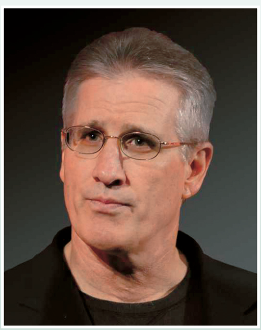
This article is sponsored by the
Society of Industrial and Office Realtors® Foundation.
Enriching Our Community

The SIOR Foundation's mission is to promote and support initiatives that educate, expand, and enrich the commercial real estate community. Established in 1962 to publish the industry's first graduate-level textbook on industrial real estate, the SIOR Foundation has maintained its dedication to expanding understanding of the commercial real estate industry.

We Found Bottom!

By Dr. Peter Linneman



Dr. Peter Linneman, Principal of Linneman Associates, holds both Masters and Doctorate degrees in economics from the University of Chicago. He is the author of the leading real estate finance textbook, Real Estate Finance and Investments: Risks and Opportunities, *and has published more than 100 articles during his career. In addition, he publishes the highly regarded economic quarterly,* The Linneman Letter, *through Linneman Associates. Dr. Linneman has provided strategic and financial advice to leading corporations for more than 25 years and provides strategic and M&A analysis, market studies, and feasibility analysis to a number of leading U.S. and international companies.*

The recession is over! Barring more government panic, we hit bottom around April 2009. However, let's be clear: Government panic and subsequent market incursions both lengthened and deepened the cyclical recession that was underway in mid-2009. The good news is that real GDP bottomed in May 2009, while monthly job losses have slowed. *(See Figure 1.)* Once job declines end, there will have been a net loss of about 7.24 million jobs over the duration of the current recession. This is equivalent to about four years of normal job growth, which is about 1.8 million jobs per year. *(See Figure 2.)*

Most economic indicators hit bottom between February and July of 2009. Most dramatic in this regard was the stock market, which reached a low of 677 in March. Since then it has rebounded nearly 65 percent. *(See Figure 3.)*

Consumer confidence bottomed in November 2008 at 55.3, but stood at 67.4 one year later. We anticipate it will continue a rolling rebound in 2010, much as occurred in 1976 and 1983. *(See Figure 4.)*

After-tax corporate profits hit bottom in the fourth quarter of 2008, but had risen by 15 percent through the end of the third quarter of 2009. To date, this profit rebound has been focused on cost reductions rather than revenue enhancements, with each of the 7.24 million jobs lost to date increasing profits by approximately $19,000. However, we are about to enter the phase where corporate profits will continue to rise as a result of revenue increases rather than cost reductions. Ultimately this will result in increased employment, as one can only use a strategy of "the beatings will continue until morale improves" for only so long. *(See Figure 5.)*

Other indicators hitting bottom include: average weekly hours worked (even in manufacturing), hours of overtime worked, new manufacturing orders for both durable (including autos) and non-durable goods, vendor deliveries, new orders received by manufacturers (both for defense and non-defense goods), single family housing starts, industrial production of business equipment and consumer goods, non-durable and durable goods sales, inventories, capacity utilization, and housing prices. The number of unemployment claims reached its high and began to turn back.

