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Impact of Hurricane Katrina Ripples Across **Economy**

by James R. DeLisle, PhD

Introduction

We started writing the "Financial Views" column for The Appraisal Journal in fall 1999, making this the sixth anniversary of publication. To help readers develop proactive stances, this column looks at major trends or events that are likely to affect the outlook for both the economy and real estate. This format worked well for the first two years, but came to a severe test in fall 2001 on the heels of 9/11. Obviously, our forecast as well as those of others were thrown off by 9/11, which shifted debates about the economy and the impacts of terrorism. The increased budget allocation for the Department of Homeland Security and the shift in the national psyche have had an enduring impact on the economy. As of late, both the economy and the capital markets have adjusted, operating on a relatively steady-state path to recovery. That is not to say the transition has been smooth. Global issues have clouded the scene and made forecasting somewhat tenuous, but in the absence of more events, life has gone on.

Now in the post-Hurricane Katrina days, we are again faced with the difficult challenge of forecasting the near-term reaction and long-term implications of a major event. This challenge is especially difficult when there is no modern U.S. precedent to give some insight into how the market will react to such a natural catastrophe. However, rather than waiting until the next edition of "Financial Views," when the impacts will be clearer, we have decided to try to incorporate the catastrophe into our discussion of the economy, capital markets, and real estate markets. While there is obvious risk in this type of prognostication, we believe it is important to highlight some of the issues so readers can think about how to adjust to the shock to our economic system.

Much has been written about Katrina and how it has forever changed the lives of individuals and the way we think about natural disasters. As the recovery efforts continue, so do the debates over what went wrong, what went right, and what to do about it. These debates have several dimensions. First, there is the national security issue and what we need to do to improve our hazard-response systems. Second, there is the issue of how to deal with the people and businesses whose lives have been shattered or disrupted. Third is the question of what, where, when, and how we rebuild public and private infrastructure and facilities in the devastated regions. Finally, there is the debate over the question of how much this will cost, how it will be financed, and who will bear the costs. In this column, we will focus on the latter issue, although we will also incorporate the ripple effects of some of the other issues.

Commentary

Before Hurricane Katrina, the economy seemed to be on track, albeit somewhat disappointing for a recovery period. Business indicators were generally positive, but with some trouble spots. The Federal Reserve (the Fed) had continued to gradually raise short-term rates, but long-term rates remained stubbornly low, which helped to stimulate the housing market. Inflation remained a concern, but seemed under control with energy the wild card. Consumers remained cautious, but confidence levels were generally positive and retail sales were holding up, especially at the top end of the market. Capital flows remained strong for real estate, placing upward pressure on prices and continuing to break new records. Finally, real estate market conditions continued to gradually improve. Some markets reported positive absorption and a gradual decline in vacancy rate.

Hurricane Katrina, however, will have an impact on each of these elements. The effects will range from the direct to the indirect, obvious to subtle, moderate to severe, and short-term to long-term. A discussion of these effects is incorporated into each of the elements of this column. This discussion will also provide a frame of reference that can guide discussion of further shocks that might be lurking on the sidelines, either natural or geopolitical in nature.

The Economic Environment **Economic Growth**

For the first half of 2005, economic growth was solid but unspectacular. Through July, economic indicators inched up, with fairly widespread gains as six of the ten indicators increased. For the year, the leading index was up moderately, led by declines in interest spread comparing 10-year Treasuries to the federal funds rate.

During the summer, economic growth appeared to be slowing somewhat, coming in on the heels of downward revisions in the growth index, disappointing many who had anticipated the opposite. Accordingly, the economy showed some stress due in part to declining inventory levels as businesses pulled back. Part of this retrenchment may be related to improvements in information systems and supply-chain management, which enable companies to adjust inventory levels more quickly to changes in consumption and near-term prospects for demand. Since this change is considered structural, it may add more volatility to growth prospects as companies try to hone in on appropriate inventory strategies to cut unnecessary costs. The prospects for economic growth suggest a nearterm deceleration, continuing the economic slowdown that had been occurring before Katrina hit.

In the aftermath of Hurricane Katrina, and in the face of rising energy prices and uncertainty, economic growth is expected to moderate even more as consumers rein in spending and companies defer expansion plans. However, there are few signs of a major disruption of economic growth and little talk of a recession on the horizon. After a (hopefully) brief pause in economic growth, the situation could reverse itself with upward pressure as the reconstruction activity picks up early in 2006.

Employment

Employment figures have been carefully monitored by consumers and analysts looking for signs that the economic recovery will provide sustainable job growth. During the first three quarters of 2005, the employment situation seemed to be on track, although improvement was spotty, especially on the manufacturing front. This fizzled somewhat during the summer, with employment growth rates disappointing many observers.

