Principal® Global Investors

RESEARCH • RESOURCES • RESULTS

Repricing, Rebalancing and Recovery: A New Era for Real Estate

PRINCIPAL REAL ESTATE INVESTORS | 2010

Table of Contents

"Repricing, Rebalancing and Recover: A New Era for Real Estate" is published as of December 2009 by Principal Global Investors and Principal Real Estate Investors.

Executive Summary

- The global economy, global trade volume and job markets have each suffered their largest post-war contraction in the wake of the credit crisis. However, following nearly unprecedented levels of coordinated government intervention and stimulus, the threat of a systemic market collapse has largely receded, replaced by cautious optimism that 2010 will bring continued restoration in the credit markets and sustained economic expansion.
- The U.S. economy is participating in the global economic recovery, but what lies ahead may be a period of slow economic growth burdened by large government budget deficits, a still fragile housing market, a weak consumer sector and slow job recovery. Consumer spending has begun to stabilize but is likely to grow slowly as a result of numerous headwinds. However, the weak dollar and a strong rebound in global trade growth should set the stage for improved export activity. A rebound in corporate earnings along with improved large cap business access to credit markets has resulted in a large accumulation of cash reserves, providing business expansion firepower.
- The global monetary policy tightening cycle has begun. The Federal Reserve has historically not begun to hike interest rates until a year or more after unemployment rates peak, implying that rates could remain unchanged into 2011. However, there is the possibility of rate hikes before then, given concern about the inflationary or reflationary consequences of extended accommodative monetary policy.
- Shocks of the extreme severity that marked the recent downcycle potentially contain the seeds of secular change, with both short-term and long-term implications for the global and U.S. recovery. Government intervention initiatives will likely have a lasting influence on markets, with government debt as a percent of GDP expected to grow significantly. Other potential secular changes influencing U.S. recovery dynamics include the possibility of higher personal savings rates, a gradual displacement of U.S. consumers as the incremental driver of global GDP growth, high structural unemployment rates and new wealth redistribution and tax initiatives.
- Given the systemic nature of the global downturn, very few sectors were able to avoid the forces of downward corrections. Economic recovery will contain certain elements of relative synchronization, given the intertwined forces of globalization, yet increasingly idiosyncratic factors suggest that not all investment sectors will see recovery at the same pace. As a result, there will likely be significant differences across nations, regions and property types in terms of the magnitude of real estate pricing corrections and recovery dynamics.
- During the last major real estate price correction in the early 1990s, a shortage of commercial real estate debt capital opened the door for the shadow banking sector to fill the gap. In contrast, the absence of the securitization market for much of 2008 and 2009 has been a contributor to the financing gap. However, the commercial real estate debt market has seen significant improvement throughout the course of 2009, despite still facing a long road to complete recovery.
- CMBS spreads have managed to narrow throughout most of 2009 despite a continued deterioration in space market fundamentals and a significant increase in delinquent and special servicing loans. Government intervention initiatives, including both the Term Asset Backed Loan Facility (TALF) and the Public Private Investment Program (PPIP) have increased liquidity and eased the severe technical pressure that has weighed on the CMBS markets.
- Other sectors of commercial real estate financing are gradually showing signs of life. Multifamily debt remains very accessible due to an active government-sponsored enterprises (GSE) lending market. Further, both the supply and pricing of debt capital for moderate loan-to-value core properties has improved dramatically in 2009, with life companies and better-capitalized banks competing actively for these transactions. However, a significant portion of the

community banking sector remains in credit retrenchment mode with limited willingness or ability to take on incremental commercial real estate exposure.