FIGURE 1

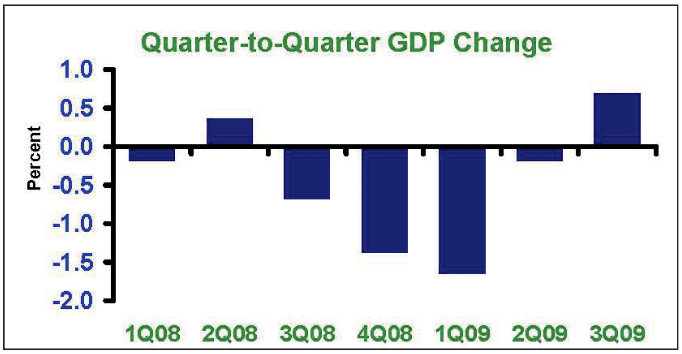


FIGURE 2

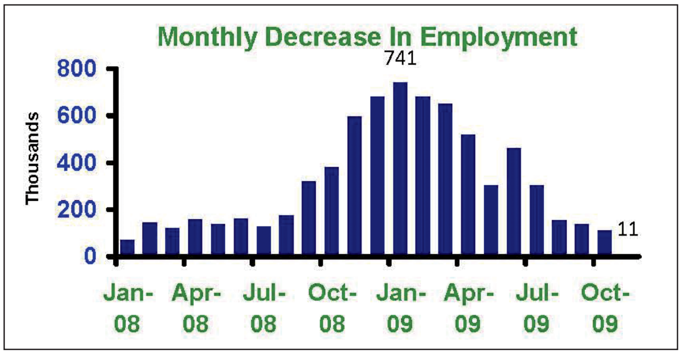


FIGURE 3

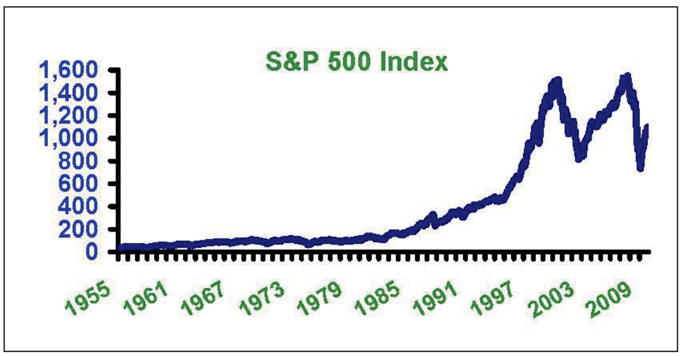


FIGURE 4

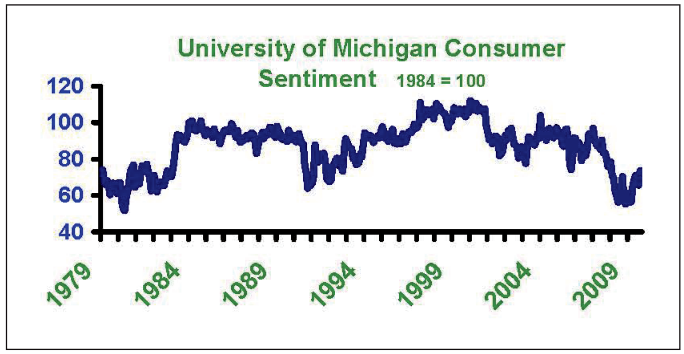


FIGURE 5

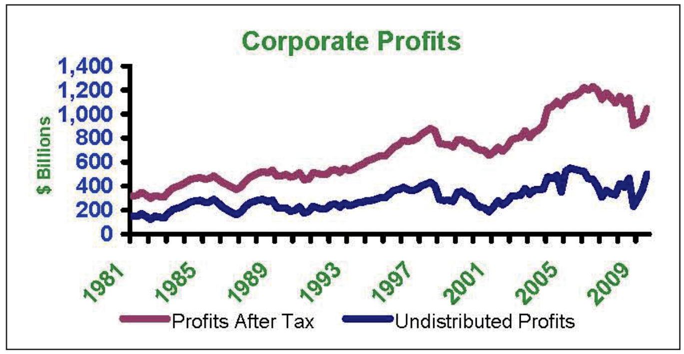
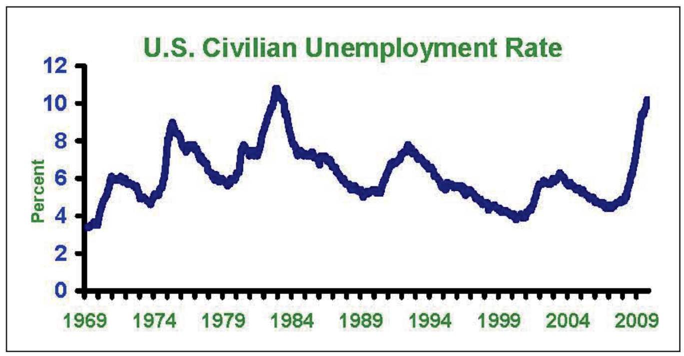


FIGURE 6



Taken together, these factors indicate that the economy turned for the better only slightly later than was widely forecast prior to the stimulus bill and government interventions.