Workers have experienced little improvement in soft wages, which has helped corporate profits, but has eaten away at earnings and savings rates as consumers stretched their fixed budgets. It appears now that workers will have to wait longer than normal for the lag between gains in productivity and wages to improve their economic situations. At the same time, the continued turmoil with regard to pension funds combined with trends in benefits suggest that employment gains in this cycle might not be comparable to those at other times. That is, despite increasing numbers and modest gains in nominal wages, new hires are unlikely to receive the same benefit packages in terms of health care and retirement as those in earlier expansionary cycles. Even with the potential for an increase in wages as the economy picks up next year, and employment expands, net real wages and benefits are likely to continue to languish.

In September, the near-term employment situation was shocked with projections of some 400,000 direct job losses related to Hurricane Katrina. While these figures are a major concern, they do not reflect the full ripple effect of the aftermath and the impact it may have on jobs across the country. The economy may stumble and companies could retrench as they try to figure out the consequences of the devastation. Energy supply and pricing remains the wild card; it is simply too early to tell how long and deep the disruption in oil flows will be. Given the anticipated slowdown in economic growth, some additional softening on the national employment front is expected. Employment prospects should pick up by the end of the year based on predictions for a period of moderate contraction followed by a period of expansion; this should set the stage for employment gains as the economy regains momentum.

Regarding the South, when the rebuilding kicks in, construction employment in the impacted areas will pick up, although there may be a mismatch between skills and labor. Depending on how extensively construction workers are redeployed to the area, construction employment may pick up in other

areas of the country, which would result in upward pressure on wages and increased costs on top of rising prices for raw materials. Jobs in New Orleans should begin to pick up over the next several months as companies come back on-line. However, whether dislocated employees will return to the devastated area remains uncertain.

Inflation and Interest Rates

Although the prospects for inflation were a concern throughout the summer, the general pre-Katrina consensus was that the Fed would be able to keep inflation in check. Again, the wild card on the inflation front was the increased energy costs that had already translated into record prices at the gas pumps.

While it is too soon to be able to quantify the full extent of inflationary pressures associated with Katrina, it is likely to place a drag on the economy. With the surge in gasoline prices after Katrina, there were some signs that retail sales were beginning to suffer as consumers began to pull back. Inflationwatchers also began to focus more attention on the impacts on petroleum-based products and the ripple effects that shortages might have on raw materials. An unexpected rise in natural gas prices created additional inflationary pressure and is likely to drag on consumer spending. At the same time, the demand for building products associated with reconstruction drove prices up over the near term, with concern that shortages might develop and prices rise, which could derail the housing market. In terms of food prices, the early results suggest that Katrinarelated losses were not as severe as initially thought, although rising costs of transportation and packaging are expected to place additional upward pressure on food prices. Insurance costs are obviously likely to rise, suggesting both homeowners and businesses will be under pressure as insurers seek to cover their losses. When coupled with continued pressure on health insurance rates, the cost of personal security is likely to eat into both consumer and business revenues.

During the summer, official forecasts for the budget deficit came in at lower than expected, although many questioned the effect of long-term pressures. The debates surrounding the deficit were quickly rendered moot by Hurricane Katrina and the prospects of unprecedented federal funding to help in reconstruction efforts. In light of the turmoil created by Katrina, the Fed is in a difficult position as it

tries to maintain the course and offset inflationary pressures. Going into the fall, the federal funds rate continued to rise, increasing to 3.5%. While the market had expected these measured increases to continue, rising concern over the economic recovery could force the Fed to pause its efforts.

On the global front, U.S. currency is in a precarious position, with the dollar's recovery losing ground and prospects for further weakening rising. The staggering \$200 billion estimated reconstruction cost weighs heavily on the record budget deficit in 2004, and hangs over the dollar's fate. The import/export balance should suffer, as imports increase to offset domestic losses in oil and agricultural production, reversing some of the positive gains that had been made in the trade balance. The good news is that the yield curve has remained flat, with compression in the spread between short-term and long-term rates helping maintain the low interest rate environment that is critical to the housing market and the fledgling recovery in the commercial real estate markets. While there is concern that risk is not being fully priced into rates, it is likely that this situation will continue, creating a rather benign outlook for interest rates through year-end.

