strategy, and other advisory services related to residential development property.

HUGH F. KELLY, CRE, is an associate clinical professor of real estate in New York University's Masters Degree Program in Real Estate Investment and Development, where he has taught for 25 years. Currently, Kelly teaches Economic Analysis for Real Estate Markets, and Risk and Portfolio Analysis. He heads his own consulting practice, Hugh F. Kelly Real Estate Economics, and prior to 2001, was chief economist for Land and Agricultural Associates, where he worked for 22 years. Kelly has published more than 200 articles in industry journals, and last year published a paper on contemporary politics and economics titled “Judgment: Imagination, Creativity, and Delusion” in the philosophical journal Existenz. He is presently completing work on a Ph.D. dissertation on the subject “24-Hour Cities and Real Estate Investment Performance,” under the auspices of the University of Ulster, Northern Ireland.

JULIE M. MCINTOSH, CRE and 2010 CRE liaison vice chair, is chief investment officer of The Integral Group, a vertically integrated real estate development and investment management company based in Atlanta. Throughout her career, McIntosh has been an investor in a variety of real estate finance and investment vehicles, including construction lending; problem loan portfolio acquisition and resolution; CMBS origination and nonrated securitization; and credit default swap index hedges and generating investment ideas for both long and short equity portfolios, as well as some fixed income and credit default swap positions.

PETER C. BURLEY, CRE, is a real estate market and economics research professional with more than 20 years experience tracking, analyzing and making sense of national and regional economic conditions and trends in the real estate industry. Most recently, Burley was vice president of market research at Simpson Housing LLLP, in Denver, where he built that company’s research and market strategies program, guiding development and investment efforts and achieving investment results well ahead of industry benchmarks. Prior to his tenure at Simpson, Burley was director of research at Amstar Group Ltd., where he developed the company’s research and market strategies program, guiding development and investment efforts and achieving investment results well ahead of industry benchmarks. Prior to his tenure at Simpson, Burley was director of research at Amstar Group Ltd., where he developed the company’s research and market strategies program, guiding development and investment efforts and achieving investment results well ahead of industry benchmarks.

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MARC R. THOMPSON, CRE, FRICS, has been a member of The Counselors of Real Estate, headquartered in Chicago, for 11 years, and is a Fellow of the Institution of Chartered Surveyors, headquartered in London, since 2003. He currently serves as senior vice president of Bank of the West, Walnut Creek, Calif., (a BN Paribas subsidiary), where he manages a lending operations unit that provides both construction and term financing on senior housing and care properties. Thompson is a real estate investment professional with mortgage risk assessment expertise. He has served on many industry association boards, is an active writer, and studies complexity science to enhance his understanding of complex systems, social networks and economics. He holds a master’s degree in business administration, and has served as an adjunct professor of financial management studies at California State University, East Bay.

MARK ZANDI, PH.D. is chief economist and co-founder of Moody’s Economy.com, where he directs the company’s research and consulting activities. Moody’s Economy.com, a division of Moody’s Analytics, provides economic research and consulting services to businesses, governments and other institutions. Zandi’s research interests include macroeconomic, financial, and regional economics. Recent areas of his research include studying the determinants of mortgage foreclosure and personal bankruptcy, an analysis of the economic impact of various state and government spending policies, and an assessment of the appropriate policy response to bubbles in asset markets. In addition, Zandi conducts regular briefings on the economy. He is frequently quoted in national and global news outlets, and is the author of Financial Shock, an expose of the subprime financial crisis. Zandi earned his Ph.D. at the University of Pennsylvania, where he did his research with Gerard Adams and Nobel Laureate Lawrence Klein, and he received his bachelor’s degree from the Wharton School at the University of Pennsylvania.
REAL ESTATE ISSUES: Questions and Answers with Mark Zandi

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INTRODUCTION

Mark Zandi isn’t an easy person to catch up with. He’s very busy these days, always moving—sometimes in Washington advising policymakers, and sometimes at his desk at Moody’s Economy.com in West Chester writing his latest assessment of the economy or some part of it.

It’s really not surprising that he’s busy and in demand. Over the twenty-odd years that I’ve known him, I’ve learned more from Mark Zandi about how the economy works and how it influences my job and my business than I have from just about any other professional economist. Few economists can offer as clear an explanation of the complexities and implications of the economy’s various moving parts as Mark.

That’s why I needed to talk to him. I needed some clarity. 2009 was an unusually difficult year. The economy was hammered by intense crosswinds that blew through the financial markets, the housing market and the employment situation. Consumers and businesses alike have teetered. Many have collapsed. Little has been left unaffected by the economic storms that began in 2007 and intensified through early 2009. Recently, there are some troubling signs that commercial real estate, too, will suffer damage and could jeopardize the economic recovery itself. So, I wanted to ask Mark where things might be headed. Is it getting better? What might “better” look like? When will the jobs come back? What can we expect for this industry?

About the Participants

Peter C. Burley, CRE, is a real estate market and economics research professional with more than 20 years experience tracking, analyzing and making sense of national and regional economic conditions and trends in the real estate industry. Most recently, Burley was vice president of market research at Simpson Housing LLP in Denver, where he built that company’s research and market strategies program, guiding development and investment efforts and achieving investment results well ahead of industry benchmarks. Prior to his tenure at Simpson, Burley was director of research at Amstar Group Ltd., where he developed regional and metropolitan area investment strategies. Before moving to Colorado, he was lead researcher in regional economic analysis and real estate portfolio analysis at the Allstate Research & Planning Center in California. He holds a lifetime college teaching credential and taught urban economic geography and spatial analysis at the University of California for several years before entering the private sector. Burley speaks often to groups inside and outside the real estate industry on current and expected trends in the economy and real estate markets. He is a Counselor of Real Estate, a Fellow of the Homer Hoyt Institute and a national policy panelist for the National Association for Business Economics. Burley currently serves as editor in chief of the professional journal Real Estate Issues.

Mark Zandi, Ph.D. is chief economist and co-founder of Moody’s Economy.com, where he directs the company’s research and consulting activities. Moody’s Economy.com, a division of Moody’s Analytics, provides economic research and consulting services to businesses, governments and other institutions. Zandi’s research interests include macroeconomic, financial, and regional economics. Recent areas of his research include studying the determinants of mortgage foreclosure and personal bankruptcy, an analysis of the economic impact of various tax and government spending policies, and an assessment of the appropriate policy response to bubbles in asset markets. In addition, Zandi conducts regular briefings on the economy. He is frequently quoted in national and global news outlets, and is the author of Financial Shock, an expose of the subprime financial crisis. Zandi earned his Ph.D. at the University of Pennsylvania, where he did his research with Gerard Adams and Nobel Laureate Lawrence Klein, and he received his bachelor’s degree from the Wharton School at the University of Pennsylvania.
**LEADERSHIP ONE-ON-ONE**

*Real Estate Issues: Questions and Answers with Mark Zandi*

*During the fall, I finally managed to visit briefly with Mark, via email, to get an update on his discussions with The Counselors this past spring at the Waldorf in New York, and to understand what to expect next. He has graciously offered some additional insight into where we have been, where we are right now and where we might be heading in the coming months. What follows is a transcript of our electronic conversation.*

**One-on-One**

**BURLEY:** When we last met in New York this past spring, we were still in the midst of the longest, deepest, steepest, and most widespread recession since the Depression of the 1930s. Beginning in late 2007 and continuing, apparently, through at least the middle of 2009, we experienced a brutal retrenchment in economic activity that has lasted for nearly two years. The nation’s economy, as reflected in the GDP numbers, declined at an annualized 5.4 percent in the fourth quarter of 2008, 6.4 percent in the first quarter of 2009 and about 1 percent in the second quarter. Finally, in the third quarter of 2009 we saw GDP post a gain of just under 3 percent. For all of 2009, though, Moody’s Economy.com expects GDP to post a decline of about 2.5 percent. And, the outlook for 2010 is for rather tepid growth of just over 2 percent.

Total employment continues to contract and is down more than six million jobs since the beginning of the recession (more than three million so far this year alone). Unemployment continues to track higher, with many analysts (including Moody’s Economy.com) expecting joblessness above 10 percent through much of 2010, even rising as high as 11 percent by next summer. Foreclosures continue. Weak home prices have undermined tax revenues, wreaking havoc on local and state budgets. And, importantly, consumer spending remains subdued, despite government supports like “Cash for Clunkers.”

There do appear to be some promising trends, of course. Housing appears to have hit a bottom of sorts, although there are some questions as to how long we may remain near or at that bottom, even as tax credits for first time buyers—and, now, repeat buyers—are extended into 2010. Home prices keep falling, though. The stock market is clearly higher, if at times tentatively, from the depths of last spring. Manufacturing indicators are somewhat improved, with the ISM survey reaching above 50 for the past few months, suggesting that recent inventory draw-downs have boosted production. Consumer demand appears modestly improved, at best, however, perhaps for the long term, with non-auto retail sales posting only small gains in the most recent “post-Clunkers” reports. And confidence has been less than inspiring.

For promising signs of economic recovery, you suggested in New York that we watch for three indicators: 1) the TED-spread to fall into the 55–75 bp range; 2) a decline in unemployment claims; and, 3) an upward shift in consumer confidence. I note the TED-spread has dipped to its lowest level since before the subprime shock in 2007, and that should be comforting, as long as lenders are expressing a concomitant willingness to lend. I also note that unemployment claims appear to have eased, although they remain high, and continuing claims remain over six million, which is a pretty high level. Confidence improved but still hovers near the same levels we have seen since May.

Those trends, which are clearly better than they were at the beginning of 2009, or even last spring, do offer some hope that the economy may, indeed, be showing signs of life—dare I say “green shoots?” Are they still just “green shoots?” What are your expectations now? Are we on a trajectory for real recovery? If so, what might that recovery look like over the next year or two?

**ZANDI:** The Great Recession has given way to a tentative and fragile economic recovery. I expect the recovery to evolve into a self-sustaining economic expansion, but that won’t be until 2011. The recovery will be a slog throughout much of 2010; at times we will feel pretty good about how things are going but, at other times, we will feel uncomfortable.

Monetary and fiscal stimulus will continue to support the economy and an improving global economy will fuel better exports. Very weak hiring by still cautious and credit-constrained businesses, the ongoing foreclosure crisis, commercial real estate mortgage defaults, and a poor state and local government fiscal situation will remain as significant weights on the recovery for much of 2010.

**BURLEY:** The stock market keeps climbing. Is that a bet on recovery—that conditions might improve sooner rather than later?
ZANDI: Yes, the stock market is correctly expecting the recovery to gain traction and to avoid sliding back into recession. However, the robust recent gains in stock prices do seem to overstate the economy’s prospects for 2010, but this may be a reflection of the better conditions for the larger companies whose stocks are publicly traded. Small and mid-sized firms are not doing nearly as well. Big businesses are benefiting from their global links and the weaker dollar and their greater access to credit. The stock market may not be as reflective of the prospects for the broader economy as it has been in times past. It is also important to note that despite the fact that stock prices are up, they are still some 25 percent below their 2007 peak; stock investors don’t expect the economy to come roaring back.

BURLEY: I’d like to talk about the employment situation, as it has been near and dear to my own heart for much of 2009. The latest (November) outlook survey from the National Association for Business Economics (NABE) shows that the majority of economists expect net employment losses to bottom out in the first quarter of 2010, but that a full recovery of the jobs that have been lost might not be clear until 2012. Unemployment, according to the survey, “…will remain stubbornly high…” as well. Given that you see a self-sustaining recovery coming perhaps in 2011, do you agree with the NABE employment outlook? What is your outlook for job growth and unemployment over the next couple of years—will it get much worse before it gets better?

ZANDI: Yes, I agree that the job losses will end early in 2010 and for meaningful job growth to resume by year-end 2010. Unemployment will rise through next summer, peaking as high as 11 percent. Full-employment, which is consistent with a 5.5 percent unemployment rate, isn’t likely until 2013. Even this depends on continued, very aggressive policy support; the Fed needs to keep rates at near zero throughout 2010, and fiscal policymakers need to come forward with more temporary tax cuts and spending increases.

BURLEY: And home sales. The National Association of REALTORS’ said existing home sales rose 10.1 percent in October, the biggest monthly increase in a decade. Clearly, federal programs to lower mortgage rates and homebuyer credits are luring more buyers into the market. And, prices are off 7 percent from a year ago and continue to fall, with many analysts expecting prices to hit another low in 2010, falling an additional 5–10 percent. Certainly that helps affordability. But, it also surely has a negative effect on homeowner equity and wealth. What are your expectations for the housing markets?
LEADERSHIP ONE-ON-ONE

Real Estate Issues: Questions and Answers with Mark Zandi

ZANDI: Home sales and housing construction have hit bottom, but house prices will suffer another leg down. Based on the national Case-Shiller House Price Index, I expect prices to fall 38 percent peak-to-trough, with the trough in the third quarter of 2010. Prices are down 30 percent through the third quarter of 2009. Prices actually rose a bit this past summer as foreclosure sales abated, with mortgage servicers trying to figure out the HAMP loan modification plan. As they determine that many homeowners won’t qualify for the plan, foreclosure sales will pick up by early next year. The key statistic for determining when house prices hit bottom is the share of home sales that are distressed; foreclosure or short sales. This share will rise in early 2010, and thus house prices will fall further.

BURLEY: Are there other signs of recovery—nationally or regionally—that you see or that we might want to watch for?