- Even though less overall debt will be needed in a market that is deleveraging, the demand for debt capital will still likely be too large to be met solely by portfolio lenders and government lending initiatives. Given the still fragile banking system, some form of restoration in the securitization markets will likely be vital to an earlier recovery in real estate credit markets. The completion of three new issuance CMBS transactions in the fourth quarter 2009 provides hope that the CMBS conduit market could return in 2010 to partially fill the financing gap.
- Publicly-traded REIT prices have rebounded strongly during 2009, albeit off a depressed base. Improved access to secondary equity offerings and REITs' ability to by-pass commercial banks by issuing unsecured corporate debt have allowed them to de-risk balance sheets, and in some cases, amass capital for new acquisitions. In contrast, private real estate equity price corrections are not yet complete, but appear to be easing and approaching a cyclical bottom. Cap rate expansion is likely nearing its end, with additional downside risk primarily attributable to possible net operating income declines beyond what is currently impounded into values. Investor interest in private real estate equity is growing amidst improved relative value and anticipation of the ability to acquire assets at a substantial discount to both replacement costs and previous peak valuation levels.
- Despite growing investor interest, private real estate equity transaction volumes remain quite low. That trend is attributable both to reduced debt capital availability for new purchases and predominance of loan extensions as the resolution mechanism of choice for troubled loans, resulting in fairly limited actionable distress from the perspective of potential buyers. However, given the significant deleveraging needed in the system, it is likely that both overall and distressed transaction volumes will increase in late 2010 and beyond.
- With some exceptions, U.S. space markets have been characterized by reasonably disciplined levels of new supply. But the favorable impact of restrained new supply has been more than offset by a massive contraction in user demand. Vacancy rates across virtually all property types are either already at or likely headed for or above 1990s peak levels. Declines in payroll employment have reached post-war peaks. Business bankruptcies continue to increase and consumer spending is under pressure due to high unemployment rates, a still weak housing market and the negative wealth effect.
- Despite consumer spending headwinds, retail total returns during the downturn have thus far outperformed the other property types. However, while the outlook for retailer credit has improved, the sector continues to be under financial stress as evidenced by negative net absorption in 2009 which will likely continue throughout 2010. In addition, there could be another round of retailer bankruptcies in early 2010 if the holiday sales season turns out to be especially weak. Retail is at a pivotal point, potentially facing a major secular shift driven by heightened personal savings, declining personal income in the face of elevated unemployment rates and deleveraging of household balance sheets. Given the distinct possibility of continued weakness in consumer spending, there is a need for a sustained period of very limited new supply until the dynamics of net population growth can close the gap and reduce retail vacancy rates.
- The largest decline in global trade volume in the post-war era along with weak consumer spending have driven industrial vacancy rates above the peaks reached in the 1990s. Demand will likely regain momentum in 2010, with global trade expected to resume positive growth following a precipitous decline in 2009. However, the recovery in consumer spending is likely to be more muted. The prospects for industrial recovery rest heavily on keeping net new supply even more constrained than in the past, allowing the dynamics of net U.S. population and export growth to chip away at high vacancy rates.
- Despite record home foreclosures that might otherwise have led to increased demand for apartments, weak household formation levels and high unemployment rates have combined to weaken apartment fundamentals throughout 2009. Multifamily vacancy rates have climbed to an all-time high of nearly 8%. Declines in apartment transaction volume would have likely been worse if not for availability of financing from the GSEs. However, should financial reform lead to a reduction in apartment lending by the GSEs, there could be additional upward pressure on multifamily cap rates.