Business Indicators

Business indicators through the summer were generally positive, suggesting economic growth would begin to improve as companies continued to ramp up operations. Inventory levels, which had been depleted and dragged down economic growth earlier in the year, started to pick up. Capacity utilization continued to increase, although not reaching levels that would trigger a new wave of business expansion. The manufacturing sector, however, lost some ground during the summer, giving up some of the improvement it had exhibited. Industrial production also fell as did new orders, suggesting the sector was vulnerable to additional slippage. The decline in inventory levels contributed to the doldrums as restocking fell off in light of economic uncertainty. Productivity gains finally tapered off, suggesting that increasing output levels might finally begin to translate to more meaningful and sustainable employment growth.

Although business indicators were generally favorable in late summer, some sectors were in trouble. In particular, the airline industry continued to face turmoil because of rising fuel prices and lagged effects from 9/11. Despite strong passenger levels, the industry failed to turn a profit as higher costs ate into the bottom line and competition placed a cap on revenues. The surge in fuel prices, because of Hurricane Katrina, proved to be the straw that broke the camel's back. In mid-September, even before the full effects of the devastation hit the industry, Delta and Northwest filed for Chapter 11 bankruptcy protection on the same day. While this fate may have been inevitable in light the two airlines' sustained losses, it punctuated the crisis in the skies that plagues the nation. Indeed, with the filings, four of the top seven domestic airlines are operating under bankruptcy protection. With rising tension within the ranks of airline employees who have already provided concessions, there are few prospects for the turn around that some had anticipated by year-end. Despite the inevitable disruptions, travelers are unlikely to see short-term impacts as airlines try to maintain business as usual to help nurture the recovery in air travel. In the meantime, the airline industry is likely to struggle a bit more, resulting in a slowdown in orders for new equipment. Over the longer term, there may be a wave of consolidations that could reduce competition, and the industry could ultimately emerge even stronger with greater economies of scale.

The aftershocks associated with Hurricane Katrina are likely to create downward pressure on a number of business indicators. In particular, property and business insurance costs, energy costs and nonwage benefits costs are likely to rise. These increases can be attributable in part to the underlying forces that were in play before Katrina hit. Despite these challenges, the prospects are generally favorable for the business sector, which should return to where it left off before the storm hit. Much will depend on how the impacts play out and how corporate and investor attitudes respond to the reconstruction efforts and the overall economic environment. Once momentum returns, inventory levels should pick up and start rippling over to the manufacturing sector, which needs some stimulus to get back on track.

Stock Market

Corporate profits have been healthy with firms in the Standard & Poor's reporting 13-straight quarters of double-digit growth, tying the record set back in the early 1990s. Despite this streak, the pace has slowed, with the exception of the energy sector. More recently, crude oil prices have placed a drag on global markets, although not enough to drag down global stocks. Through August, global equity markets reflected positive investor sentiment, with returns in major European markets reflecting double-digit gains, and Asian markets in the upper-single and low double-digit ranges.

On the domestic front, price-earnings ratios continue to be relatively attractive, down from the recent peaks at the beginning of the decade, but still slightly above long-term averages. This improvement can be attributed to gradual strengthening of the economy, cost cutting, and increasing productivity. Going forward, companies will confront higher fuel costs, upward pressure on health care costs, and rising short-term interest rates. Of the three, the only pressure that might subside over the near term is on the interest rate front—although inflationary risk may make this a temporary respite. The flat yield curve should provide some cushion on long-term costs, although economic uncertainty may force companies to defer capital expenditures.

In the period leading up to Hurricane Katrina, the stock market showed little reaction to changing interest rates. While many hope for business to continue as usual, the catastrophe remains a major variable. This uncertainty may lead to more profit taking early in the third quarter, which would add more near-term volatility before the market settles down. Over the near term, energy producers may continue to benefit, while prospects for manufacturing and other sectors adversely affected by the disaster remain tempered.

It will be difficult to pick the post-Katrina winners and losers as the direct and indirect costs, and the disruption of business are still unfolding. At the same time, stock market gains are expected to fall back in line with economic growth, leaving little upside potential for the overall market. In this environment, investors may show increased interest in finding safe havens, focusing on dividend-paying investments for near-term earnings rather than long-term price gains. The situation is likely to remain volatile, although the decreased sensitivity to risk that investors have shown may help dampen the overall market.

Consumer Confidence

Consumer confidence was mixed during the summer. The Conference Board indexes rebounded in

August, led by the Present Situation Index and modest increases in the Expectations Index. On the other hand, the University of Michigan's Index of Consumer Sentiment dropped abruptly, with the decline exceeding expectations. Rising gasoline prices and jobs remained a concern for consumers, although there were some signs of employment growth.