ZANDI: Commercial and industrial lending would also be a good indicator to watch. C&I loans outstanding continue to slump, indicating that credit remains tight for many businesses. This is limiting their ability to expand their businesses and resume hiring. If C&I lending stabilizes that would be a positive sign; if it begins to increase, that would be a clear indication that a self-sustaining economic expansion has begun.

BURLEY: How about regionally? In the past, you have mentioned that signs of recovery might be evident earlier in areas with heavier concentrations of technology and healthcare. Does that still seem to be the case? And, will a Healthcare Reform bill change the map at all? What about regional (renewable or otherwise) energy markets? Would a “Cap and Trade” energy bill change that outlook?

ZANDI: The upper Midwest economy, which is more dependent on agriculture and energy, has already begun to recover strongly, as are parts of the Northeast economy driven by healthcare, educational services and the federal government.

Tech centers and global gateway city economies are set to turn next. Examples of these cities include Raleigh, North Carolina; Austin, Texas; Seattle; and San Jose, California.

Some industrial centers are also doing better, although this is a bounce off of extraordinarily depressed levels. Healthcare reform will, at the end of the day, not change the map, at least not in the near future, nor will energy legislation which is increasingly unlikely to pass through Congress anytime soon.

BURLEY: Do our little “green shoots” need yet more nurturing (i.e., Stimulus) to make the recovery stronger and more durable?
ZANDI: Yes, I think it is important for the Federal Reserve and fiscal policymakers to remain aggressive in supporting the economic recovery. This means that the Fed should maintain a zero funds rate and fiscal policymakers will extend and expand various parts of the expiring fiscal stimulus.

It is even reasonable to expect the Fed to increase its credit easing efforts and for fiscal policymakers to consider such things as a job tax credit if the job market remains weak and the recovery threatens to unravel back into recession.

Recession risks remain uncomfortably high, but more importantly it is very important to guard against going back into recession. If the economy does fall back into recession, it will be very difficult to get out given double digit unemployment, the zero funds rate, and the $1.4 trillion budget deficit in the just-ended 2009 fiscal year.

BURLEY: Looking at our own business, commercial real estate is facing a looming credit crisis. According to a second quarter 2009 report from Deutsche Bank, deterioration in commercial property loan performance is accelerating—the total delinquency rate reached 4.1 percent in June, 2.2 times higher than in March 2009, and 3.5 times higher than in December 2008. Deutsche Bank expects delinquencies to rise even further over next 24 months, overwhelming servicers with some 2,100 delinquent fixed-rate loans amounting to roughly $28 billion.

The report projects that losses could reach 4.3–6.3 percent of the outstanding CMBS universe, roughly $31–$46 billion. It also estimates that roughly $400–$450 billion in CMBS would not qualify to refinance were they to survive until maturity. More than $2 trillion in commercial mortgages, including CMBS, bank and life company portfolios, will likely mature between now and 2013. Debt deterioration appears to have accelerated across all property types. Even small, expected improvements in rents and vacancy rates appear insufficient to offset the scope of the problem, at least in the near term (of 24 months or so). And, with demand fundamentals looking weak for the foreseeable future, and valuations taking a huge hit from their peak in 2007, the majority of those loans might not qualify for refinancing sufficient to retire the existing debt. Does the deterioration in commercial mortgage credit represent a threat to recovery in the broader economy?

ZANDI: Yes, the commercial real estate bust poses a significant threat to the tentative recovery. Not only does this mean that commercial construction will continue to weaken, a direct weight on economic activity but, more importantly, it will result in hundreds of bank failures. While small banks are at most risk, these banks are vital providers of credit to small businesses which are vital to job creation. Without credit, small businesses are unable expand their operations and the job machine will not engage.

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Figure 3

Rising Foreclosure Sales Will Undermine Prices

Index: January 2006 = 100

Source: Moody’s Economy.com
BURLEY: Do you have an outlook with respect to how the CMBS/commercial mortgage situation might play out?

ZANDI: Defaults will continue to mount, but probably won’t be quite as severe, as policymakers are responding by providing different ways for mortgage owners to show some forbearance to property owners.

The FDIC’s recent guidance to banks allowing them to break apart loans into good and bad loans is an example of this. I also suspect that commercial credit will begin to flow more freely once employment, and thus the absorption of space, stabilizes. Commercial real estate will be a weight on the economy, but will not push back under, at least not on its own.

BURLEY: Clearly, the situation has forced the property markets into a defensive crouch. My personal view is that we will probably have to deal with this problem one property or portfolio at a time. Lenders are going to have to become more confident that the long term prospects in the property markets are good and likely to get better. And, property owners and investors are going to have to become a bit more realistic in their expectations.

What is your outlook for commercial property markets, in terms of property fundamentals and performance? Is there a particular segment (office, multifamily, retail, etc.) that you see recovering sooner? Where? East Coast? West Coast? Southwest?

ZANDI: I don’t think a particular property type and/or region will lead the way to recovery. Instead, investors will have to look metro area by metro area and property type by property type. Investing will be much more difficult than in times past when simply investing in the Sunbelt was a virtual slam dunk.

ENDNOTE

A CONVENIENT DEFINITION OF A BUBBLE might be “a flimsy and temporary spherical structure, with nothing on the inside.” How bubbles have occurred throughout history has been the subject of quite a few instructive and frequently entertaining narratives. It is an amusing story line, until it strikes close to home. Then we can almost hear a collective groan of Homeric proportion, “Doh!” (O.K., so that’s Homer Simpson, but there are suddenly legions of financiers now feeling like that iconic schlub of an Everyman.)

How could we have gotten so out of control? In particular, how could even a flawed product like some (not all, by any stretch) of the subprime residential mortgage loans have transmogrified into a debilitating epidemic affecting the entire credit market and the world economy?

I am reminded of a study of the United States real estate banking industry I did in 1986, when the boom of the 1980s was ending and the savings and loan sector was imploding. I interviewed the senior vice-president/credit risk management of one of the nation’s largest banks whose desk was piled high with file folders of loans in default. “How did it happen?” I asked him. “It seemed like a good idea at the time,” he answered.

The sad fact is that we have experienced so many “financial crises” in the past two decades that we must suspect a more fundamental cause than simply “event risk” or “product failure.”

As illustrated in Figure 1, we have had the Resolution Trust Corporation (RTC) crisis, then a related capital crisis in the early 1990s when banks systemically had inadequate capital sufficiency by Bank of International Settlements standards. This was followed by a series of “derivatives crises” associated with the collapse of the Mexican peso in 1995, and then the Thai baht in 1997, leading to the fall of Long Term Capital Management. The economy was weakened again by the dot-com collapse in 2000, with the consequent shakeout in the telecom industry in the early years of the just-ended decade. Some have argued that we are in the midst of a high-risk, low-probability event, but the frequency of recurrence betrays some systemic weakness rather than a “fat tail” to the probability distribution.

Confession, they say, is good for the soul, and I must admit that I was one of those who considered the subprime mortgage defaults originally as a product failure rather than an industry failure. After all, in August 2007, subprime defaults were a vanishingly small percentage of...
the U.S. residential market (see Figure 2). The total amount of subprime mortgage loans outstanding was $1.5 trillion, even after several years of explosive growth, and delinquencies among subprime loans was 15 percent—indicating trouble with approximately $195 billion of this risky debt. Losses appeared to be "containable" within the context of the $10 trillion residential mortgage system. My turn to say, "Doh!"

**METASTASIS**

By now, the basic story of the contagion that transmitted the risk of a rather limited amount of ill-advised U.S. housing debt through the financial markets to the point where the entire global economy was gripped with panic is fairly well known.

Like higher-quality forms of residential debt, subprime mortgages were packaged into Residential Mortgage-Backed Securities (RMBS). To a great extent, RMBS of this type were issued as so-called "private label" securities, since subprime mortgages were "non-conforming" loans under Fannie Mae and Freddie Mac standards, and thus not eligible for guarantees from the Government Sponsored Enterprises (GSEs). As early as March 2006, the Bank of International Settlement had noted that the securitization of non-prime housing loans represented an important shift in risk, since non-agency securities carried risks of both prepayment and default risk. Investors in Agency (GSE) securities were guaranteed against default risk. Nevertheless, from 2000–2005 the proportion of non-agency RMBS issuance rose from a 25 percent market share to approximately 56 percent. Private label RMBS, in other words, was squeezing out Agency securities, as non-agency issuance broke above $1 trillion. Moreover, the credit quality of the private label securities was dropping. The high-risk subprime component grew 20 percent per year after 2003. Subprime pools constituted 80 percent of non-agency RMBS issuance by 2006. In keeping with an increasingly integrated global capital market, offshore holdings of U.S. mortgage debt increased fourfold in the fifteen years beginning 1990, and were above $1 trillion at the middle of the past decade.

What were the attractions of the non-agency debt for investors? Yield and volume.

The two factors are, unquestionably, related. The amount of money seeking investment grew monumentally over the course of the early 21st century, a phenomenon that has been called a Niagara of Capital. Anthony Downs of the Urban Land Institute and the Brookings Institution identifies a large number of sources of increased capital over that period: the economic expansion of nations such as China, India and other Asian nations; surplus savings accruing because of worldwide demographic patterns, evidenced in the emergence of sovereign wealth funds; the startling rise in U.S. corporate profits that soared from 7.1 percent of GDP in 2001 to 13.4 percent in 2006.
The arbitrage of the low Japanese lending rate of 1.5 percent into risk-free U.S. Treasuries at 4.5 percent; and the rising profits of oil-producing countries, denominated in dollars. U.S. investments of all kinds, including real estate, were the largest potential target market.10

The law of supply and demand accurately predicts what occurs when huge levels of new demand impact a market. Asset prices rise in the short run, and the rise in price ultimately gives rise to an increase in the supply of product. So it was in housing finance. Rising asset prices are reflected in reduced yields. Yet investors of all stripes—pension funds, insurance companies, private equity funds, hedge funds, sovereign wealth funds, banks, mutual funds—clamored for enhanced returns. The securitization market, through the bundling of subprime mortgages, was able to offer such yields since the underlying subprime mortgages typically featured an interest rate structure that on a yield-to-maturity basis was 300 basis points higher than a prime mortgage loan.11

Regrettably, that higher yield was not appreciated for what it was: a significantly higher risk premium reflecting the loan’s greater \textit{ex ante} default exposure. Subprime loans were extended to borrowers not qualifying for conventional mortgages, because of poorer credit histories, lack of income verification, or excessive leverage in the form of low or no down payments of equity in the home purchase.

Securitization helped disguise that level of risk in at least two ways. The pooling of the mortgages afforded the illusion of diversification. Diversification is the foundation of modern portfolio investment theory and is based on the sound premise that the combination of diverse assets can reduce the level of risk to a level less than the weighted average of the risk in the individual assets. Most investors understand the rudiments of diversification, but not many attend to the limits of its application. That limit is that portfolio construction, rigorously executed, can virtually eliminate idiosyncratic risk, that is, the risk that is \textit{particular} to each individual asset. But what remains is systematic risk, that is, the risk that is \textit{common} to all assets in the marketplace. For subprime loans, systematic risk is very high. And as is now apparent, that systematic risk was severely mispriced by the purchasers of RMBS with substantial weights in subprime mortgages.
The second important element masking risk was the flawed performance of the major rating agencies in evaluating expected losses in the waterfall of payment tranches in RMBS. Analyses from IMF economists and others offer details about why the rating agencies' assumptions were implausibly optimistic, details that were known by market participants long before the crisis emerged. In some ways, it is just common sense to question how high-risk mortgages can, when bundled as a security, achieve a capital structure where 80 percent of the mortgage bonds are rated AAA, and 95 percent are rated A, AA, or AAA.

As a relatively new product, the subprime RMBS looked back on a period of low defaults and rising home values. Based on that thin recent history, the rating agencies modeled the assumption of a roughly six percent default rate. Investors could have resisted that assumption and the resulting underestimation of default incidence and severity of loss. But the investors, especially those with fiduciary requirements demanding an “investment grade” rating as a condition for committing capital, had a significant incentive—in the form of incentive compensation and management fees—to simply accept a favorable rating for an investment that would boost their overall yield (at least in the short run). At the end of 2007, an estimated $600 billion in subprime mortgage bonds were outstanding, spreading risk widely across the world geography of investors. But amazingly, this was just the start of the path of contagion. Subprime loans then were repackaged in collateralized debt obligations (CDOs), described in financial engineering jargon as asset-backed synthetic securities. Issuance of CDOs more than tripled from 2004 ($157 billion) to 2006 ($521 billion), before being caught in the shutdown of the credit markets that the CDOs themselves helped to cause [see figure 3].

CDOs are commonly issued by an investment bank (all of which have now been re-structured as commercial bank holding companies in order to be eligible to participate in the Federal Reserve’s “quantitative easing programs”). The standard game plan was to create a special purpose entity (SPE) to acquire assets like mortgage loans, auto loans, credit card receivables or corporate loans. Most often, the SPE would be legally formed outside the U.S., to avoid U.S. federal income tax. The SPE’s activity was limited to “investing” rather than trading or dealing in U.S. securities. The SPE would then issue bonds, with a sequential structure of priority for cash flows and credit losses.
similar to RMBS. Like the mortgage bonds themselves, the CDOs would be rated by tranche. And, like the mortgage bonds, the CDO was an instrument for redistributing credit risk from the originator to other investors. Investment banks earned substantial fees while retaining (they thought) little residual liability. At the same time, the financial incentive for the issuer was a function of volume, rather than the quality of the loans themselves. From the standpoint of the investors, the rule was, or should have been, caveat emptor.