- White collar job losses have been disproportionately large compared to overall job losses, driving up office vacancy rates. Although new construction will continue to fall sharply, negative absorption is projected to push office vacancy rates beyond the previous peak reached in1991. Recovery in the office markets will be largely a function of white collar job recovery, which is likely to proceed fairly slowly. Even when businesses resume hiring, it will not immediately translate into net absorption, given a significant amount of leased but vacant space. Further, office job creation is closely linked to small-to-medium businesses whose access to credit remains quite challenged, given the uncertain financial health of community banks.
- Hotel fundamentals have significantly eroded over the past two years. Large price corrections have been driven by the immediacy of declines in operating income, high operating leverage and dramatic increases in required risk premiums for owning and lending on hotel properties. While 2010 will likely be another very challenging year, the hotel industry will hopefully make material progress toward recovery in 2011 once economic expansion becomes more sustained and business spending regains momentum.
- While government intervention initiatives have been critical in achieving capital markets stabilization, recovery dynamics could not have maintained momentum without private capital markets which remain an integral part of a sustained economic rebound. As a result, there is a need for avoidance of government intervention initiatives that inadvertently create regulatory or tax barriers or increase the cost of global capital flows into U.S. real estate.
- The new decade will provide the global economy and capital markets an opportunity to remedy imbalances that grew out of the excesses and overleveraging of the past decade. Similarly, that period will also create an opportunity for investors to rebalance and reposition commercial real estate portfolios, including upgrading portfolio quality, reducing leverage and enhancing risk management mechanisms and reassessing the optimal mix of real estate investment strategies. For investors seeking to take advantage of a market now priced for extended imperfection, increased strategic and tactical readiness will be important. While transaction volumes will likely grow substantially over the next few years as the deleveraging process proceeds, the accumulation of capital from investors seeking to acquire properties may grow even faster.
- The opportunity set is large and increasingly compelling, but many challenges remain. The space market road to recovery is likely to be a long one, given an economy that could grow more slowly than in past recoveries. As a result, there is a critical need to keep net new supply of commercial real estate well in check for most of the next decade to work through space market overcapacity. As the new decade begins, the road to recovery is beginning to come into view, but continued investor caution and selectivity will be critical. That is particularly true in an economy exposed to significant secular changes that will likely lead to unexpected twists and turns along that road.

1 The Turning Point?

As the global economy prepares to turn the chapter to the new decade, there are unmistakable signs of a turning point and with it the hope for a new beginning.

Meltdown Averted

The severity and breadth of the credit crisis and recession that has cut a devastating swath through the global economy during the closing years of the new millennium's initial decade has been staggering. Global GDP, U.S. GDP and U.S. payroll employment have each suffered their largest contraction since the Great Depression. But as the global economy prepares to turn the chapter to the new decade, there are unmistakable signs of a turning point and with it the hope for a new beginning.

Since March 2009, market sentiment has improved in a gradual and fairly consistent manner as the pendulum of extreme risk aversion has swung back to a somewhat more balanced and centered approach. Having avoided a complete meltdown of the financial system, markets are embracing a growing conviction that the days of peak systemic risk have passed. Increasing evidence of credit market restoration and global economic recovery have helped propel stock markets in several nations to new highs for the year. The lift in stock markets and early signs of an improvement in median home prices, along with households beginning to deleverage their balance sheets, has allowed the severe negative wealth effect of the past two years to not only ease, but also to partially reverse.

The U.S. economy is participating in this global recovery, with positive third quarter GDP growth that ended a streak of four consecutive negative quarters. Renewed optimism is reflected in a dramatic improvement in the index of leading economic indicators. But what lies ahead may be a period of slow growth in a U.S. economy saddled with the burden of huge government budget deficits, a still overleveraged household sector and fragile housing market, and heightened regulatory environment. In addition, there are sectors of the U.S. economy that have yet to show meaningful improvement, especially employment. The sharp contraction in payroll employment that has resulted in over 7 million net job losses appears to be coming to an end, but a robust rebound in job growth is unlikely. Net payroll employment growth averaged about 15 million per decade from 1940 to 2000. By contrast, this has been the lost decade of job growth, with only 450,000 in cumulative net job growth since the beginning of 2000 and a likelihood that payroll employment will not return to previous peak levels until 2013 or later.

Global governments have had a major hand in stabilizing the credit markets, directing nearly unprecedented fiscal and monetary stimulus into the markets. However, given signs of stability and improvement, government exit strategies are being planned amidst growing investor concern about a premature monetary policy tightening cycle. Central bank wariness about sustainability of economic growth suggests that most nations' accommodative monetary policy will remain in place well into 2010, perhaps even longer. But there are also signals that when the tightening cycle begins in earnest, it could be more substantial than expected, given concerns about goods and services inflation and asset reflation leading to potential new bubbles, although the latter currently appears to be the bigger threat.