The mixed consumer attitudes reflect the uncertain times, as well as a lack of agreement as to what various economic signals should mean to consumers. For example, some consumers took solace in the strong wealth/income ratio, which continued to benefit from rising housing values. On the other hand, this ratio was a concern in light of some signs that the housing market might be cooling off. At the same time, personal savings remained low, as consumers continue to focus on current consumption rather than retirement, although the rhetoric surrounding Social Security reform has started to raise awareness of the importance of long-term savings. Despite these concerns and mixed signals, toward summer's end it appeared consumer attitudes would mirror those of business leaders and reflect the overall economy; resilient, albeit somewhat dampened.

As might be expected, the widespread devastation associated with Hurricane Katrina was a major shock to consumer confidence, causing levels to plummet. This rapid decline was not unexpected, as consumers were inundated with news of the personal hardship, economic losses, and devastation associated with the storm. Consumers and businesses alike rose to the challenge and opened their hearts and pocketbooks to help those whose lives were shattered by the storm. While this scene is still being played out and private fundraising efforts continue, consumers are also beginning to turn attention to their own economic situations. In addition to the budget stresses triggered by the spike in gasoline prices, the hurricane aftermath may have a deeper and more insidious impact on consumer attitudes. That is, many consumers viewed the rise in gasoline prices as an example of price gouging and looked at the authorities with a growing sense of distrust. Nagging questions about the mismanagement of the emergency response system, the efficacy of our disaster preparedness, and government leadership further increased consumers' angst. This situation is unlikely to be resolved over the near term and may have opened wounds that will plague consumer confidence levels for some time.

Hurricane Katrina was a major shock to consumer confidence.

Given the human tragedy underlying many of these questions, it is unclear how consumer attitudes will adjust and play out longer term. The depth of the shock from the unexpected devastation may create a temporary disconnect between consumer confidence levels and the broader economy. As such, consumer confidence levels might not be as accurate a predictor of retail sales and other economic prospects as in more normal times. Hurricane Katrina created a situation that is unprecedented in its scope and potential impacts. Thus, while consumer confidence levels will likely be dampened well into the next year, what that means for the overall economy and political scene remains a major unknown.

Retail Sales

In late summer, rising gasoline prices caused a number of retailers and prognosticators to lower their outlooks for retail sales. Indeed, retail sales lost ground in August, reversing the modest gains of July. This decline was the greatest in over five years, pushing the levels recorded in November 2001 and beating downside scenarios. The largest declines were recorded for the automobile industry, which went to great lengths to stimulate the market, shifting from offering low interest rates to rebates to "employee discounts." While the promotions helped boost demand for new automobiles, consumers proved to be very selective, especially with respect to gas-guzzlers, which were eschewed in favor of more energyefficient lines. This shift in appetite is likely to hold since there is little near-term prospect that energy prices will abate. Setting aside rising gasoline sales (due to price increases rather than consumption) and declining automobile sales, retail sales were relatively flat.

Retailers initially avoided passing on to consumers the higher costs of shipping and energy associated with Hurricane Katrina, opting instead to absorb these costs. However, there is expected to be significant upward pressure hitting food, housing,

and material costs. Given the tenuous nature of consumer confidence going into the upcoming holiday season, retailers are likely to face a number of difficult challenges in pricing and inventory levels. They are well aware of the erosion in purchasing power associated with rising gasoline prices, flat take-home pay, and economic uncertainty. The good news is that after-tax profits for large retailers have been relatively healthy, continuing the upward trend since fall of 2001. While the stock market is unlikely to look favorably on any erosion in profit margins, the turmoil in the broader market associated with Katrina might provide a cushion that can be used to help nudge consumers into the buying mood. At the same time, strong agricultural productivity should help take pressure off food prices.

It is likely that consumer spending and retail sales will both face some downward pressures. Accordingly, there should be some decline in sales growth, although no major disruption in the absence of major unexpected shocks to consumer confidence.

Housing Market

The housing market has continued to belie predictions of an impending softening as new-home sales continued to be strong. There was some weakness in the existing-housing market; however, activity levels have remained sufficiently strong to suggest that the bull market might not be over.

One of the major stimuli to the housing market has been the continued low mortgages rates, which benefited from flattening of the yield curve as longterm rates held despite rising short-term rates. The fact that the Fed may slow increases in short-term rates to help the economy, coupled with the prospects that investors will continue to accept lower risk premiums, suggests that mortgage rates may continue to support the housing industry.

Over the past quarter, the debate over whether there is a housing bubble continued to rage. Indeed, as of mid-September, Googling "housing bubble" returns over 56 screens of articles on the topic with views on both sides of the issue. While it is generally agreed that some markets have exhibited bubble-like tendencies (i.e., speculative and unsustainable pricing), the views of pessimists, who argue that a major price correction is imminent, have been muted by those who take a more measured stance. Those with a more positive outlook point to the stratification of markets and the fact that funda-

mentals vary by market, with a number of markets experiencing above-average appreciation rates on the basis of strong demand fundamentals. From a theoretical perspective, the segmentation of housing markets and consumer behavior support this analysis and suggest the United States may be able to avoid the dramatic correction in housing values suggested by the bubble label. There is some downside risk, however, signaled by the fact that the recent surge in prices has been attributable in large part to cyclically low interest rates.