A CDO primer issued by Nomura Securities in 2004 was very candid about the typical capital structure of a CDO: a pool of underlying bonds with an average rating of single-B-plus (by definition: speculative grade; poor credit quality) would be sliced and diced and find a majority of its derivative securities bearing investment grade ratings of triple-B or higher, with the largest share in the AA and AAA categories. This was financial alchemy of the most mysterious kind. Nomura specifically attributes the ratings transformation to “diversification,” explaining that the ratings agencies attributed constant correlations of 0.3 within any ABS sector (such as residential mortgages) and 0.1 between ABS sectors (such as mortgages and auto loans). Such an assumption makes for enormous portfolio risk reduction, as a matter of simple mathematics, justifying the Lake Wobegon effect (where all the children are above average).

From the point of view of CDO sponsors, however, there were two driving motivations. One was the arbitrage that could be exploited between the CDO yields and the underlying debt. This result was to boost earnings. The second was that the SPE could remove assets from a bank’s balance sheet, thus reducing its requirement for regulatory capital. That freed up capital for other uses and, not coincidently, helped boost the value of the bank’s common stock equity. All from the magic of financial alchemy.

But the experiment was far from finished. If subprime loans could be securitized, and those securities used as the basis for CDOs, the CDOs themselves could be conceived of as the basis for an even more derivative security—the CDO-squared (CDO²). Between 2004 and 2008, $762 billion in CDO issuance was collateralized by structured finance instruments, qualifying as CDO². This was 57 percent of the entire global CDO issuance over that period.

Again, there were ingenious variations on the theme. For simplicity’s sake, though, a common approach was to separate the cash flow from the CDOs comprising the CDO² from the market value of the security as an instrument. Thus, the scheduled payments would be isolated and ownership of the rights to the cash flow transferred to a special purpose vehicle, with risk of loss divided in reverse order of priority. These were the larger portion of the CDO universe, between 70–78 percent of issuance between 2004 and 2008, according to the Securities Industry and Financial Markets Association (SIFMA).

The remaining 22–30 percent were in “synthetic funded” or “market value” derivatives.

Synthetic CDOs do not own cash assets, but gain credit exposure via the use of credit default swaps. In this swap, the CDO receives cash payments in the form of premiums, in return for agreeing to assume the risk of loss in the event of default or other credit event. Issuance of synthetic funded CDOs jumped from $37 billion in 2004 to approximately $65 billion in both 2005 and 2006, but this market shut down abruptly in mid-2007 as subprime defaults began to take a toll. Market value CDOs, however, which were essentially trading instruments that sought to achieve capital gains from the frequent sale of collateral assets, burgeoned even as the financial crisis deepened.

In 2004 and 2005, market value CDO issuance was just $650 million and $620 million, respectively. In 2006, that soared to $43.6 billion, and in 2007 to $92.8 billion, of which $44.1 billion (47.5 percent) was floated in the second half of the year, after Bear Stearns had announced the failure of two of its hedge funds that were heavily invested in CDOs based on subprime mortgages.

What were the buyers thinking? At this point, markets had already reacted strenuously by constraining overall credit availability, beginning a “flight to safety” that was a mere glimpse of what was to come roughly a year later. But still many rushed to buy this dubious paper.

The growth of the credit default swap (CDS) market, which had critical interactions with the CDO and CDO² markets, was even more astronomical than the swift rise of subprime mortgage, private label RMBS and CDO instruments. The first CDS was fashioned by strategists at JPMorgan Investments in 1995, and these swaps had grown to an estimated $43 trillion market in 2007, and possibly as much as $62 trillion in 2008. These are estimates since there is no central clearinghouse for credit
default swaps, and the exact size of the market is unknown even at the present time. This estimate, if at all accurate, is a multiple of the world’s equity markets’ capitalization. As a point of comparison it might be noted that world GDP in 2009 has been computed at $54.9 trillion dollars by the International Monetary Fund.17

Following the glare of the spotlight on American International Group (AIG), where the CDS product failed so spectacularly, most of those involved in real estate investment—whether securitized or not—understand that while CDS is often explained as an “insurance-like product” it lacked two key elements of what most recognize as insurance. One of the missing ingredients was a sound actuarial basis for making estimates of expected loss incidence and severity. The second missing ingredient was cash reserves set aside to fund such losses in the event of their occurrence. CDS contracts were negotiated instruments, not established risk products where premiums could be based upon hard historical evidence from a broad and statistically reliable sample of default experience.18 And, interestingly, though sold as insurance, CDS were called swaps precisely to avoid the statutory reserving requirements that traditional insurance products must satisfy.19

Many—most, I would suggest—were surprised to find that AIG’s primary financial products regulator in the U.S. was the Office of Thrift Supervision (OTS). In a shrewd example of regulatory arbitrage, AIG was actually able to select OTS as its regulator by virtue of its purchase in 1999 of a small savings and loan company, Standard Pacific Savings. The OTS has subsequently acknowledged that it did not have the resources or expertise to oversee the complex and worldwide risks that AIG was taking in its financial products division. But, incredibly, the European Union’s regulators in January 2007 certified OTS as the appropriate supervisor for AIG’s business line managing credit risk. As the Roman satirist Juvenal wrote two millennia ago: Quis custodiet ipsos custodes? (Who will guard such guardians?)20

Pushing the envelope even further, AIG used ratings arbitrage to enhance its CDS business. Until the credit collapse, AIG was one of the few companies in the U.S. that had a AAA rating, indicating a likely default rate of virtually zero in the eyes of the ratings agencies. By providing credit default swaps covering securities backed by subprime mortgages, it placed those securities under the mantel of its AAA rating—effectively providing investors with the assurance that these very weak-credit mortgage securities would be backed by AIG’s enormous resources in case of default.21 Cloaking subprime RMBS with AIG’s gaudy rating calls to mind Hans Christian Andersen’s classic tale, “The Emperor’s New Clothes,” in which, remember, the emperor’s tailors were simply swindlers playing on royal hubris and public sycophancy.

In all this, behaviors betrayed insatiable appetite, a hunger for more that drove homebuyers, lenders, financial institutions and investors well beyond the bounds of prudence.22 When markets are gripped by such a dynamic, the result may well be called a mania, or a bubble, euphoria or irrational exuberance. This is merely labeling, though. To understand this phenomenon more deeply, it helps to ask if there is some underlying cause, shared by the variety of market participants, that helps explain their common behaviors. There is such a fundamental driver, I believe, and it goes by the ordinary and innocent name of growth.

THE GORDON DIVIDEND GROWTH MODEL

One of the simple and powerful equations underlying presumptively rational market pricing is the Gordon dividend growth model23 (known in financial theory as the GGM). In its simplest form, that equation is stated:

\[ E_p = \frac{DIV_i}{r-g} \]

Essentially, this model says that the expected price of an asset is equal to its periodic yield, divided by its rate of return minus the expected rate of growth. This means that, all other things being equal, the higher the expected rate of growth, the greater the multiplier on income. (Since the rate of return is in the denominator, the lower \(r-g\) is, the greater the quotient in this formula. And, of course, a higher the growth rate (as a subtrahend) the lower the term \(r-g\) will be.) The dynamics of the marketplace, especially for public companies but for private firms seeking capital as well, thus favor entities with strong growth potential by rewarding them with higher values per unit of income.

Few would quarrel with the assumptions of the GGM. Naturally, capital will flow to assets with the brightest future. The fundamental principle of anticipation says much the same thing in positing that “value is the expected future benefits of ownership” for any asset, namely, the cash flow it provides and the expected eventual selling price.
INSIDER’S PERSPECTIVE
The Morphology of the Credit Crisis

It is worth specifying how growth is actually achieved, though, if we wish to understand the concrete workings of the GGM in practice. A business can grow its bottom line in three critical ways:

a) Increasing market size and share;
b) Increasing margins;
c) Increasing price.

All three elements were in play in the housing finance market earlier this decade. (They are still at play, in fact; the GGM is not abrogated by the fact of recession, falling prices or stressed profit margins. It just means that the numerical values plugged into the model change!) Let’s take a quick look at how these three elements were at work.

MARKET SIZE AND SHARE

One way that growth can be achieved for any entity is by expanding its market footprint. That is especially powerful when the market itself is getting bigger, that is, when the rules of competition are not pegged to a zero-sum game. In housing finance, the increase in the U.S. homeownership rate was a powerful force. In 1988, 63.8 percent of American households owned their dwelling place. By 2004, that figure had increased to 69.0 percent.

Meanwhile, of course, the U.S. population had continued to grow in absolute terms (by more than 49 million persons), so even if the homeownership rate had remained stable there would have been demographic demand for approximately 19.6 million additional housing units. Beyond that sheer population pressure, though, the increase in the homeownership ratio caused the size of the pie to grow by a further 6.1 million units. Obviously, the numbers were solidly on the side of the housing industry: homebuilders, real estate agents, mortgage brokers, bankers, and all those tied to the housing business, including furniture and appliance manufacturers, landscapers, and retailers like Lowes and Home Depot.

Thus far, those appear to be the bare facts. But we will want to understand more about the increase in homeownership. For instance, it was during this period that the baby boom generation (born 1946–1964) surged into the home-buying stage of life. The youngest of the boomers turned 25 in 1989 and 40 in 2004. It would be tempting to claim that marketing to the boomers was overly aggressive and was a factor in the deteriorating average quality of the purchasers/borrowers inflating the homeownership rate. But the facts do not bear out this hypothesis. The data show a smaller increase in homeownership share for the under-35 age cohort (3.5 percentage points from 39.6 percent in 1988, to 43.1 percent in 2004) and the 35–44 years-of-age cohort (66.9 percent to 69.3 percent, a rise of 2.4 percentage points), compared to the increase in the U.S. totals (5.2 percentage points, from 63.8 percent to 69.0 percent).

If not sheer demography, there were myriad other sources of economic pressure for increased home buying. Household resources were increasing as the stock market moved from a level of the Dow Jones Industrial Average at 1,988 at the start of the year 1988 (not a typo, just an amazing coincidence) to 10,500 at the end of 2004; and the monetary measure, M-2 (which counts funds in savings accounts, small-saver certificates of deposit and retail money market accounts) rose from $2.1 trillion to more than $5 trillion, contrary to the widespread presumption that Americans were meager savers over this period. Moreover, there were powerful regional shifts occurring as population shifted from the Northeast to the South and West. The homeownership rate in the Northeast did rise 3.6 percentage points from 1988–2004, but this was lower than the increase in the South (4.8 percentage points) and the West (5.0 percentage points). And, with the population shifts came greater political power and continued favorable tax treatment for homeowners in the form of mortgage interest and property tax deductibility from federal income taxation, power epitomized by the emergence of the soccer mom as an electoral polling category. A combination of such factors helped keep the homeownership rate rising.

In the context of generalized growth, though, an increase in market share is, ironically, an especially difficult task. Competitive firms all see the expansion in the customer base and can be expected to respond to increased demand. To gain an above-average rate of growth in an expanding market means a sustained commitment to aggressive sales. Increasing the value of the enterprise in such an environment is a daunting task and so alternative strategies for improving sales will be adopted. That may involve taking on more risk and, if so, this places special burdens on management to evaluate the firm’s capacity to deal with the added risk. This, we have learned, is not a universal management skill.

The track record of the largest firms—that is, those successfully moving to the top of the market size/share pyramid—has been, frankly, questionable. Countrywide Financial was the nation’s largest home mortgage lender. Lehman Brothers
and Bear Stearns were, respectively, the fourth and fifth largest investment banks. AIG is still the world’s largest insurance company. Citigroup and Bank of America are two of the nation’s three largest banks. And so it goes.

**INCREASING MARGINS**

In the financial management of a firm, laser-keen attention to earnings and to the structure of the balance sheet provides another avenue to improving r-g. Operationally, mortgage lenders effected a tremendous cost reduction by adopting automated underwriting as standard procedure. Not only was the productivity of loan officers multiplied by reducing the amount of interviewing and credit investigation required under the old system of reviewing mortgage applications, but the primary reliance on FICO scores took out that pesky element of personal subjectivity known as judgment. The term “relationship banking” took on a rather quaint ring, suggesting the nostalgic era of Capra’s “It’s a Wonderful Life.”

The number of mortgage brokers in the U.S. increased from approximately 30,000 in 1990 to 147,000 at its peak in early 2006 (the number is now back down to 43,000). As commission-based contractors, mortgage brokers are a highly cost-effective field force for lenders. The huge rise in the number of such brokers made the early 2000s an especially competitive era. In order to make a living in this environment, brokers were incentivized to originate a large number of deals and to push toward the highest possible loan amount. This set of incentives made them behave in ways that may have differed from the behavior of salaried loan officers within financial institutions. As far back as 2001, an AARP consumer survey had revealed that mortgage brokers were twice as likely as bank lending officers to originate subprime loans.24 Harvard’s Joint Center for Housing Studies observed that regulatory oversight had not evolved as quickly as industry practices.25 “Churning” of refinancing, high upfront fees, asset-based lending without regard to income-capacity to repay, and “push marketing” are all practices raising concerns, but are margin-enhancing in the short run.

Originate-to-distribute models enabled financial institutions to book lucrative fees at every stage of the housing finance process, from the home loan itself through the entire chain of securitizations and derivatives. This improved earnings, while assuring that the balance sheet would not be burdened with long-term mortgages. The ability to arbitrage risk in the secondary markets and in derivatives also lowered the cost of funds and improved margins. The very existence of robust secondary securities markets reduced the illiquidity premium embedded in the mortgage interest rate, lowering costs for everyone. The ability to create off-balance-sheet special purpose vehicles meant that capital reserve requirements could be mitigated, again raising overall margins on measures such as return on assets. From the standpoint of maximizing the impact of r-g, this was all good.