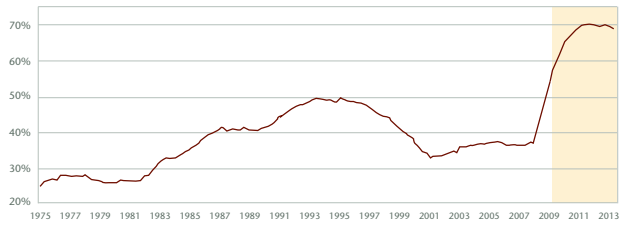
Secular Changes Afoot

Shocks of the extreme severity encountered in 2008 – 2009 have the potential to contain the seeds of secular change, in turn suggesting that the emerging recovery could be quite dissimilar to past upturns. Unlike traditional recovery dynamics in which accommodative monetary policy is implemented within a healthy and functioning financial system, thus expediting an orderly return to business as usual, the upcoming recovery is likely to play out differently. Massive government intervention alone will change the landscape of America for the next decade or more, with government debt as a percent of GDP expected to grow dramatically as shown in Exhibit 1.1. The ultimate cost effectiveness of the fiscal stimulus package remains an unknown, partially because it is so back-loaded that instead of it being the more desirable countercyclical force (that is, with most government expenditures occurring while the economy is contracting), it will likely end up primarily being pro-cyclical. In addition, government intervention in the financial, health care and automotive industries creates uncertainty as to the boundaries of governmental presence in economic affairs. Further, protectionist sentiment appears to be gaining traction within the executive and legislative branches of the U.S. government.

Secular dynamics will be also be influenced by the intersection of demographic forces and potential behavioral changes as regards personal savings rates and consumer spending patterns. The current downcycle and subsequent recovery may represent an inflection point for the U.S. consumer, consisting of a partial displacement of this sector as the incremental engine of global growth. Helping fill the gap, the emerging middle classes of developing nations will likely become an increasingly important catalyst of global growth over the next several years. These dynamics will likely lead to a somewhat less U.S. centric world economic order for the foreseeable future, with one of the more powerful forces of U.S. recovery being exports (especially of services and specialty goods) to a growing global middle class, helped along by a weaker dollar.

> Shocks of the extreme severity encountered in 2008 – 2009 have the potential to contain the seeds of secular change...

EXHIBIT 1.1 | FEDERAL GOVERNMENT DEBT AS A PERCENT OF GDP



Sources: Congressional Budget Office, Moody's Economy.com, October 2009

The Challenges and Opportunities

Given the systemic nature of the global economic contraction, virtually every nation, industry and asset class turned down simultaneously and severely. The transition to economic growth will likewise contain certain imbedded elements of relative synchronization, given the coordinated stimulus and inherent interdependence of nations due to global trade and capital flows. However, because the upturn will see a growing influence of idiosyncratic elements, not all investment sectors will turn the corner at the same time or pace.

That is already evident for commercial real estate, an asset class that has seen a wide dispersion in investment performance across quadrants in 2009. The two public quadrants of real estate investment trusts (REITs) and commercial mortgage backed securities (CMBS) have already reached bottom and begun to recover. Publicly traded REITs have de-risked their balance sheets, while CMBS technical and liquidity challenges have largely been addressed with the help of government

intervention, with space market fundamentals now more heavily influencing market pricing in both sectors. The private real estate equity quadrant, in contrast, continues to experience downward pressure on property values.