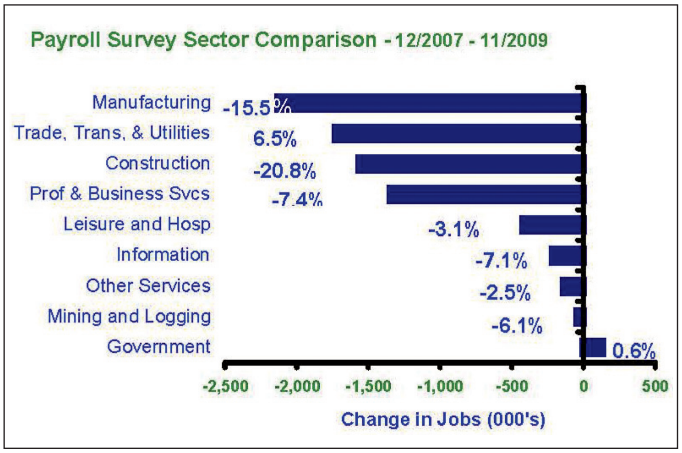
How Will Jobs Return?

November 2009 registered a gain of 4,000 jobs, but the U.S. economy lost 85,000 in December, a level which we anticipate to be adjusted downward. Professional and business services bottomed in August 2009 and gained 148,000 (+0.9 percent) over three months through November. This was driven largely by education and health services, which increased throughout the recession by 858,000 (+4.6 percent) from December 2007 through November 2009. We expect overall job gains to begin in March 2010. *(See Figure 6.)*

In terms of commercial real estate fundamentals, we will need the return of the 7.24 million jobs that will have been lost to the recession (7.2 million through December 2009 plus an estimated 40,000 more), plus an additional 1.5 million jobs, to fill the new space that came online since December 2007. That is, in order to return to the real estate supply-demand fundamentals that existed at the beginning of 2008, we need to add roughly 8.74 million jobs, or about 4.9 years of normal job growth. We suspect that this level of job increase will not occur until late 2014 or early 2015. If we experience above-normal growth of 3–3.5 million jobs per year, then it will take 2.5 to 2.9 years or until late 2012 or mid-2013. *(See Figure 7.)*

Millions of jobs were lost in the economic downturn that surprised the economists. The lack of governmental rules and the ensuing panic froze the vast majority of Main Street. As a result, employers stopped replacing employees who died, retired, took maternity leaves, or went back to school. This lack of employee replacement resulted in dramatic and widespread net job declines. The exploding job losses are less a testimony to the collapse of employment in construction, finance (both of which

FIGURE 7



include the effects of the housing downturn) and autos, than to the widespread failure of Main Street to replace workers. In fact, only 2.1 million (about 25 percent) of the lost jobs were in construction, autos, or finance.

With the bottom found over the past six months, solid employers are slowly becoming comfortable with replacing employees who are leaving today, as well as replacing workers who left 6 to12 months ago. This is why job losses have slowed and will eventually reverse. By early 2010, we anticipate that most firms will be replacing both workers who leave and those who left (and were not replaced) during the panic. After all, most non-replaced workers were highly productive.

What Will The Recovery Look Like?