It does go without saying that consumers learned to play the margin game pretty sharply themselves. The automation of the mortgage process commoditized the industry and had the additional effect of detaching borrowers from lenders as well. Consumers seeking mortgage credit shopped for the best available deal. They learned to see their mortgage as a “tradable instrument” able to be refinanced frequently as interest rates and housing prices shifted in their favor. They learned that fees could often simply be added to the principal amount of the loan, and that the required level of down payment was definitely a negotiable figure. And, most of all, they discovered that so eager were lenders to do business, constraints that formerly discouraged them from seeking a mortgage loan might not apply any longer: a situation apotheosized by the NINJA (or “no-doc”) loan—No Income, No Job or Assets? No problem!

On the business side of things, the improvement in margins worked through the GGM as predicted. The S&P Financials Index rose from 372 in May of 2004 to 508 in February 2007, a 37 percent increase in 33 months. It worked—until it didn’t: by March of 2009, this index was down to 82.

**INCREASING PRICE**

One of the classic definitions of inflation (attributed to Milton Friedman) is “too much money chasing too few goods.” Inflation has often been viewed as favoring real estate assets, and there remains considerable truth to that perspective—when it is understood clearly. Over the long term,26 in income-producing properties, rents must rise to reflect the inflation-influenced expenses of operations. Likewise, the replacement value of properties—which reflects inflation in the cost of building materials and labor—will rise over time, since during times when market value is lower than replacement cost, no building will occur and prices will rise to reflect the relative scarcity of new commercial properties in the marketplace. In housing, too, prices will reflect changes in household incomes as well as the impact of the cost of production of new homes.
Nevertheless, the mispricing of assets is constitutive of a bubble, almost as a matter of definition. Scholars and industry professionals are now examining the relationship of asset pricing to general inflation with renewed interest.27 The separation of asset values from underlying economic fundamentals in housing was identified relatively early by Robert J. Shiller in 2005, long before the bubble reached its maximum magnitude.28 In the world of stocks, the ability to grow earnings based on rising home prices affected a multitude of firms in housing, in housing-related finance, in retailing, and even in manufacturing.

There is a kind of “fallacy of serial correlation” that encourages the unwary to anticipate that what goes up will continue to go up. This is also popularly known as the Great Fool Theory: I might be a fool to pay this price, but when I want to sell there will be an even greater fool who will pay an even higher price. So stated, it seems almost laughable. (Laugh until you cry.) But such an expectation was behind tulip mania in the seventeenth century and the South Sea bubble in the eighteenth century,29 as well as the dot-com bubble and the current financial crisis in our own times. An inflated expectation of price increase translates, in the GGM, into an unsustainable inflation in asset prices. We are now living through the painful correction of the resulting excesses.

CONCLUSION
Having stepped back and examined the metastasis of subprime mortgage lending into a global credit crisis, and having suggested that the bias toward growth drives capital pricing in all asset markets, whether in boom times or busts, we must still pose a soul-searching question as to how we have arrived at the present sorry condition.

It is clearly not for want of technical skills or analytical capabilities that we traveled down the road to this crisis. Nor is it for want of information (although asymmetrical information did, no doubt, play a role in the market interactions—from the selling of subprime loans to unsophisticated borrowers to the purchase of AAA paper by those who had little idea of how that rating was determined). For at least two decades, the “best and brightest” have flocked to our business schools, and the top graduates have disproportionally gone into the investment industry rather than to the corporate world that produces “stuff” or into the not-for-profit sector.

I have long felt that our shortcomings have been due less to the quantitative skills taught in our universities and deployed in finance than to our inattention to developing good judgment.30 Though there have been failures in applying what is available in financial theory (e.g., the distinction between systematic risk and idiosyncratic risk; the fundamental relationship between household income and housing affordability; the basics of underwriting credit), these have not been failures of knowledge, but of behavior.

Some of our choices could be much better informed were we to commit to a broader understanding of decision-making, good and bad. The case study method of learning is intended to promote this, but often devolves to mere calculation. Decisions, it should be understood, are not the application of mathematic formulae but are activities of a personal intelligence. Here’s a critical insight: in using math, everyone should come to the same conclusion; insightful decisions, on the other hand, should enable a person to break away from the herd.

Judgments also require standards. As a result of the survey cited in endnote 12, a panel of Counselors of Real Estate prepared the following rules, which we commended to those in attendance at the CRE organization’s national meeting in November 2008. I think these prescriptions are worthy of wide attention, in academic settings and in the real estate financial industry. I commend them to your reading and reflection.

TEN COMMANDMENTS FOR 21ST CENTURY REAL ESTATE FINANCE

I. Write upon thy heart the law that “reward” and “risk” shalt always appear in the same sentence.

II. Make neither markets nor regulators into idols, and follow not false prophets of simplistic bias.

III. Be sober and watchful, lest the enemy of massive loss approach like a thief in the night.

IV. Honor thy father and thy mother’s ancient counsel: Keep It Simple, Stupid!

V. If thou wilt not do thy own credit analysis, then vow to invest not at all.

VI. Thou shalt not adulterate thy portfolio with excessive leverage.

VII. Thou shalt not bear the false witness of hidden assumptions in thy investment underwriting.

VIII. Thou shalt not covet for the short term, yea, but shalt lay up thy treasures for length of days.

IX. In all things, yield not to the tempter’s snare of panic.

X. Remember that, after thy exile in the wilderness, if thou heedest these commandments, thou shalt once again return to the land of milk and honey.
The Morphology of the Credit Crisis

Editor’s Note: portions of this article have appeared in The Stamford Review.

ENDNOTES


2. Hugh F. Kelly, *Real Estate Finance and Banking Practices in the United States 1970–1986*, (study performed for confidential client), Landauer Associates (New York, 1986). This report records the more specific issue: “...a management decision to pursue arbitrarily determined origination and yield targets. The bank’s ambitious program to grow its asset base and fee earnings was not attainable within the underwriting guidelines for the highest quality loans. Loan officers therefore moved ‘down-market.’” (p. 69).


5. I prepared “The Subprime ’Emergency’” for American Realty Advisors (June 2007), which acknowledged the distress but saw the subprime defaults as geographically concentrated and tractable within the broader credit markets. In November 2007, I prepared the quarterly newsletter for Real Estate Capital Partners, which depicted the mortgage crisis as a “product failure, not an industry failure.” Following the model of the 1990s derivatives crises, I projected the period of “correction” as taking approximately one year.


13. The CDO has a suspect pedigree. The first collateralized debt obligation was issued in 1987 by Drexel Burnham Lambert for the Imperial Savings Association. Drexel Burnham collapsed in 1990 in the wake of insider trading scandals that sent financier Michael Milken to prison. Imperial Savings became insolvent in the summer of 1990, and was taken over by the Resolution Trust Corporation.


15. In my classes in Real Estate Economics and in Risk and Portfolio Analysis, I frequently explain the difference between mathematics, where numbers are just numbers (i.e., abstract quantities) and economics, where every number must represent something that exists in the world. The putative correlations employed in CDO rating were, in my opinion, truly abstract math and not economically grounded.

16. Author’s calculation from SIFMA data on global CDO market issuance.


19. The New York State Department of Insurance, in fact, issued a ruling on June 16, 2000 that a CDS was not a contract of insurance. Alan Greenspan, then Fed chairman, had testified in July 1998 to the House Committee on Banking and Financial Services that over-the-counter derivatives contracts like CDS did not merit regulation under the Commodities Exchange Act. New York State Insurance Commissioner Eric Dinallo testified in October 2008 that, were it not for a specific exemption granted to CDS by the Commodities Futures Modernization Act of 2000, the NYS Insurance Department would have prosecuted so-called “naked” CDS (i.e., swaps where the swap purchasers do not own the underlying obligation) under state gambling and bucket shop laws. There are overtones of a famous Keynesian dictum: “When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done.”
20. This seems to be a very good time to be reading Juvenal, who also wrote *Rara avis in terris nigroque simillima cyneo* (A rare bird on earth, comparable to a black swan). Liberal arts education continues to be vindicated by the perennial relevance of the classic authors!

21. There has been a wealth of good reporting on AIG’s use of regulatory and rating arbitrage, notably by the *New York Times*’ Joe Nocera (“Propping Up a House of Cards,” Feb. 28, 2009), the *Washington Post’s* Dennis Brady (“Senators Call AIG ‘Lost Cause,’” March 6, 2009), and Daniel Wagner of the *Insurance Journal* (“How AIG Fell Through the Regulatory Cracks,” March 9, 2009). The *Washington Post* has also noted that the very compliant OTS was the regulator of Countrywide Financial and Washington Mutual, two of the most aggressive of the subprime lenders. (Binyamin Appelbaum and Ellen Nakashima, “Banking Regulator Played Advocate Over Enforcer,” Nov. 23, 2008).


26. This is always a red flag in an economic discussion, of course. Keynes famously pointed out that “in the long run, we are all dead.”


29. See John Mackay, *op. cit.*

A Missed Assessment of Real Estate Debt Risk:
How the Credit Rating Agencies and Commercial Bank Regulators Missed the Assessment of Real Estate Debt Risk, Creating the Largest Real Estate Bubble in U.S. History

BY MARC R. THOMPSON, CRE, FRICS; WITH ANALYST SUPPORT FROM IAN C. BROFF, CFA
Written in Memory of Mentor, Robert A. Crane, CRE

Editor’s note: The views expressed herein are those of the author. They are not to be construed in any way as the views of Bank of the West or its senior management.

INTRODUCTION
This article addresses real estate aggregate debt risk assessment on both income property mortgage markets and single-family mortgage markets. The risk assessment described here is recommended to be added to other probability of loan loss risk factors such as property type and loan underwriting credit quality in a specific origination. Aggregate debt risk assessment can be applied to both income property and single-family markets in similar ways. This article provides recommendations on the income property debt markets and addresses, more specifically, risk assessment of commercial mortgage-backed security (CMBS) issuances compared year over year. This author proposes an Accumulated Aggregate Debt Loss Probability Rate methodology to correctly assess risk on mortgage-backed issuances and other financial institution loan originations.

THE EXISTING CREDIT RATING SYSTEM OF DEBT INVESTMENTS
The Nationally Recognized Statistical Rating Organizations (NRSROs)—Moody’s, Standard & Poor’s and Fitch—are franchises currently authorized by the Securities and Exchange Commission (SEC). In the past, buyers and sellers relied upon these agencies’ debt ratings when making purchasing decisions, believing that no additional due diligence was warranted. Many investors, over the years, believed that the risk of owning these CMBS securities was increasing but continued to base purchase decisions on the high reliability of the risk grades as assessed by the NRSROs.

About the Authors
Marc R. Thompson, CRE, FRICS, has been a member of The Counselors of Real Estate, headquartered in Chicago, for 11 years, and a Fellow of the Institution of Chartered Surveyors, London, since 2003. He currently serves as senior vice president of Bank of the West, Walnut Creek, Calif., (a BNP Paribas subsidiary), where he manages a lending operations unit that provides both construction and term financing on senior housing and care properties. Thompson is a real estate investment professional with expertise in mortgage risk assessment. He has served on various industry association boards and is an active writer. He also studies complexity science, which encompasses complex systems, social networks and economics. Thompson has a master’s degree in business administration and has served as an adjunct professor of financial management studies at California State University, East Bay.

Ian C. Broff, CFA, is a current candidate in the Master’s of Financial Engineering program at UCLA. His background includes working as a securities analyst for Botti Brown Asset Management, San Francisco, and as a corporate credit analyst (Dallas) and a vice president for Bank of America (Charlotte, N.C.). Broff’s experience encompasses: underwriting and structuring of various credit products including term loans, revolving credit facilities and ISDA Master Agreements, actively hedging corporate credit risk using a variety of credit default swaps, first-to-default structured credit transactions and credit default swap index hedges, and generating investment ideas for both long and short equity portfolios, as well as some fixed income and credit default swap positions. Broff graduated magna cum laude from Boston College with a bachelor of science degree in finance.
Those perceptions began to change in the summer of 2007. The markets began trading low risk AAA securities at a significant discount because of concerns about aggressive risk assessment designations by the NRSROs. An example of missed assessment of risk in mortgage-backed securities is observed when studying the interest spreads on CMBS AAA tranches relative to other corporate debt AAA designated tranches in the marketplace. After hitting a low point of 23 basis points in December 2006, super senior (very low risk) AAA issuances traded as high as 1,150 basis points, or 11.50 percent on Feb. 27, 2009, while comparably traded AAA corporate bonds were trading at about 6.50 percent. This relative market variance indicated the credit rating agencies had missed the assessment of risk on CMBS issuances. In other words, the market no longer believed the AAA risk assessment on CMBS bond tranches.

Uncovering a Flaw in Real Estate Debt Risk Assessment

SAVINGS AND LOAN AGGREGATE RISK

The framework for the theory presented here is based on the author’s experience working out problem income property loans and collections for savings and loans (S&Ls) from 1987–1997. A pattern became evident when observing the correlation of defaults associated with the year of origination. Income property portfolios at two California-based S&Ls experienced very high growth rates from 1986–1989. Many competing S&Ls and commercial banks showed the same pattern, providing easy credit to income property borrowers in the market and, at the same time, increasing speculative buying and supporting the increase in income property and single-family prices.