The real estate asset class is facing a massive slump in user demand that has trumped reasonably disciplined new supply, and consequently is being priced for the reality of the aftershock of a deep recession and likelihood of another jobless recovery. As such, pricing now reflects not only expectations of lower net income but also higher required risk premiums for owning and lending on commercial real estate, resulting in a dual downward force on property values. The result has been both a deeper and more rapid peak-to-trough drop in commercial real estate values and higher vacancy rates than was the case in the 1990s.

Further, the deleveraging of the commercial real estate markets could be even more difficult than it was in the 1990s, given the challenges in jump-starting the CMBS conduit market and the still uncertain financial health of many small and mid cap banks. It is likely that much of the deleveraging will eventually take the form of foreclosures or deed-in-lieu activity as borrowers exercise their put option on non-recourse debt to transfer ownership to lenders. To date, most lenders have prioritized extending troubled loans, but a slow job recovery and limited borrower access to capital to fund shortfalls likely means that foreclosures will eventually become a much more dominant form of deleveraging.

When a market rapidly shifts from priced-for-perfection to priced-for-extended-imperfection, intriguing buy-side opportunities often arise. While many traditional institutional investors have limited capital for new investments, the adverse impact of the denominator effect has eased as a result of the stock and bond markets rally. In addition, capital formation targeted at distressed real estate is well underway, with players including recapitalized publicly traded REITs, unlisted REITS, high net worth individuals, underweighted domestic plan sponsors and sovereign wealth funds. Not many sales transactions have occurred in 2009, partially because of the aforementioned lender inclination to extend problem loans, but as the forces of deleverage inevitably begin to assert themselves, more distressed buying opportunities will likely arise in second half 2010 and beyond.

Importantly, most domestic and foreign institutional investors and their consultants appear to remain strategically committed to the commercial real estate asset class, despite the tremendous volatility in the space and capital markets. While the next few years will undoubtedly represent one of the most challenging eras that commercial real estate has ever faced, the combination of major price corrections and the relative shortage of debt capital sets the stage for a variety of attractive investment opportunities. Going forward, as systemic risks continue to fade, the diversification power of real estate is likely to be restored. Combined with acquisitions available at steep discounts to both replacement costs and prior valuation peaks as well as at accretive cap rates, investor demand for commercial real estate is likely to rebound quite strongly.

In the aftermath of the turmoil, there will be numerous lessons learned. Some have had to be re-learned from the experience of the 1990s, while others are new, attributable to innovations such as financial engineering that became a more dominant part of capital markets since the last major real estate correction. Many of the previously accepted norms of doing business and structuring investments have been forced into a significant reevaluation mode in the current environment, including a greater focus going forward on

reduced financial leverage; better asset-liability matching; improved risk identification and management; enhanced governance, control, and alignment of interest; and heightened focus on the financial and organizational stability of investment managers.

After an extremely turbulent end to a decade that held much promise for commercial real estate's continued advancement as an integral part of asset allocation models, the next decade will hopefully allow for a complete restoration of commercial real estate's value contribution to achieving investors' strategic objectives. Among the ashes of significant investment losses lie the ever present restorative elements of creative destruction, which will almost certainly lead to new and improved ways of doing business in the upcoming decade. This new beginning will provide investors an opportunity to rebalance existing real estate portfolios to reduce financial leverage, portfolio risk levels and fees. The repricing of the asset class will also give investors an opportunity to acquire entirely new assets at a more favorable cost basis relative to legacy holdings. However, given the likely slow trajectory of economic growth and the uneven job recovery, investor selectivity will, despite more favorable pricing levels, be more critical than ever in the new decade of real estate recovery.

2 Secular and Cyclical Economic Recovery Dynamics

Overall, global credit market functionality has dramatically improved during 2009, and in the process has helped most economies now begin to expand

Recovery in Sight

As the global economy reaches the final months of 2009, the threat of a systemic financial collapse has largely receded, replaced by cautious optimism that 2010 will bring continued stability and restoration in the credit markets and sustained expansion of the global economy. With the help of extensive global government intervention, including nationalization or quasi-nationalization of numerous large financial institutions, most areas of credit formation have returned to functionality, and in some cases to pre-credit crisis pricing as shown in Exhibit 2.1. In addition, the past several months have seen strong volumes of corporate bond issuance and a rally in corporate credit spreads, especially high yield. There has also been a partial restoration of the functionality of asset-backed securities issuance marketplace, with support from government intervention initiatives. However, new CMBS issuance has been the exception, as it has continued to struggle to gain traction until very recently when the first new issuance in over a year was completed.