Given the institutional support that has built up around the current housing market, and the continued interest in housing as a long-term investment, the housing market may continue to remain strong. However, at this stage of the market, there is more downside risk in housing appreciation rates than upside potential, suggesting that homebuyers and housing industry specialists should proceed with caution.

The potential impacts of Hurricane Katrina on the housing market remain unclear. In the affected areas, the prospects that replacement housing will involve upgrades and modernization of existing stock should bolster values once the local economies get back on track. Uncertainties remain as to what restrictions will be placed on building or redevelopment. Similarly, the forced evacuation of the region and warnings that hurricane activity is expected to trend upwards create uncertainty regarding the strength of future demand.

Housing production costs in the South, and to a certain extent nationally, will be under upward price pressure with prospects of material shortages looming. This surge in demand for construction materials and labor could place upward pressure on new housing prices across the nation. The home improvement market should also face upward pressure on prices, especially on materials that can be expected to be in short supply. These factors, coupled with restrictive development policies that drive up land prices, may create inflationary forces in the housing market.

Assuming the market is allowed to adjust to the demand and supply factors in a reasonable manner, the housing market should gradually return to more normal and sustainable levels. While not at the frenetic pace of the recent past, these activity levels should remain relatively strong if mortgage rates hold and the economy picks up speed after the effects of Katrina are fully absorbed.

Real Estate Outlook

Market Overview

In the period leading up to Hurricane Katrina, real estate markets remained on the path of moderate improvement for most property types and markets. Little has changed in terms of the real estate outlook in areas not affected by Katrina. While the recovery may be postponed somewhat as the economy struggles to absorb the hurricane losses, the real estate market should not see major corrections and downside risk. Indeed, in some markets that absorbed families and business evacuees, near-term real estate fundamentals may temporarily improve due to the influx of new residents and businesses. Whether such improvement will be sustained is unknown. Thus, the overall prospects for real estate remain solid, but unspectacular, with significant improvement tied to a broader economic recovery.

Office Market

Of the major property types, the office sector remained the most troubled through the summer, with no major correction expected. The modest improvements in office fundamentals in large part can be attributed to stagnant construction levels rather than major gains in tenant demand.

On the positive side, vacancy rates continued to trend downward, hitting a three-year low. Net absorption picked up, with the strongest levels in five years, helping to explain some of the improvements in vacancy rates. Although this was welcomed news, vacancy rates still remained in the middle-teens, significantly above long-term averages and structural vacancy levels. That said, the available supply of sublease space has continued to decline, especially in the suburbs, which were hit the hardest in the last cycle.

A number of office markets showed sufficient improvement to set the stage for some new construction activity. These prospects are greatest in markets where efforts are being made to create denser, more compact cities to combat sprawl and manage growth. Similarly, some of the markets that absorbed businesses forced out by Hurricane Katrina may experience an uptick in office demand, although the long-term prospects in such markets remain guarded.

Going forward, the fate of the office sector will hinge on the broader economic recovery and increases in white-collar employment. Thus, officemarket fundamentals should exhibit some moderate improvement that will eventually translate to higher rents. Unfortunately, rising energy costs may eat into some of those gains. The good news is that investors seem to have discounted such conditions and appear resigned to the prospects of lower yields, especially for core holdings.

Retail Market

Of all the property types, the retail sector has remained the most durable, riding the heels of the strong consumer demand that defied many forecasts. While some retail formats languished and others lost ground, developers were quick to pounce on new opportunities such as mixed-use, lifestyle, and towncenter type projects. These projects signify the renewed interest in urban infill and economic revitalization of central cities. In markets and submarkets where the new supply outpaced demand, this new construction activity cannibalized retail sales from stores in more traditional shopping center formats. This risk has been mitigated somewhat by the overall strength of retail sales, especially with respect to other property types.

The relatively healthy retail environment has led to further declines in cap rates, especially for centers with dominant anchors, defensible niches, or growth constraints that provide some insulation from new competition. In terms of traditional subtypes, well-positioned regional malls have led the retail sector, while grocery-anchored shopping centers have held up well. Going forward, rising gasoline and natural gas prices may affect consumer attitudes and cause the retail sector to pause. These prospects pose some downside risk for the sector, although the relatively stable market should help it weather such setbacks.