However, a pattern between year-of-loan origination and loan loss rates was not evident until 1993–1994. From 1991–1996, most of the loans that originated from 1986–1989 had become distressed because of lower property cash flows and valuations. From 1991–1994, the aggregate income property debt shrank 10.4 percent before again growing moderately at 1.6 percent in 1995. At a minimum, based on findings and conclusions presented here, an estimated 20 percent shrinkage of the outstanding $3.4 trillion income property debt in the U.S. can be expected to occur through 2014. Keep in mind that an undetermined amount of this shrinkage in loan amounts outstanding from the 1991–1994 period and forecasted for the 2010–2014 time frame will be the result of full loan repayments from the recapitalization of the real estate by investors injecting new equity capital and reducing debt to meet lower debt qualifying amounts. In addition, this author expects the aggregate loan shrinkage rate and time-to-clear forecast of 2015 to be a best-case scenario, given the increased complexity and collection times (as compared with the S&L period) to clear the market of overleveraged income property in commercial banks and within CMBS issuances. This aggregate debt growth risk assessment methodology is the basis for this loan loss probability and loan loss severity forecasting.

COMMERCIAL AND MULTIFAMILY DEBT MARKET GROWTH

The growth in aggregate debt for income property was 123 percent from 2000–2008, versus 29 percent from 1990–1999. There appeared to be no question that a cause for the high aggregate growth in income property since 2000 was due to the high growth of a relatively new entrant in the marketplace. After reviewing the Mortgage Banking Association (MBA) Data Books’ and the debt markets, it became clear that the cause for excessive aggregate debt growth was the high growth in CMBS loan originations.

### Figure 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Outstandings</th>
<th>Change in Outstandings (B=Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$106.6B</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>$109.8B</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>$99.6B</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>$126.8B</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>$171.5B</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>$249.2B</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>$274.8B</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>$110.4B</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>(21.8B)</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>(22.8B)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Flow of Funds Accounts, Federal Reserve Board of Governors (MBA Q2 2009 Data Book)
In the S&L growth period from 1985–1994, a similar pattern of change in debt outstandings occurred as follows:

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$69.8B</td>
<td>$60.3B</td>
<td>$91.2B</td>
<td>$71.9B</td>
<td>$35.1B</td>
<td>$18.7B</td>
<td>($13.3B)</td>
<td>($44B)</td>
<td>($25.2B)</td>
<td>($14.8B)</td>
</tr>
<tr>
<td>Growth Rate</td>
<td>13.6%</td>
<td>12.5%</td>
<td>13.2%</td>
<td>9.2%</td>
<td>4.6%</td>
<td>1.7%</td>
<td>(1.5%)</td>
<td>(5.2%)</td>
<td>(2.7%)</td>
<td>(1.4%)</td>
</tr>
</tbody>
</table>

*Source: Flow of Funds Accounts, Federal Reserve Board of Governors (MBA Q2 2009 Data Book)*

The aggregate growth rate in income property loans in the U.S. from 1980–1989 was 127 percent. This loan growth over a decade is similar to the 123 percent aggregate income property loan growth rate from 2000–2008.

**COMMERCIAL MORTGAGE-BACKED SECURITIES DEBT MARKET GROWTH**

The growth rate in CMBS was likened to what was observed during the S&L crisis. Instead of the S&Ls, it was the CMBS market that was providing easy credit—supporting speculative behavior in income property investing. From 2004–2007, CMBS base loan outstandings more than doubled, from $383.29 to $820.94 billion. Figure 3 provides annual CMBS loan originations and annual growth rates of CMBS issuances from 2000 through the second quarter of 2009.

Through mortgage production conduits—some of the largest owned by commercial banks—CMBS loan production steadily grew from 2003–2007. Until 2005, CMBS issuances were influenced by the market feedback from B-piece bond buyers. The B-piece bond buyers had a first-loss position in these CMBS issuances and therefore, carried the most risk. Until 2005, B-piece bond buyers influenced which loans were included in the CMBS issuance, or passed on buying issuances they assessed as too risky. This discipline in the CMBS marketplace was removed once B-piece buyers began competing with collateralized debt obligations (CDO) pools—sponsored by the investment banks to increase the production of income property loans—and corresponding fee income in the CMBS market. In addition, to continue to keep risk low in CDO issuances, credit default swaps (CDS), or default insurance, was offered to investors to help back the higher risk CDO and CMBS issuances for institutional investment grade investors.
COMMERCIAL BANKING INDUSTRY IMPACT
During the CMBS aggregate growth period, commercial banks were under pressure to book high-earning commercial real estate loans. Most commercial banks became incrementally aggressive over time to maintain market share, as CMBS was growing as a formidable competitor in the market. During this period, commercial banks continued to maintain market share with a 42.8 percent share of all commercial real estate loans in Q4 2004 compared to a 44.8 percent share in Q2 2009.1

As did credit rating agencies, commercial bank regulators missed the assessment of real estate debt risk during this high debt growth period. According to Bloomberg.com in an Oct. 19, 2009 article by Alison Vekshin,2 the FDIC failed to limit the amount of commercial real estate loans as a percentage of capital within banks. The FDIC regulations indicated a maximum guidance amount of commercial real estate loans to be no more than 300 percent of capital. One bank referred to in the Vekshin article was Security Pacific Bank in Los Angeles, which had, as of September 2008, nearly 1,400 percent commercial real estate loans to capital. The bank was closed two months later by the FDIC. "Of 95 U.S. bank failures before September 2009, 71 were caused by non-performing commercial real estate loans," said Chip MacDonald, a partner specializing in financial services at Atlanta-based law firm Jones Day.

Although there was a rising concern by many FDIC regulators during the period from 2005–2007, regulators seemed to have difficulty enforcing their own regulations. When economic times are considered favorable, commercial bank regulators complete audit reviews assessing very low risk of probable loss as supported by a high debt service coverage ratio, and also supported by recent comparable sales of the real estate collateralized loan. Unless a uniform aggregate real estate risk assessment is deployed by all financial intermediaries in the market, discrepancies in risk-taking will impact the overall lending behavior of competing financial institutions in their attempt to maintain earnings growth and market share.

RESIDENTIAL MORTGAGE-BACKED SECURITIES DEBT MARKET GROWTH
In order to better understand the overall capital markets, it is necessary to study the risks associated with the much larger single-family mortgage market, which comprises $11.4 trillion in loans. Applying the same risk assessment to single-family markets, it is clear that the highest risk in the U.S. economy resides in the excesses in aggregate debt growth in the single-family mortgage market. This debt market grew from $5.5 trillion in 2000 to $11.4 trillion at the end of 2008—a 107 percent increase in its aggregate debt. This debt market is significant as it relates to the U.S. economy, owing to its large scale as compared to annual gross domestic product (GDP). In 2000, the U.S. single-family aggregate debt relative to GDP was 50 percent. In 2008, it rose to more than 100 percent. It is not likely that households can “grow” the economy to outpace aggregate single-family debt growth when consumers comprise up to 70 percent of the GDP. If consumers are saddled with single-family mortgage debt, they are less able to contribute to the consumption of products and services which, in large part, are drivers for the U.S. economy. In addition, the mounting losses in single-family mortgages are likely to continue for years, keeping housing prices at relatively low levels compared to the amount of mortgage collateralized by single-family homes. Applying an aggregate debt risk assessment, one can estimate loan loss probability on the single-family mortgage market to be in the trillions of dollars over the next 10 years. With single-family housing prices now falling to 2000–2003 prices in many distressed markets, the single-family appreciation rates that supported the growth in aggregate home mortgages is no longer supporting the aggregate amount of debt in the single-family marketplace.

How to Correctly Calibrate Risk in Aggregate Debt Assessment Models
The following is an aggregate debt risk assessment model (see Figure 5) that is recommended to enhance existing credit rating and risk assessment models developed by credit rating agencies, bank regulators, economists and academics. The values were estimated by this author and used as a basis to develop the model and postulate a thesis. However, there appears to be a predictive quality of this methodology and presented value assumptions. Using a second order Polynomial regression with Accumulated Aggregate Debt Loss Probability Rate (6) (ADLPR) as the independent variable from 1991–2008, this regression explained 78 percent of the annual income property mortgage delinquencies rates, incorporating a three-year time period lag. These results suggest that there is a reasonable predictive quality in the aggregate debt risk model’s current basic form to predict delinquen-
A Missed Assessment of Real Estate Debt Risk

Real estate issues three years from now using current data with the Accumulated ADLPR (6). (References and personal experience were used to determine many of these values and to compute annual aggregate debt growth factors. Although these are close approximations to scientifically derived calculations, the reader is advised to develop a more precise scientific method in developing these factors and to use the best data available.)

**Question:** What is the correct aggregate debt risk factor for 2006 using the aggregate debt risk assessment model?

**Data:**
- Year 2005 annual real GDP of 3.1 percent x 50% = 1.6%
- Year 2005 annual Consumer Price Index of 3.4 percent x 50% = 1.7%
- The 50% weighted economic debt growth rate for year 2000 was 3.2 percent

**Definitions:**

The Economic Growth Rate (1):

\[
\text{real gross domestic product prior year (2005) + Consumer Price Index prior year (2005)} \div 2
\]

\[
= \frac{3.1\% + 3.4\%}{2} = 3.2\%
\]

Actual Annual Aggregate Income Property Debt Growth (2):

This data can be found in the Federal Reserve flow of funds accounts or from the MBA Data Book.

Aggregate Debt Growth Risk Rate (3)

13.8% increase in prior year 2005 Aggregate Debt less 3.2% Economic Growth Rate = 13.8% less 3.2% = 10.6% Aggregate Debt Growth Risk Rate

This factor represents the excess in probable loan loss risk because the aggregate debt growth is higher than the Economic Growth Rate (1) in any one year. At 10.6 percent, this risk rate value is assessed as high.

With this value at above 5 percent, the rate of aggregate debt growth for that year is assessed as overheated and will be characterized by either loose lending standards or low interest rates. With this value at above 8 percent, as observed in years 2006, 2007 and 2008, the risk is high that the probability of aggregate debt loss in those loan production years will rise, given that the momentum of the debt market is creating high risk excesses in loan quality. This combined with very low interest rates fuels a rapid aggregate debt growth rate.

Aggregate Debt Growth Risk Rate Factor (4):

This author estimated the debt loss factor on income property loans incurred by all real estate lenders in a year based on the following table of values:

<table>
<thead>
<tr>
<th>Aggregate Debt Growth Risk Rate Factor Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADGRR &lt; 0%</td>
</tr>
<tr>
<td>0% &lt;= ADGRR &lt; 5%</td>
</tr>
<tr>
<td>5% &lt;= ADGRR &lt; 8%</td>
</tr>
<tr>
<td>ADGRR &gt;= 8%</td>
</tr>
</tbody>
</table>

For ADGRR less than zero percent, the debt risk factor is to be applied directly to the Accumulative Aggregate Debt Loss Probability Rate (6) to reduce it to support lending after a year when average GDP and CPI have dropped below zero.

Aggregate Debt Loss Probability Rate (5):

10.6% x Aggregate Debt Risk Factor of 38% = 10.6% x 38% = 4.0% Aggregate Debt Loss Probability Rate.

This Aggregate Debt Loss Probability Rate (ADLPR) of 4.0 percent is added to prior year values. The aggregate debt growth rates above the economic growth rate increases risk for the year of loan origination. If this aggregate debt growth pattern continues, the following years' aggregate debt growth risk rises. For example, if applied from 1980 to a forecast into 2019, the values would be as follows:
### Aggregate Debt Analysis Since 1980

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP Prior Year</td>
<td>3.1%</td>
<td>-0.3%</td>
<td>2.5%</td>
<td>-1.9%</td>
<td>4.5%</td>
<td>7.2%</td>
<td>4.1%</td>
<td>3.5%</td>
<td>3.2%</td>
<td>4.1%</td>
</tr>
<tr>
<td>CPI Prior Year</td>
<td>13.3%</td>
<td>12.5%</td>
<td>8.9%</td>
<td>3.8%</td>
<td>3.8%</td>
<td>3.9%</td>
<td>3.8%</td>
<td>1.1%</td>
<td>4.4%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Economic Growth Rate (1)</td>
<td>8.2%</td>
<td>6.1%</td>
<td>5.7%</td>
<td>0.9%</td>
<td>4.2%</td>
<td>5.6%</td>
<td>4.0%</td>
<td>2.3%</td>
<td>3.8%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Debt Growth (2)</td>
<td>11.4%</td>
<td>8.2%</td>
<td>9.7%</td>
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Forecast Notes for Figure 5: Debt growth was estimated beginning in 2010 by doubling the aggregate debt losses in the Se-L crisis years of 1991–1994 and adding one more year at a negative 3 percent to reduce this Accumulated ADLPR (6) value to near zero. CPI and Real GDP rates are estimated. If higher inflation rates are experienced in the economy, fewer aggregate debt reductions would be expected.

Accumulated Aggregate Debt Loss Probability Rate (6): The Accumulated Aggregate Debt Loss Probability Rate (Accumulated ADLPR (6)) is the factor to be used by credit rating agencies in CMBS issuances and by regulators of financial institutions to calculate probability of loss risk. As indicated above, the probability of loss due to the Accumulated ADLPR (6) factor for all CMBS issuances in the 2007 vintage year is 18.1 percent. Please note that if this assessment methodology had been implemented in 2000 by both bank regulators and credit rating agencies, the Accumulated ADLPR (6) factor would not have risen above 2000 or 2001 levels. Given the self-regulating nature of this model, the probability of loss risk would have been too high to originate the higher amount of aggregate debt.