However, the rapid expansion of the money supply and restoration of the functionality of the credit markets has not necessarily led to a uniform expansion of credit. This is partially because banks continue to hold large capital reserves and have not been aggressively lending. Credit retrenchment has been particularly prevalent within the still fragile small to mid cap banking sector. In addition, the demand for credit has been less than robust in certain sectors, particularly among households which have begun to reduce leverage levels.

Overall, global credit market functionality has dramatically improved during 2009, and in the process has helped most economies now begin to expand or at least dramatically reduce their trajectory of contraction. The International Monetary Fund (IMF) has continued to revise its projections for global GDP growth upward,

EXHIBIT 2.1 | TED SPREAD (3 MONTH LIBOR LESS 3 MONTH TREASURY)

Source: Bloomberg, October 2009

now expecting the global economy to expand by 3.1% in 2010 after contracting by approximately 1.1% in 2009. The rebound is being led by developing economies, especially China given its rapid expansion of credit and fiscal stimulus initiatives. In addition, most developed economies are now experiencing positive economic growth. The turnaround in global trade has also helped a rebound in global economic growth. Global trade has declined by 13% during 2009, but is expected by the IMF to rebound to 2.7% in 2010, as shown in Exhibit 2.2.

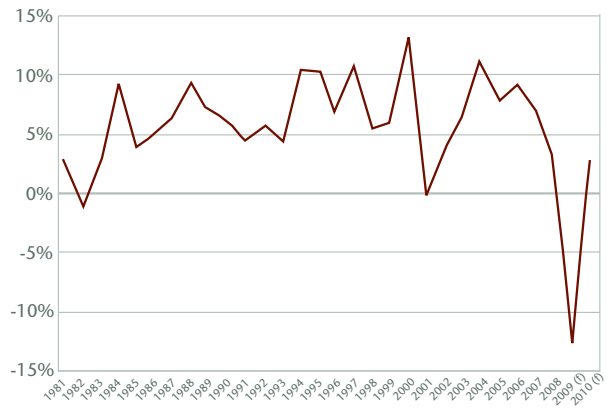
Secular Forces and a Fragile Recovery

Given the duration, and perhaps more importantly, the absolute severity of the global recession, the restoration of economic growth in many nations is likely to be characterized not only by cyclical forces of recovery, but also by numerous and somewhat nebulous secular forces, as noted in Chapter 1. The presence of secular dynamics is largely attributable to the jolting and nearly unprecedented nature of the systemic downturn, suggesting the possibility of long-lasting influences in the areas of government policy, business practices and consumer behavior. Structural changes are also a function of the ongoing need to unwind numerous global excesses and imbalances that had become imbedded in the fabric of pre-credit crisis markets, and whose resolution will likely involve powerful forces beyond the usual cyclical dynamics.

Some industry observers who anticipate a wave of secular changes have coined the phrase "the new normal" to describe the economic, financial and regulatory landscape that market participants may be facing. Some of these potential secular dynamics within the United States include:

- Dramatically increased government intervention and regulatory initiatives that likely contain numerous adverse unintended consequences, despite being well intentioned
- A movement toward quasi-industrial policy, with the government playing an increasing role in the finance, automotive, energy, and health care industries