Industrial/Warehouse Market

Through the summer, the industrial/warehouse market showed signs of improvement, providing some solace to investors who stuck with the sector. Overall, industrial vacancy rates continued their downward trend, with gains in absorption outpacing new construction. Speculative construction increased, but remained tempered.

Investors continue to focus on the sector, looking to it for solid but unspectacular returns. The recent disappointment in manufacturing employment has created some concern for the industrial sector, although the increase in capacity utilization suggests a rebound in employment that should trigger demand for additional industrial space. The warehouse market has benefited from the strong retail sector, as companies sought to replenish shelves to satisfy consumers. In addition, the rise in fuel prices has forced more attention to distribution costs; this may have an indirect effect on the demand for warehouse facilities in terms of type, size, and location. The research and development sector remains somewhat troubled, although there is some evidence that this sector may have hit the bottom of the cycle.

The impacts of Hurricane Katrina on the industrial/warehouse market remain mixed, with some disruption of established supply chains and distribution patterns likely over the near term. It is likely that there will be massive demands for materials and building supplies, which will have to be accommodated somewhere in close proximity to the region. On the other hand, increases to the federal deficit may lead to a weaker dollar, ultimately translating to higher exports that require more industrial and distribution facilities. Despite these near-term and longer-term stimuli, the overall industrial market is likely to improve gradually, with strong investor demand helping hold prices and cap rates.

Apartment Market

The apartment sector has continued to receive investor interest despite the softness that plagued the sector during much of the decade. This interest can be attributed to a number of factors, including the belief that the erosion caused by the shift in tenure choice from renter to owner has played its hand. Indeed, some prognosticators contend that homeownership may lose some of its luster if mortgage rates rise and prices began to flatten or decline. At the same time, household growth is expected to increase demand for housing, especially workforce or affordable housing, which has been priced out of reach of many households.

Despite the gains in occupancy levels in some markets, yields on apartment projects remain subdued, as investors have bid up prices by competing for relatively scarce product. In a number of attractive market settings, this situation has been amplified by condominium conversions, which have led to a contraction of the supply of rental housing. This impact has been most pronounced in urban centers with a renaissance in urban living.

In general, apartment market fundamentals are expected to continue to gradually improve, with additions to supply remaining tempered. This should translate to an increase in net operating income, which should lead to improved yields. However, rising energy costs, insurance rates, and interest rates may eat into such gains. Regardless, the apartment sector is expected to continue to be heated, with capital flows from lenders and investors fueling the demand for product, thereby placing downward pressure on cap rates and mortgage yields.

The direct impacts of Hurricane Katrina on the housing market will be concentrated in the South and other markets where evacuees created a shortterm surge in rents and property prices. This situation is likely to reverse itself as reconstruction takes place and households have the option to return home. However, apartment prices outside of the affected areas are also likely to face upward pressure on values as rising prices for materials and labor increase the cost of new construction.

Real Estate and Capital Markets Capital Market Overview

During the summer, the overall capital market environment operated largely as expected, characterized by strong capital flows. Despite low yields, there were few signs of any correction in pricing, with capital providers willing to accept lower risks. Sellers continued to cash in on record pricing as investors focused on core holdings. There were few signs that this situation would abate, with debt and equity investors competing for product and sellers bringing more product to the market in a measured flow and retaining a seller's edge.

While the economy continues to reel after the impact of Hurricane Katrina, the real estate capital markets seem somewhat resilient in terms of capital flows. This was due to a number of factors, including the relatively low level of institutional investment in the region. Although losses are still being evaluated, the reconstruction efforts will trigger a significant rise in demand for capital to provide the materials and labor necessary to replace housing, businesses, and infrastructure. To this point, the sources of that capital have not been identified, with some signs that the government would merely absorb the costs by cutting spending and increasing the national debt rather than turning to taxpayers. This response may have been a reaction to the criticism that was aimed at the administration for its response to the tragedy, and an effort to avoid debates over who pays for what, which could have derailed focused efforts on the recovery. Although popular with taxpayers, most realize that cost cutting can only go so far. Merely adding the \$200 billion recovery costs to the record deficit is unlikely to sit well with those who feel the country has already mortgaged its future.