As noted in the tables, the Accumulated ADLPR (6) value drops below zero in years 1995–1999, which were considered low-risk loan underwriting years. (For risk assessment purposes, an Accumulated ADLPR (6) value of less than zero is not to be used in the loan origination years as it does not contribute to aggregate debt growth risk.) However, aggregate debt growth began rising in 1998 at 9 percent and, in 1999, at 13.5 percent, putting the Accumulated ADLPR (6) at a positive 2.8 percent value in 2000 to be applied on debt originated that year. Because this Accumulated ADLPR (6) was not yet developed to underwrite the additional risk of growing aggregate debt beyond the growth in real GDP and CPI (Economic Growth Rate (1)), this Accumulated ADLPR (6) value continued to raise the risk of debt originated in subsequent years, reaching a peak in 2009 of 22.8 percent. As a result, less lending was taking place in 2008 and 2009 when the risk of previous origination years began to appear in higher loan default and loan delinquency rates of 5.48 percent in 2008 and 8.74 percent in 2009.

As debt growth rises above economic growth and price factors in the U.S. economy, the risk of loan default naturally increases. However, the most appealing attribute of this aggregate debt risk assessment methodology is that it self-regulates the growth of aggregate debt in the U.S. if it is applied to all income property lenders. As debt growth rises above economic growth and prices in the U.S. economy, the rising risk of loss is factored into the new debt originated in that year. Given that the risk of the loan origination becomes higher using this accumulated risk assessment methodology, the associated minimum risk investment return requirement for debt investors will increase as well, requiring either higher interest rates or a reduction in the loan amount, which, in effect, will reduce aggregate debt growth in the following high Accumulated ADLPR (6) issuance year.

This author believes that from 2010–2015, the ADLPR (5) will be negative. This will begin the period of reducing risk in Accumulated ADLPR (6) and the risk of new loan underwriting over subsequent years, lowering loan origination risk to a neutral level in 2015. Does that mean that the origination of new loans in 2010 will have less risk than those loans originated in 2006 and 2007? The answer is “Yes!” With real estate prices lower in 2010 compared with the peak in 2007, loan-to-appraised values have reduced loan amounts for new loans compared against property appraised at higher values in those previous vintage loan origination years. However, the risk of probable loss remains high on debt positions originated in years 2003–2008. With the threat of high foreclosures increasing supply of income properties in the markets from previous high leverage vintage year positions, the risk of issuing new debt remains high. And, lending in a weak economic environment increases the uncertainty of income property cash flows, which in combination of excess supply of foreclosed income properties, keeps underwriting risk high through 2010–2014. Lending is recommended by this author to proceed, but at conservative lending levels together with third-party support if speculation risk exists of future leasing fill-up or higher rents on commercial real estate loans. On residential income property loans, employment rates and economic regional growth are larger factors in loan underwriting, but residential income property is expected to be impacted by price deflation risk on both sale prices and rents in many distressed markets through 2014 as well.

If this aggregate debt risk methodology had been used by credit rating agencies and bank regulators in 2000, the aggregation of real estate debt would not have occurred at the same high rate or with the same low interest rates. The aggregate debt growth rate possibly would have grown more in line with both GDP and CPI growth rates since real estate debt would have had been assessed as more risky, translating into more costly debt.
Why Financial Intermediaries Should Implement Aggregate Debt Risk Assessment Factors

The credit rating agencies did not know they were flawed in their assessment of risk in CMBS issuances as the actual risk of probable loss was increasing from 2005–2007. If the agencies had appropriately assessed probable loss risk as increasing each year, the percentage of CMBS AAA-rated tranches would have decreased during this period, with a corresponding increase in BBB tranches. Had any of the credit rating agencies known about aggregate debt risk and chosen not to assess risk correctly because of a reason as yet undisclosed, they may be liable to the investment public they serve. As well, commercial banks likely would have been more conservative in lending. A uniform risk assessment methodology employed by credit rating agencies and bank regulators likely would have increased interest rates on the CMBS issuances and commercial bank real estate loans. The higher interest rates would, in turn, lower qualifying amounts for loans. This author believes that adopting this recommendation would result in the correct alignment of debt risk assessment models backed by real estate mortgages with AAA credit risks.

Had this aggregate risk assessment methodology been applied to home mortgages, the home mortgage debacle would have been less severe, and the banking crisis and many other negative unintended consequences would not have occurred. More broadly speaking, the financial crisis would not have occurred if the credit rating agencies and commercial bank regulators had developed and implemented an aggregate debt growth risk methodology no later than year 2000.

ENDNOTES


3. Annual loan delinquency data and annual aggregate debt growth data was gathered from the website www.federalreserve.gov.

4. Real gross domestic product data was gathered from the website: www.bea.gov.

5. CPI Index data was gathered from the website: www.bls.gov.
PUBLICLY TRADED HOMEBUILDERS, many of which were "sellers" of production housing lots in 2007 and 2008, have again become "buyers" in certain markets around the country. Residential development land was often characterized as an investor/speculator acquisition market as late as the winter of 2009. Publicly traded homebuilders have since re-entered some markets, often with very aggressive purchasing strategies that have left investors and non-publicly traded private builders (those few with the financial horsepower) unable to compete.

In many of these markets, profit margins, expressed as a percentage of sale revenues, must be below ten percent to consummate a transaction that has multiple bids from builder competitors. Such narrow profit margins often imply non-leveraged yield rates (internal rates of return) at twenty percent or lower. These profit and yield hurdles are similar to those during the housing boom of 2003–2006.

The NAHB/Wells Fargo Housing Market Index (Figure 1) gauges builder perceptions of current single-family home sales, prospective buyer traffic and sales expectations for the next six months. Builder perception, or confidence, of near-term sales conditions affects decisions to acquire lots and construct homes. Builder confidence bottomed out in January 2009 at levels not seen in more than 25 years. The recent increase would signify growing optimism on the part of some builders going into 2010.

Recent or pending public homebuilder acquisitions are reported around the country but are focused mainly in first-tier locations in regions such as California, Arizona, Texas and Florida. To limit risk and keep lot inventories in check, structured rolling option contracts are preferred by buyers. However, larger bulk purchases, typically lender real estate owned (REO) assets, are also in play.

Some investor/speculators were having second thoughts on their gamble in picking up lots at discounted prices in 2007 and early 2008 given the subsequent credit collapse in the fall of 2008 and dismal winter of 2009. Some are now in a position to sell the same lots to public builders for an attractive return rather than the anticipated three-to five-year holding strategy.

Since public builders are indeed in the home-building business, lots are being acquired to build rather than bank. Construction critical paths suggest these markets will see new for-sale housing in the summer of 2010 if not sooner. This scenario, where new home construction will find adequate demand for market entry in 2010 was, for the most part, not considered realistic in 2008 and

**About the Author**

Brian J. Curry, CRE, MAI, SRA, is senior managing director and national practice leader of the Residential Development Specialty Group with Cushman & Wakefield Valuation & Advisory Services, San Diego. As national group leader, he provides a wide array of consulting and advisory services to clients, team training/development, team management, assignment procurement, assignment protocol/management, quality control, and portfolio management. Prior to joining Cushman & Wakefield in 2005, Curry was a principal with Doré, Curry, & Marschall, Inc., and Integra Realty Resources, San Diego. He has been providing valuation and counseling services involving residential development property for more than 25 years, specializing in detached housing, attached housing, condominium product, military re-use plans, urban redevelopment, mixed-use and master-planned communities. Curry’s experience includes valuation, highest and best use analyses, marketability and feasibility studies, business plan counseling, acquisition and disposition strategies, litigation support, arbitration, investment strategy, and other advisory services related to residential development property.
early 2009. Indeed, in certain markets, new home construction and sales in existing developments have accelerated because of the lowering of home prices by those builders willing and able to do so.

New construction is feasible provided product is priced to capture demand (absorption), and the cost to acquire lots, build and then sell homes is low enough to allow for an adequate return. An examination of pricing and inventory trends along with effective demand factors are critical criteria to the feasibility equation.

**HOME PRICING TRENDS**

According to U.S. Census Bureau statistics (Figure 2), the U.S. new home median price reached an all-time high in March 2007, followed by the most severe price decline in more than 50 years. A low of $206,200 was recorded in August 2009, reflecting a 21 percent drop from market peak, followed by slight increases through October. Median new home pricing has returned to 2003 levels.

The National Association of REALTORS® (NAR) reports the U.S. existing home median price reached an all-time high in March 2007, followed by the most severe price decline in more than 50 years. A low of $164,800 was recorded in August 2009, reflecting a 21 percent drop from market peak, followed by slight increases through October. Median existing home pricing has returned to 2003 levels.
Public Homebuilders Look To Build In 2010

high in July 2006 and has also declined precipitously (Figure 2). A floor may have been reached in January 2009 at $164,800, reflecting a 28 percent decline from the peak. Pricing increased more than 10 percent from January through June 2009, but has since declined to $173,100 through October 2009. Like new product, median existing home pricing has returned to 2003 levels.

In the current market, it is often the case that the resale market is the primary competition to new construction rather than builders competing with builders. This is especially true for infill locations with limited potential for new home construction. A general consensus among homebuilders is that in markets with low or limited supply of buildable lots, new product priced at or slightly above existing homes will find market acceptance as many homebuyers prefer new homes and will pay a premium over resales, which may involve dealing with foreclosures and short-sales.

NEW HOME INVENTORY TRENDS

In 2005, inventory levels began to increase companion to the declining rate of home sales. According to the U.S. Census Bureau, new home inventory reached an all-time high in 2006, but has since decreased 58 percent to 1992 levels with the decline in construction. Supply reached a 35-year high of 14.3 months in January 2009 as new home sales hit a 35-year low (Figure 3). An increase in sales rates, coupled with the lowest year-to-date completions on record, helped lower new home supply to 6.8 months by August.

Building permits are an indicator of near-term future construction (Figure 4). New home sales peaked in 2005, and building permits began to decline four months later. Building permits in 2008 dropped to an all-time low (since recording began in 1959), reflecting a 58 percent decline from the high in 2005. January 2009 marked the lowest monthly permit activity (36,300) on record. As of October, permit activity was more than 47 percent below 2008 levels.

Low inventory of new construction is the significant impetus for the most recent purchasing strategy by builders. With limited new supply entering the market in the short term, those builders able to control lots in select locations with limited supply have greater confidence in the ability to sell product when primary competition comes from the resale rather than new home market.

EXISTING HOME INVENTORY

Existing home inventory is critical to the feasibility of new construction as it presents competition and also demonstrates the health of the housing market in general. Further, the ability to move up or move down equity out of existing homes is significant relative to the ability to sell new housing. According to the NAR, existing home inventory peaked in July 2008 and has fallen 22 percent, bringing the supply down to 7.0 months from the high of 11.3 months.
in April 2008. Increased sales activity and lender delays in taking back and then selling additional REO inventory has helped lower existing home supply (Figure 5).

Even so, foreclosures have exacerbated the downward trend in pricing and continue to put upward pressure on existing inventory. RealtyTrac reported 1.3 million foreclosure filings in 2006 (Figure 6). With the subprime crisis unfolding in mid-2007, a 75 percent increase in foreclosure filings was recorded by year-end. Foreclosure filings rose to 2.9 million in 2008, a 43 percent year-over-year increase. As of third quarter 2009, year-over-year foreclosure filings were 23 percent higher than 2008. This increase has likely been subdued by lender delays or government imposed moratoriums on foreclosures. Hence, the rate of foreclosures has not kept pace with
notices of default. *Housing Predictor* estimates there were 4.2 million residential foreclosures from 2007 through June 2009. More than 5.8 million additional foreclosures are forecast through 2012. If the projections are accurate, there will have been 10.0 million foreclosures over a six-year distressed housing cycle ending 2012.

**EMPLOYMENT AND PURCHASING POWER**

The Bureau of Labor Statistics reported that non-farm employment peaked in December 2007 and has declined 5.2 percent as of November 2009, reflecting a loss of approximately 7.2 million jobs. Unemployment has surpassed 10 percent. It does appear that the rate of job loss has finally been curtailed, but robust job growth is not anticipated for several years. Unemployment and fear of additional job loss and wage compression will continue to keep significant demand in check, even as some sectors of the economy begin to show improvement and the statistical recession is reportedly over or waning. It is difficult to conjecture the overall effect of a so-called “jobless” recovery on the housing market when, in traditional economic-housing cycles, employment is the primer of housing demand.

As of November 2009, Freddie Mac reported fixed-rate 30-year mortgages were averaging 4.88 percent, slightly above the 40-year low of 4.81 percent in April. Low interest rates have dramatically increased affordability levels and rates are not anticipated to increase substantially in the short term. However, long-term forecasts are for increasing interest rates along with potential hyper-inflation. Further, qualifying and underwriting continue to present a major barrier to purchase mortgage financing. If and when interest rates do increase, affordability levels would diminish accordingly and reduce housing demand.

**LOOKING AHEAD**

Debate continues with regard to the health of the economy and housing market. Home prices have decreased substantially over the past 24 months, and home purchase affordability indices are at new highs (Figure 7). Government intervention, in the form of first-time and move-up homebuyer tax credits, Home Affordable Modification Program, the recently introduced Deed-For-Lease Program, exceptionally low interest rates, and financial support of FNMA and FHA, has helped sustain demand for home purchases. On the other hand, economic instability reflected in yet-to-be-realized employment growth, and staggering statistics on the potential for new increases in foreclosure inventories instills pessimism as to whether the housing market has indeed hit a true bottom in this cycle.

There have been various articles in the press and economic studies suggesting “guarded” optimism that the housing market had reached bottom, with positive movement in pricing and sales. Even so, most considered
a “U” rather than “V” shaped recovery the likely prognosis. There have been more recent articles and studies suggesting the potential for renewed downward movement in home prices which would imply a “W” shaped recovery is possible.