Historically, the U.S. economy has rebounded in ways that were unimaginable at the time. We examined how each of our metrics changed in the 24 months and 48 months after the end of each of the two previous super-recessions. In each case, despite prevailing recessionary doom and gloom, the data reveal that the U.S. economy bounced back strongly within two years. In the 24 months following the two super-recessions of 1973–75 and 1980–82, real GDP grew by 10 percent and 14 percent, respectively, employment grew by 6 percent and 8 percent, automobile sales rebounded by 49 percent and 15 percent, industrial output grew by 19 percent in both cases, construction increased by one-third and two-thirds, housing starts rebounded by 100 percent and 25 percent, the unemployment rate fell by 250 basis points in both cases, and real wealth rose by 9.1 percent and 8.2 percent.

It is important to understand that these earlier super-recessionary recoveries occurred as sanity eventually replaced panic. We believe the same process is already underway. It is not the result of government stimulus packages whereby the government "creates" jobs. It is the result of slowly improving consumer and business confidence, combined with technological growth and population growth, and rebounds in auto and housing from cyclical lows. This will be the case again.

Government programs, such as clunker trade-ins and first-time homebuyer subsidies, do not create jobs or value. They merely reward those who were going to purchase anyway and ensure certain types of consumption "now" relative to other types of consumption (including consumption "later"). If all we had to do was create new assets and destroy existing assets in order to grow, we should immediately embark on destroying real estate across the country. Value creation occurs by satisfying legitimate consumer needs, not by the government manufacturing consumer needs.

The government's interventions and spending did little more than redistribute income from the politically unfavored to the politically favored, while creating uncertainty about the rules of the game. Only as this noise has receded has some semblance of normality returned.

Housing: Sunshine Ahead

The best news for the U.S. economy continues to be that the U.S. housing market bottomed in February 2009. Single-family starts hit (a very low) bottom of roughly 355,000 units in January and February 2009, increasing **unsteadily** to 511,000 in September 2009 and 476,000 in October 2009. The inventory of homes held by builders for sale has plummeted to 239,000, as new home production over the past two years has been insufficient to replace the more than 350,000 units destroyed each year. *(See Figure 8.)*

MLS (multiple listing service) home prices, which exclude wholesale sales such as sheriff sales, have risen both nationally and in almost every MSA (metropolitan statistical area) for the past nine months. Thus, while many foreclosure wholesale sales in the weakest markets continue to drag down the Case-Shiller and NAR indices, as seen in the retail-only FHFA index, the preponderance of homes sold by resident owners have seen price rebounds. The housing sector's strong rebound over the next three to four years will be a powerful growth

Historically, the U.S. economy has rebounded in ways that were unimaginable at the time.