Stepping back and looking at previous efforts to capitalize major construction activity, it is likely that the administration will turn to the private sector to help fund the reconstruction efforts. This outreach could take a number of forms including encouraging lenders to honor their civic responsibility, as was the case in the 1960s and 1970s when the country sought to save its cities. On the other hand, the government could step in and provide incentive programs that would mitigate some of the risk associated with redeveloping the commercial and residential portions of the region. This could take the form of government guarantees that would indemnify investors for the riskier portions of redevelopment, to outright grants, tax write-offs, or other incentive programs that could attract private capital. On a related note, the insurance industry is likely to struggle for some time as it tries to absorb as much as \$60 billion in claims. This could dry up mortgage capital as insurers are forced to pull back on investments to improve their balance sheets. Similarly, the cost of business and property insurance in the affected area and overall could rise, adding to the costs and risks of reconstruction. Since these scenarios have not yet been determined, there is a significant level of uncertainty regarding the effect of the disaster on real estate capital markets and the cost of capital.

The good news is that the market remains flush with capital, providing a cushion against such impacts. Similarly, from a market-basket perspective, the region is not likely to attract significant capital flows that would cannibalize flows to other areas of the country and major urban centers. While the private market may be looked at as a source of recapitalizing the region, there is limited risk of a significant reallocation of market-based capital flows that could place upward pressure on yields and dry up capital flows to the overall real estate market.

Construction Activity

Through the end of summer, construction activity remained relatively strong, although the value of construction put in place slipped a bit early in the third quarter. The strong housing market continued to lead construction activity, although the increases were lower than the same period in 2004. New construction activity continued to tail off, but the declines were more attributable to retrenchment from the cyclical highs in the prior year.

Even though there were declines, the percent change in construction put in place remained similar to levels earlier in the cycle, suggesting a cyclical cooling off rather than a major correction. Of the total construction activity levels, private construction led, while public construction activity tapered off as it did for much of the first half of the year. Private nonresidential construction levels were relatively flat, but up moderately over 2004.

Despite this overall pattern, commercial construction activity has picked up in some markets, especially in the commercial sector as developers cashed in on the strong retail market. Going into the fall, little change was expected in construction activity, with residential and nonresidential activity remaining in line with changing demand.

The full impact of Hurricane Katrina on construction activity is unknown. In the impacted areas, construction activity is expected to explode as reconstruction efforts begin. However, much remains to be decided in terms of what to rebuild and where to rebuild it, suggesting that a number of strategic decisions will have to be made before activity levels soar. Similarly, it will take some time before insurance companies sort out the damages and determine how much to award policyholders. Unfortunately, many of the hardest hit by the devastation had little, if any meaningful insurance, raising the fundamental question of who is going to pay for rebuilding.

With respect to the rest of the country, the markets that absorbed the majority of the evacuated households and businesses may experience a temporary surge in demand for new construction. It is simply too early to determine how many residents and businesses will permanently relocate. At the national level, construction activity should not experience major shocks because of Hurricane Katrina, although upward pressure on raw materials and periodic labor shortages could suppress construction levels. This adjustment should be relatively shortlived, however, with plentiful capital flows and aggressive investors providing some insulation. Thus,

There were increased concerns over the pressure to soften underwriting standards.

the outlook for private construction activity remains generally positive, with actual levels depending on a combination of market fundamentals and economic conditions.

Commercial Mortgage Market

During the first half of 2005, commercial loan activity continued its strong pace, with mortgage bankers reporting record activity for commercial and multifamily mortgage originations. Indeed, compared to 2004, the rate of increase was almost a third higher, attesting to strong demand and plentiful capital flows. Mortgage activity was widespread, extending across the major types and carrying over into the lodging sector, which had lagged other sectors. Average loan size increased across the board, reflecting a combination of new transactions and refinancing activity.

Commercial mortgage-backed securities (CMBS) conduits were the largest source of capital, followed by commercial banks and life insurance companies. Through the summer, commercial mortgage activity remained strong, extending the competitive cycle, which placed pressure on originators to place capital. This competitive environment also benefited from the flat yield curve, as investors ignored rising short-term rates in favor of locking in long-term high quality assets.

During the third quarter, there were increased concerns over the pressure to soften underwriting standards to accommodate higher loan-to-value ratios and declining debt-coverage ratios. Concern also increased over the growth of interest-only loans, declining reserve requirements, and other changes that could weaken credit worthiness. Despite rising rhetoric, such concerns had little impact on the market, and increases in volume showed no signs of abating over the near term. Indeed, CMBS issuances through the end of August once again set a record pace, continuing the upward trend since the market contracted in 2002, and pushed \$100 billion in domestic issuances.

Reflecting a combination of a maturing market and low delinquency rates on underlying properties, spreads on lower-rated traunches declined over year-end figures, while spreads on upper-traunches edged up.

The outlook for commercial mortgages remains bullish, with low interest rates and perceived risk leading to strong capital flows. This situation is unlikely to be materially affected by Hurricane Katrina, due to the relatively low concentration of commercial mortgage holdings in the affected areas. Depending on how the government and private sector approach financing reconstruction, investment opportunities may increase and take some pressure off originators, although competition for product is expected to remain strong.