Public homebuilders buying highly discounted lots hope to build and sell product while navigating erratic and often conflicting economic and housing metrics. During the boom years, when price appreciation was the norm, it was not difficult to cover aggressive acquisitions regardless of the underlying metrics. Today, current conditions—much less forward-looking projections—are less clear. With an improving economy and positive movement in the housing market, bulk purchases of production lots may prove profitable and put the pessimistic forecasts to bed. Alternatively, further softening in home prices and demand could put aggressive pro formas with narrow return criteria at risk, and should the housing downturn continue unabated, those same builder/buyers may become sellers once again. Builders with rolling option lot take-downs will have the flexibility to react accordingly.

Editor’s Note: portions of this article appeared in PricewaterhouseCoopers’ Korpacz Real Estate Investor Survey™ Fourth Quarter 2009.
In many ways, Chicago presents a microcosm of commercial real estate market conditions in the United States. It’s a large, vibrant market temporarily laid low by the credit crisis and the recession. There are few signs of a recovery despite the more upbeat tone of recent economic indicators because tenant demand for most types of commercial real estate tends to lag job growth, which itself lags the broader economy. Signs of a market recovery are likely to show up first in more volatile, technology-driven markets such as the San Francisco Bay area or Austin before they show up in Chicago, whose recovery profile is likely to emulate the national average. Market conditions are expected to soften further in 2010 before embarking on a recovery beginning in 2011. Here is a summary of recent market conditions in Chicago and our outlook for 2010.

OFFICE MARKET
Two years after the start of the Great Recession, the office vacancy rate broke the 20 percent ceiling at year-end 2009, the highest since Grubb & Ellis began tracking the local market in 1985. Job losses and company consolidations led to more than 3.8 million square feet of negative net absorption in 2009. “Zombie buildings” are becoming a new phenomenon. These are buildings with available space that cannot fund competitive tenant improvements because of their highly leveraged loans and deteriorating cash flows. A surprising side effect could be a tighter market for tenants amidst a

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shrinking pool of buildings with the tenant improvement dollars to compete for deals.

Unlike the early 1990s’ softening cycle, the current challenge is a lack of demand, not an overabundance of new supply. In the Chicago central business district, only the 800,000-square-foot Blue Cross Blue Shield building expansion is under construction, while the 160,000-square-foot 555 Corporate Center in Lincolnshire and the 105,000-square-foot Cisco building in Rosemont are the only major construction projects underway in the suburbs. Three high-rises, with a total of 3.8 million square feet, were added to the downtown inventory in 2009. They are 80 percent leased, but their tenants vacated other space that now stands unoccupied. United Airlines announced the relocation of its headquarters from the suburbs, taking 450,000 square feet of former Ernst & Young space at the Willis Tower (formerly called Sears Tower). This relieved the central business district of a large block of space.

The Chicago area has lost approximately 95,000 office-related jobs since the third quarter of 2008. Comparing this number to the increase in vacant space leads to an estimated shadow vacancy of about five million square feet, which will require at least two years of strong growth to absorb. As the economy starts to improve, companies will fill up this shadow space before making new space commitments. The only industry sectors in the area currently adding jobs are education, pharmaceuticals and government.

In 2010, many tenants will not be in a position to take advantage of the market. They are still reeling from uncertainty in their own businesses. The few tenants that are looking for new space or are renegotiating their leases may have an additional party join them at the negotiating table—the lender. Many leases now must be approved by the lender backing the mortgage of the building. This can hold up transactions significantly, which is something all parties need to consider before commencing lease negotiations.

Concession packages are changing in the Chicago area. In the past, when tenant demand slowed, landlords would offer tenants incentives as a reason to commit to their building. In the current economy, tenants need even more persuasion to embark on the cost-intensive adventure of relocation. However, cash-strapped landlords are unable to afford the generous tenant improvements that tenants have become accustomed to in recent years. One alternative being considered today is for the tenant to pick up some of the build-out cost in return for some additional rent abatement. Another option for tenants is previously occupied space where suitable improvements may already be in place. Some landlords are starting to offer incentives that are spread over the term of the lease rather than at the beginning. With rental rates decreasing, most landlords are not interested in early renewal negotiations with tenants whose leases expire beyond 2012. At the other extreme, some landlords may be unwilling to offer any concessions, since they are unsure if they will still own the building in one or two years. They will not want to invest in the property if they are about to lose it.

For the coming one to two years the Chicago office market still will be dominated by declining fundamentals and slow demand due to minimal job growth. Overall asking rental rates, which have decreased by only three percent since their peak in 2007, are expected to decline an additional seven to 10 percent in 2010. Expect the central business district to fare better than the suburbs.

**INDUSTRIAL MARKET**

Lease rates have been falling since the first quarter of 2008, dropping by five percent in 2009. They are expected to remain soft but not decline much further as negative absorption levels are easing while transaction volume is stable. Absorption could turn positive by the end of 2010.

Tenants continue to have the upper hand in lease negotiations. Landlords who can afford to do so are trying to entice occupants by offering increased rent abatement, concessions and aggressive lease rates. Some landlords have even dropped rental rates to below one dollar per square foot as an initial teaser rate to attract tenants. While many tenants are on the fence, third-party logistics (3PL) companies have
been executing transactions as they are forced to adhere to contracts signed one to two years prior. Many 3PL deals have been completed in the Central Will County and Interstate-55 Corridor submarkets. Exel Logistics took over 590,000 square feet at the beginning of 2009 in Bolingbrook, while Alliance 3PL leased more than 415,000 square feet at CenterPoint's intermodal facility in Elwood.

Fewer than two million square feet of industrial product is currently under construction. Speculative construction starts will be rare in the next few quarters, and build-to-suit projects will drive what little construction there is. An example of this trend can be seen in the local food industry with recent build-to-suits completed for Central Grocers, Affiliated Foods Midwest, Gordon Foods and Bay Valley Foods. Some cities are offering incentives for new build-to-suits. To attract Freudenberg Household Products, a cleaning and laundry products manufacturer, the city of Aurora granted a seven-year tax rebate capped at $1.55 million and waived 75 percent of the building permit fees for the company’s new 525,000-square-foot build-to-suit project.

Property taxes have a significant impact on commercial real estate and can be one of the top expenses for property owners and tenants. In 2009, Cook County implemented a 4.2 percent tax hike for suburban property owners and a six percent increase for those within the city of Chicago. But available tax incentives can help to offset some of this increase. Lacava, a luxury bathroom design and manufacturing company, qualified for a Class 6B tax incentive that will enable the company to reduce its property taxes by half over the course of the next decade. Lacava purchased an 80,000-square-foot building on Chicago’s northwest side for half the price at which it was marketed in 2006.

Rail and intermodal traffic are expected to increase over the next several years because rail offers lower costs and a smaller carbon footprint, which has become an important issue for users and municipalities. Burlington Northern Santa Fe (BNSF), recently acquired by legendary investor Warren Buffett, is the nation’s second largest railroad and a leader in Chicago’s freight rail industry. Chicago serves as BNSF’s eastern end point for its western U.S. routes.

The Chicago industrial market is expected to show initial signs of recovery in the second half of 2010, but the recovery will be slow. What demand there is will come from owner/users and from government incentives.

**RETAIL MARKET**

The vacancy rate for Chicago-area retail properties soared to more than 10 percent by year-end 2009, the highest level in a decade. The construction pipeline continued to deliver space begun when the market was more promising, churning out brand-new, barely-occupied strip centers and mixed-use developments. Rental rates declined further as a result of the rapidly rising vacancy rate—a trend that will continue in 2010.

Nationally, retail sales are showing signs of firming, but Chicago will see more retailers downsize or close in 2010. Banks will continue to struggle with retail development projects such as 108 N. State Street, the former Block 37, which went into receivership at the end of 2009. Continuing a trend seen in 2009, more of the independent start-ups and boutiques that sprang up in the boom years will close. For example, in Lincoln Park, one of Chicago’s wealthiest neighborhoods, more than 20 stores have already ceased operations or moved to less expensive areas. Some of the stores, including Fresh or Faux, Moonlight Graham, Entendre Couture and Ethel’s Chocolate Lounge, have closed, while She Boutique moved to north suburban Highland Park. A number of mini-malls across the Chicago area sit largely vacant with only one or two stores occupied, and many of these projects are already in foreclosure.

By contrast, some grocers are taking advantage of empty shopping centers, low rates and landlord incentives. Dominick’s, Whole Foods and Jewel are being wooed by landlords to anchor troubled centers. As a result of the collapse of new housing starts, particularly in the outlying suburbs, many new retail centers have not been able to generate sufficient traffic. Instead, older shopping centers closer to
Chicago are becoming more attractive to retailers. Tenants in a position to relocate or expand can get bargain-priced space in premier locations, which would not have been possible during boom times.

No new, large-scale retail developments are planned in the near future. For example, developer Oliver McMillan LLC aims to sell a 64-acre parcel in far-northwest suburban Lindenhurst, scrapping plans for an open-air lifestyle center called Lindenhurst Village Green. The company had intended to build up to 600,000 square feet of retail space at the undeveloped site near State Route 45 and Grand Avenue.

While few new developments are in the works, there are some exceptions, most notably Walmart and Costco. Walmart announced in October 2009 that it purchased land in Rochelle for a new Walmart Supercenter. Likewise, Costco has announced that it will acquire the former Kiddieland property located at the corner of North and First avenues in suburban Melrose Park, where it plans to build one of its warehouse membership clubs.

In 2010, consumers will look for value and quality, and are unlikely to buy unless the price is right. In a similar vein, stronger retailers will look for rental rate bargains in premier locations and will hold out until they get what they want.

INVESTMENT MARKET
Investment transaction volume in the Chicago area hit an all-time low in 2009. About 120 properties traded for a total of just under $2 billion compared to a recent peak of 716 properties valued at $22.2 billion in 2007, according to Real Capital Analytics, Inc. Owners of well-leased properties with good credit tenants who are able to pay their mortgages are holding on to their assets. Only owners who really must sell will put their building or portfolio on the market.

Office: Although prices have dropped by 30 percent or more, it is not necessarily a buyer’s market since rents and tenant demand continue to slip. Landlords dealing with loan maturities and low tenancies will capitulate in 2010, which will create more sales comparables and therefore more pricing clarity. Well-capitalized buildings with low vacancy rates and a stable tenant base will have the best chance to trade or receive financing through banks and other lenders. Equity capital is becoming very impatient—investors that have already raised money need to start placing it. This new and still subtle sense of urgency is a major change from 2009, when people were holding tight. The challenge will be finding assets that are performing and that owners will be willing to sell.

Industrial: Investment activity in the Chicago industrial market is expected to remain soft in 2010. Institutional buyers are still scarce and very selective although UP-REITs, which function similarly to 1031-tax exchanges, are starting to gain momentum in the industrial sector. Acquiring an investment portfolio of newer and mostly leased buildings in the Chicago area has been difficult. However, it is not impossible, as seen in the case of TA Associates’ purchase of a five-building investment portfolio in 2009. The 392,000-square-foot portfolio was 95 percent leased and sold on an all-cash basis for more than $21 million. This deal could be a first sign of a slow recovery for the investment sales market. Sale-leaseback deals continue to gain momentum as companies are seeing the value in redirecting capital once locked in real estate into other aspects of their business. Many of these transactions include long-term lease deals, providing an attractive option for investors.

Retail: With many retailers having gone out of business during the past two years, retail investors are extremely focused on tenant creditworthiness. Potential investors are marking down rental rates even for retailers that are doing well. Fewer than 30 properties sold in 2009 compared to 133 in 2007. Activity is expected to pick up slightly in 2010, but more for troubled assets than trophy properties. Currently almost 10 million square feet of retail space in the Chicago area is in distress, with much of the distress in Cook County because of its 10 percent sales tax and high parking meter rates.

Apartments: In the record-breaking year of 2007, apartment properties valued at more than $2.9
billion sold in the Chicago area. By comparison, the numbers in 2009 reached just 10 percent of this amount. Mainly weak properties sold, driving the average property value to $16 million, or half the average value seen in 2007. Apartments are still seen as the most resilient of the major property types, but the mindset of investors has changed. During the boom, the focus was on high leverage and a well-timed exit strategy because the profit was to be made when the property was flipped—the sooner the better. Now, investors must deal with lower loan-to-value mortgages and tighter underwriting standards and, consequently, they are focused more on first-year cash yields. Downtown Chicago is dealing with a glut of apartments being completed along with a number of condominium projects that will be leased. In the suburbs, demand for apartments has fallen significantly due in part to the relocation of some employers to the city, the most notable being United Airlines. Suburban investors are likely to target properties close to Chicago or located near major thoroughfares and public transportation. Rental rates will decrease further through most of 2010 as landlords attempt to boost occupancy.
Going from Mark-to-Market to Mark-to-Make-Believe

BY ROBERT J. PLISKA, CRE, CPA

HAVE WE GONE FROM “MARK-TO-MARKET” to “mark-to-make-believe?” Financial regulators consisting of representatives of the Federal Reserve, the Federal Deposit Insurance Corporation, the Comptroller of the Currency, and others released their guidelines, “Policy Statement on Prudent Commercial Real Estate Loan Workouts,” in late October 2009. The purposes of the statement were to provide transparency and consistency to commercial real estate workout transactions and not curtail the availability of credit to sound borrowers. While the regulators’ intentions are honorable, the policies may provide the opposite effect—lack of transparency and consistency and the lack of credit to sound borrowers.