FIGURE 8

FIGURE 10

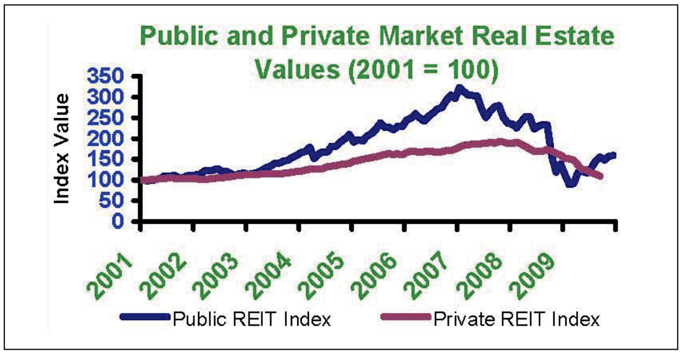


FIGURE 9

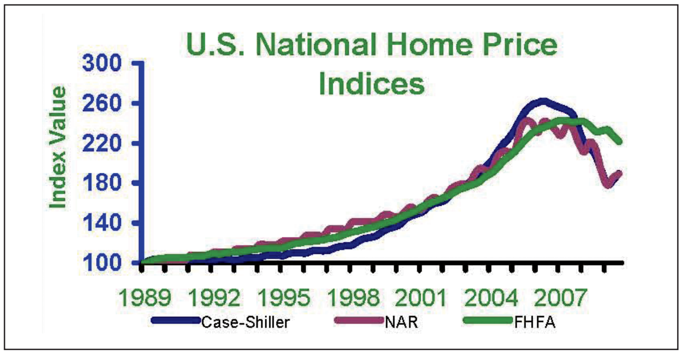
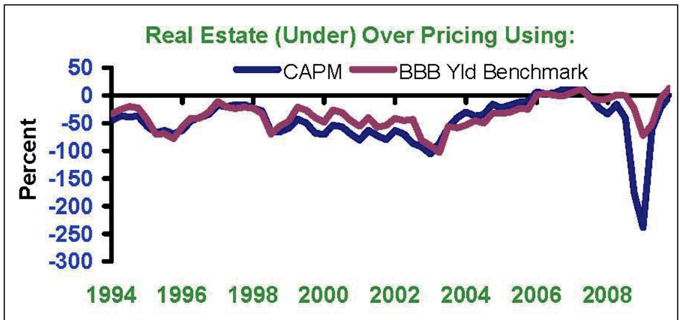


FIGURE 11



Liquidity premium assumed to be zero.

engine. Each 100,000-housing-unit increase represents an increase of about $20 billion in GDP. *(See Figure 9.)*

Indices that include sheriff sale prices on foreclosed units massively overstate the decline in retail home prices because sheriff sales are wholesale prices. This is a key reason why FHFA price indices (all retail) do not show the dramatic price declines found in the Case-Schiller and NAR indices (which include sheriff sales).

Capital Markets Are Thawing

As asset values begin to rise, you will see consumers and businesses willing to buy and invest. This will lead to increased investment activity and ultimately will cause lenders to lend. There is no doubt that capital markets are rebounding, as witnessed by the nearly 50 percent bounce in the stock market and the greatly narrowed spreads on LIBOR (the interest rates that banks charge each other), high-grade corporate debt, and more recently, junk bonds. The process of price discovery always occurs first in the public markets, where assets are freely and frequently exchanged between third parties, with private markets lagging 12 to18 months. As a result, we expect private asset pricing, including that of commercial real estate, to begin rebounding in the second and third quarters of 2010. *(See Figure 10.)*

For a number of years, we have consistently applied two valuation models to the pricing of commercial real estate: the Capital Asset Pricing Model (CAPM), and a comparative risk analysis, which we have referred to as the "it tastes like chicken" model (ITLC). CAPM effectively calibrates risk as the covariance between commercial real estate returns and total market returns (so-called beta). The ITLC model assumes that ownership of the perpetuity lease claim should generate approximately the same expected return as the perpetuity debt claim of the tenants, as proxied by BBB bonds. In these analyses, we proxy the cash flow return to real estate by the REIT dividend yield on REITs, and we use REIT-implied cap rates as indicative of commercial real estate pricing over the long term.

Both models indicate that the pricing of commercial real estate was systematically too low until early 2006. By early 2007, these models indicated a 20-percent premium relative to alternative investments. Since the collapse of capital markets, real estate pricing dramatically overcompensated relative to long-term risk. This reflected the concern that things could get much worse in the short term, particularly in light of difficulties with renewing maturing debt. *(See Figure 11.)*

Over the past six months, the CAPM analysis indicates that real estate pricing has improved dramatically relative to its long-term risk. In particular, REIT pricing has gone from being under-priced by 230 percent in March 2009, to being fairly priced in December 2009. The massive under-pricing reflected the fact that real estate no longer served as a diversifier, but in fact had heightened portfolio risk, implicitly increasing the implied REIT beta. The ITLC model suggests that the under-pricing of real estate has gone from being 75 percent undervalued in March 2009 to 10 to15 percent overvalued as of late December 2009, reflecting the strong rebound in REIT prices.

"Going forward, the best news for a recovery is that the commercial construction pipeline is empty. Thus, as profits continue to increase, employment growth will absorb existing space and raise occupancy rates."