Private Equity Market

As expected, the private equity markets remained heated during the summer, with a surplus of capital chasing deals. Despite overall shortages of product, strong investor demand drew more properties to the market, as owners sought to tap into unrealized gains before rising interest rates and new construction activity could deflate prices. In this environment, cap rates continued to decline moderately, with retail trading at the lowest rates followed by apartments, office, and industrial. Lodging, recreation, and special-purpose properties traded as slightly higher cap rates, although the same pattern of compression held across most property types.

While cap rates varied within property types and markets, aggressive pricing suggested private players have continued to apply commodity pricing models, which tend to overlook differences in risk profiles. This inefficiency creates some downside risk for less savvy investors who snapped up properties. This risk is especially pronounced in the cases of functionally or locationally obsolescent facilities that will be supplanted by better product as construction activity begins to kick in.

In terms of capital flows, the private equity market is likely to remain flooded with capital ranging from institutional investors to tenants-in-common investors who have become a viable component of the commercial market. At the same time, foreign capital flows are expected to remain strong, with investors drawn by the prospects for economic recovery, and improving real estate fundamentals for many markets and property types. The strong returns reported by the National Council of Real Estate Investment Fiduciaries will undoubtedly generate additional interest in the private market in spite of concerns over declining yields.

If long-term interest rates remain flat, strong capital flows will hold values and may bridge the bottom of the market cycle until market fundamentals improve and net operating incomes increase. Further, the search for higher yields may attract additional equity flows to the Gulf states, with the prospects for solid returns enhanced by the social benefits such investing may entail.

Public Equity Market

Going into the fall, real estate investment trust (REIT) returns have led the broader market. REITs showed solid single-digit gains that compared very favorably to major market equity indexes, which wound up in negative territory.

Despite this relatively strong performance, the combination of prolonged periods of low and declining cap rates and rising asset values has created some consternation among investors. On a positive note, REITs have reeled in expansion plans, with total securities offerings including initial public offerings, secondary offerings, and the use of unsecured debt for the first half of the year.

Equity REITS had competitive returns relative to other asset classes, but gave up some ground in August with moderately negative returns being reported across most property types. Despite this setback, REITs continued to outperform, pushing double-digit returns on a year-to-date basis. This relative strength helped boost market capital, with equity market capital rising to \$337 billion. Geographic diversification in most portfolios dampened the adverse impacts of Hurricane Katrina.

Thus, the outlook for REITs will depend on improvements in market fundamentals and investor demand, both of which have upside potential. On the other hand, rising energy prices, the upward pressure on interest rates, and a moderate setback in the economic recovery may dampen near-term performance. However, the negative impacts of such forces will be felt across asset classes, suggesting REITs should continue to provide relatively attractive returns.

Conclusion

Getting a handle on economic prospects in the aftermath of Hurricane Katrina poses a number of challenges. While the economy seemed to be on track at the end of the summer, the economic and human devastation of the hurricane left a cloud of uncertainty over the country. This situation is likely to play out over the next several months as analysts and observers struggle with the question as to the full ramifications of the disaster. While it will be relatively straightforward to get a handle on the direct costs of losses and reconstruction, the subtle impacts on business and consumer attitudes may prove to be much more difficult to quantify. Similarly, the weaknesses in the hazard response system and the lack of effective leadership in the aftermath is likely to create a drag on the economy that may linger long after the hard costs and construction activity have been completed. Despite this rather pessimistic outlook, the overall economy, real estate capital markets, and real estate market fundamentals appear to be on track for gradual, although somewhat delayed, improvement. In the absence of additional shocks, the real estate market should begin to stabilize with prospects for improvement tied to that of the overall economy.

James R. DeLisle, PhD, is the Runstad Professor of Real Estate and Director of the Runstad Center for Real Estate Studies at the University of Washington. Prior to his current assignment, DeLisle was the director of the Real Estate Research Center and the coordinator of the e-Commerce Program at Georgia State University. Before returning to academia, he was an executive vice president and head of strategic planning for Lend Lease Real Estate Investments, a global company and the successor firm to Equitable Real Estate where he founded the Investment Research Department and directed it for nine years. He has published widely in academic and professional journals. DeLisle received his BBA in real estate and MS in marketing research from the University of Wisconsin. He received his PhD in real estate and urban land economics from the University of Wisconsin under his mentor, the late Dr. James A. Graaskamp, one of the leading academic proponents of applied real estate research. Contact: T 206-616-2090; E-mail: jdellsle@u.washington.edu