In the early part of 2009, a tremendous amount of distressed commercial real estate existed. Many loans had balances that exceeded their underlying asset value. This dilemma continued throughout the year with substantial defaults and increasing amounts of distressed real estate. Later in the year, Real Capital Analytics, Inc. estimated that distressed properties exceeded $150 billion and Moody’s Investors Service noted that commercial property values dropped 43 percent from their October 2007 peak and were continuing to drop. A joint study by PricewaterhouseCoopers and Urban Land Institute indicated that there was little, if any, chance of recovery for many of these properties. Further, they reported, an additional pool of distressed properties existed just in commercial mortgage-backed securities, or CMBS—$250 to $300 billion a year that matured or rolled over through 2015. This was just one of many financial sources having difficulties. In the case of CMBS alone, previous underwriting would not hold water due to higher loan to values, deteriorating net operating income and rising capitalization rates. As a result, a huge amount of properties were at risk. Obtaining financing upon the expiration of their loan terms was highly questionable.

In spite of the tremendous amount of existing and future distress in commercial real estate, foreclosures and write-downs were minimal during 2009. Lenders did not want to foreclose since it would mean taking a loss on their financial statements and be a detriment to their capital ratios. Interesting terminology came into play that explained their approach: “A rolling loan gathers no loss.” If lenders were forced to write down their loans, then this could cause a significant amount of additional bank failures—many more...

About the Author

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than had already occurred. With the FDIC’s insurance fund already significantly depleted and proceeding toward a deficit, the federal regulators seem to have decided to go along with the flow—try to extend the loans as long as they could. Accordingly, new descriptive terminology emerged: "extend and pretend" and "delay and pray." This "sanction" by the federal regulators of "extend and pretend" has caused great concern among many. Concerns include:

- The financial crisis and the inevitable are just being prolonged;
- An additional drag is being put on the current poor economic environment;
- New good loans may be more difficult to make due to capital being tied up in bad loans;
- Proper and consistent accounting may not be occurring, causing further differences and inconsistencies in decision making and reporting;
- Management manipulation of financial information will be easier;
- A transaction freeze will continue to take place;
- Value will be difficult to determine due to a lack of transactions;
- The period of uncertainty will just be extended.

The key point of the policy statement issued by the regulators is that loan workouts need to be designed to help ensure that a financial institution maximizes its recovery potential. Renewed or restructured loans to borrowers who have the ability to pay their debts under reasonable modified terms will not be subject to adverse classification solely because the value of the underlying collateral has declined to an amount that is less than the loan balance. So if the borrower and/or its guarantors can still make the payments and the financial institution would prefer to extend the loan rather than take a loss, the fact that the property is worth less is not the determining factor.

The loan can be in good standing if the borrower/guarantor can show that they can still make payments. New appraisals need not be ordered if an internal review by the institution appropriately updates the original appraisal assumptions to reflect the current market and provides an estimate of the fair value for impairment analysis. Documentation should demonstrate a full understanding of the property’s current “as is” condition. However, if the institution intends to work with the borrower to get a property to “as stabilized” market value, the institution can consider the “as stabilized value” in its collateral assessment for credit risk rating. This ability to extend the loan and not report losses or reserves may be heading too far toward the “make believe” area. Just present a “good story” and the institution can buy a lot of time.

This good story accounting could provide more of a lack of transparency and consistency. Different accounting approaches may take place for similar distressed assets for different financial institutions. Two accountants and/or examiners can tell a good story much differently. It will probably make the federal regulator’s job more difficult. In the 1990s, for example, banks in Japan were allowed to avoid taking losses and write-downs. The result was an entire decade of stagnation. The steps by our federal regulators could create a parallel situation. This may extend the time of lack of credit to borrowers.

In spite of the above, as of December, 2009 there seem to be some potential transactions occurring which could escalate regardless of the ability to extend these loans via the new policy statement. Some lending institutions are taking a more realistic line on distressed assets and are starting to foreclose, take deeds in lieu of foreclosure and selling their distressed assets and notes. Distressed funds that have been set up for some time await the purchase of distressed assets and notes are now able to purchase them whereas they could not before—thereby getting deal flow going again and toxic assets off the lenders’ financial statements.

A lack of transactions hurts everyone. The investment funds are not able to invest in the distressed properties that they have been set up for. The financial institutions are saddled with nonperforming assets that are impacting their future ability to lend. Assets continue to deteriorate and lose value due to rising vacancies, higher loan-to-value ratios and rising cap rates. Valuations are difficult to determine. Uncertainty continues.

Let’s get back to reality, consistency and good reporting rather than good story, make-believe and a head-in-the-sand approach with relaxed accounting and reporting standards. Let’s try to clean up our commercial real estate problems sooner versus later by taking a more realistic approach rather than have toxic loans eat at the insides of supposedly “well capitalized” institutions. Let’s address our issues more timely and critically in order to get back more quickly to a better market—a market where there is more lending, less uncertainty, more transactions, better valuations, more transparency and a more vibrant economic environment. ■
This book "is a collection of abridged market analyses, forecasts, and strategy papers from ING Clarion’s Research & Investment Strategy (RIS) group. . . It is not meant to be a comprehensive approach to strategy formulation for the real estate industry, but instead illustrates a cross section of private equity strategies across the various property types."1

Active Private Equity Real Estate Strategy effectively achieves what it intends, providing readers with an inside look at the kinds of issues, investment factors and other considerations that go into private equity real estate decision-making at one of the world’s largest real estate investment management organizations. Books on private equity real estate investment are rare, and even rarer is a book that spends less time defining terms and more time discussing the nuance and process of making private equity decisions. In this case, unlike in making sausage, the process is enjoyable to learn about.

While most of the chapters focus on describing the key investment drivers and risks for particular property sectors, and will be quite useful for those readers who want to understand how institutional property investors think about real estate, it is in chapters 11 and 12 where the book lives up to its name. Chapter 11, "Active Portfolio Management using Modern Portfolio Theory," introduces "Hypothetical Fund Forecasts" utilizing sector, region and metropolitan area forecasts. Key issues in benchmarking, balancing and rebalancing portfolios and scenario analysis to test the impact of rebalancing are discussed. While the treatment of these issues is not extensive, it is difficult to find books that address them at all.

Chapter 12 on derivatives is quite good. While derivatives are seen as somewhat of a “dirty” word today, this chapter demystifies some important private equity-based derivatives that can have important applications to active portfolio management through hedging, asset allocation and rebalancing, and speculation. The chapter discusses the key risks of derivatives—liquidity, basis risk, counterparty risk and interest rate risk, and provides some detailed applications of derivatives as a form of portfolio insurance and to rebalance a fund.

The book’s initial chapters start with an overview of the key markets and trends that form the basis of more sophisticated investment strategy and active portfolio management techniques, which are discussed in the second half of the book. While the initial chapters on the real estate market

About the Reviewer

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and forecasting are straightforward and may be useful for those with limited background in these issues, the chapter on recession simulation is interesting and of course, quite important in today’s market environment.

Chapter 4, “Subprime Fallout and the Impact on Commercial Real Estate,” was written in the summer of 2007, just prior to the unanticipated (at least as to its severity) collapse of the real estate markets, and demonstrates the type of analysis produced that summer that led to forecasts of no recession and limited impact of the residential subprime crisis on commercial real estate markets. While I am not sure the authors want to advertise forecasts that failed to materialize, I applaud them for keeping the chapter in and providing students and other readers an inside look at how “event” risk and the psychology of markets can catch even the smartest of investors by surprise.

The book is also notable because it does not focus on office and retail investment, the focus of most institutional investor portfolios, but presents an excellent framework and assessment of residential land investment as well as global gateway industrial markets, senior housing and other sectors.

The book’s greatest strength—the inside perspective on the process and thinking of a firm providing investment products to investors—is also a weakness. By focusing on the perspective of an investment firm, less information is provided from the perspective of an investor. The authors do not provide their perspective on where private equity real estate fits in the broader investor portfolio, and they pay less attention to the many shades of private equity based on the relative risks and rewards of investment. Examples include core, core plus, value-added, opportunistic, mezzanine debt (equity) and related typologies that provide some classification that enables investors to actively manage their private equity real estate portfolios.

While I never like to critique a book for what it does not do—when it never intended to do it—I cannot resist. I would like to have seen a bit more on performance assessment and private equity deal structures, which have become important to the strategic development and management of private equity real estate. What are the trends in private equity deal structures and performance-based fund contracts? Are clawbacks becoming more important? How will the problems many private placement deals are experiencing change the way deals are structured?

In summary, few books on private real estate equity exist, and David Lynn and ING’s contribution offers a unique glimpse at the internal research and strategy development process for one of the industry’s largest real estate investors. By focusing on what the book says about the strategy process, students and practitioners will gain insights not available in standard academic textbooks.

ENDNOTE
1. From Preface to the book.
REMEMBER THE SCHOOL DRILLS of the 1960s when we hid under our desks in case the Soviets nuked America? I do. Who could have imagined that the Soviet Union would just “fall apart” by the end of the 20th century? George Friedman explains, “Conventional analysis suffers from a profound failure of imagination.”

There is nothing conventional about this book. With analysis based on geopolitics, Friedman presents a rational, feasible forecast for our world in *The Next 100 Years*. His premise is that the concept of the “invisible hand” of geopolitics leads nations and their leaders to act in their own self-interests over the short-term, leading to predictable behavior and therefore to an ability to forecast the shape of the future of the international system. This method assumes two things consistent throughout history: 1) humans will continue to organize themselves into units larger than families and are naturally loyal to these groups; and, 2) the character of these nation-states is determined to a great extent by geography, as is the relationship between nations. When one drills down and examines the forces that shape nations, one can see the choices for their behavior are limited.

Friedman’s goal is to get one to think beyond common sense and to imagine the unimaginable and its unintended consequences. He starts out with a review of the past century of history which started with Europe peacefully ruling the world. He examines the major events of the 20th century and concludes a major point he makes throughout the book: The United States is now the dominant world power, economically, militarily and politically, replacing the reign that Europe enjoyed for the previous 500 years—from 1492 to 1991. Therefore, the coming 100 years will be defined by two opposing struggles: 1) secondary powers forming coalitions to try to contain and control the U.S.; and, 2) the U.S. acting preemptively to prevent effective coalitions from forming.

The book is fascinating and very readable with helpful maps that provide useful illustrations of the areas of the world and international dynamics that Friedman discusses. He stops and examines the world every twenty years to observe the changes and demonstrate that these changes were beyond the reach of conventional political analysis but not so incredible when one considers the cultural and technological changes that occurred.

**About the Reviewer**

Julie M. McIntosh, CRE and 2010 CRE liaison vice chair, is chief investment officer of The Integral Group, a vertically integrated real estate development and investment management company based in Atlanta. Throughout her career, McIntosh has been an investor in a variety of real estate finance and investment vehicles, including construction lending, problem loan portfolio acquisition and resolution, CMBS origination and non-rated securities underwriting and purchase, equity joint ventures for development projects on behalf of her Wall Street client, and private equity fund management for public pension funds and institutional clients. Her passion is in the urban environment and revitalizing and/or sustaining our nation’s livable city centers.
Friedman examines the events of 9/11 and the U.S. response to those events. The assessment of goals, options and strategies among the various players is interesting and enlightening. Yet it is his view of the future that is most compelling. Pointing out the inevitable decline in population that has already begun in the developed world, he states this will continue around the globe with developing countries well into the 21st century. This population decline will restructure our lives and transform the family. All societies will experience the tension between the traditionalists, such as Osama bin Laden and the fundamentalist Christians, and those attempting to redefine the family, women and society. This tension will continue to shape the world as the inevitable decline in population plays out.

Next Friedman looks at the new “fault lines” in the world—where will the next geopolitical earthquake strike? The currently viable candidates are: China, Japan and the Pacific Basin; Eastern Europe—Russia and the former republics of the Soviet Union; Europe with its recurring tensions; the Islamic world; and Mexico. Friedman looks at them all and concludes that in the next ten years, Russia and China have the greatest systemic conflicts that may escalate. He goes on to examine each of these countries in greater detail. For each, there are notable tensions: Russia with Poland, and China with Japan. He predicts these will be prominent issues by 2020.

By 2030, America will experience a labor shortage that, without a change in immigration policy, threatens to become a crisis. Once the U.S. addresses internal problems, we should see a time of tremendous growth in 2040, similar to the 1990s. By 2050, the world will be at war and Friedman describes this fantastical conflict in great detail. He has written numerous articles on national security, information warfare, computer security and intelligence and he describes a war which is “based on real technology and reasonable extrapolations about future technology and war planning.” I recommend reading the book if only for these warfare details—let me tell you, it’s a war fought mainly in outer space. And it certainly sounded plausible to me.

Post war, back in North America, Mexico will become a major regional power. By 2080, there will be big issues with the U.S. and Mexico, and how they are resolved is a topic for the 22nd century. This book is a great tool for understanding the current world and relationships and thinking about how it all relates to the past, giving us a possible roadmap for the future. It is definitely worth reading—and imagining.
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The award is named in honor of William S. Ballard, who was a leading real estate counselor in Boston in the 1950s and 1960s. He was best known for the creation of the “industrial park” concept and developing the HUD format for feasibility studies. He was an educator who broke new ground during his time in the real estate business, and whose life ended prematurely in 1971 at the age of 53.
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To provide a platform for professional relationships, insight
and access to diverse experience.

PARTICIPATE:
Through active participation, contribution, and camaraderie, members
enhance the benefits of a diverse professional community.

COMMUNICATE:
To communicate within the membership and marketplace that our
members are the preeminent source of real estate knowledge and advice.

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