EXHIBIT 2.2 | GLOBAL TRADE VOLUME



Source: International Monetary Fund, October 2009

- Possibility of higher structural unemployment rates and increasing protectionist sentiment (including less accommodative immigration policy) that often accompanies higher unemployment
- The potential for structurally higher personal savings rates and their impact on consumer spending patterns (see sidebar on pages 14-15)
- The likelihood of increased wealth redistribution mechanisms in the form of new taxes, higher marginal tax rates and expansion of social programs
- Dramatic increases in government budget deficits and the prospect of longer term inflationary or at least asset reflationary pressures, as well as a weak U.S. dollar
- The partial displacement of the U.S. consumer sector as the go-to global economic engine, supplanted by emerging middle classes of developing markets (see sidebar on page 36)

While higher personal savings rates would be a positive for the economy over the long term, and indeed may help reduce the weakness of the dollar, many of the other above dynamics would tend to incrementally increase the cost of doing business in the United States, discourage new business formation and create global competitive disadvantages. The cumulative impact is likely a drag on the recovery trajectory of a still fragile U.S. economy that could face challenges to revert to sustained trendline growth once the near-term boost from government stimulus and inventory rebuild is exhausted. As a result, U.S. economic growth during 2010 is anticipated to reach only 2.9%, per estimates from Principal Global Investors, partially attributable to a weak rebound in personal consumption. Combined with expectations of continued strength in labor productivity, less than robust economic growth implies a slow job recovery, which in turn tends to reinforce reduced consumer spending.

While the pace of declines in payroll employment has slowed dramatically, it remains in negative territory as the economy moves through fourth quarter 2009. Job losses in both an absolute and relative sense have already reached record levels since the Great Depression, with payroll employment declines during the current recession exceeding 7.1 million amidst total employment falling to levels last seen in 2004, as shown in Exhibit 2.3. And so long as negative payroll employment persists, the closer the current decade comes to zero net job growth, as depicted in Exhibit 2.4.

Job losses in both an absolute and relative sense have already reached record levels since the Great Depression, with payroll employment... falling to levels last seen in 2004

The Lost Decade

While continued productivity advances are likely to keep job creation somewhat constrained over the next few years, the year 2010 is likely to bring a resumption of positive payroll employment growth, albeit fairly tepid. Some of the resumption in hiring will likely reflect a reversal of layoff overshoot that resulted from the suddenness and severity of the credit crisis, as businesses aggressively cut expenses to make up for lost revenue brought on by the global recession. Further, inventory rebuilding will allow workers in certain sectors of durable and non-durable goods production and distribution to be called back. And the infrastructure part of the fiscal stimulus bill will likely create some incremental jobs in engineering and construction. Having said that, uncertainty about health care reform and continued challenges in accessing credit could hamper new business formation and small business expansion, which had been a bright spot for job creation over the past several years. Therefore, it is quite conceivable that it will take until 2013 or beyond for payroll employment growth to return to its previous peak, which was reached in December 2007.

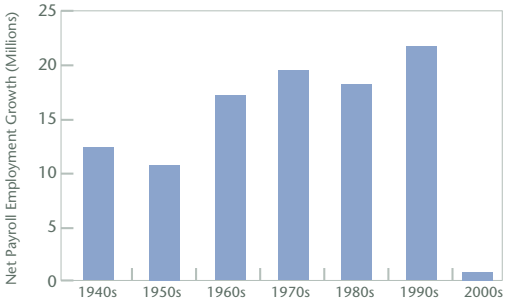
Unfortunately, in addition to being the lost decade of job growth, the 2000s have also been the lost decade of household income. Real median household income in 2008 declined to $50,000, down from $52,500 at the start of the decade. A combination of high unemployment rates, stagnant wage growth, reduced returns on investments and an increase in 2008 headline inflation from a spike in energy prices have collectively toppled real household incomes. However, there has been a material improvement in household wealth over the last six months. A combination of progress in household deleveraging (some of which is a result of credit defaults), home price stabilization and most importantly a stock market rally since March 2009 has helped undo some of the massive negative wealth effect that has crippled U.S. households over the past two years. Household debt has contracted for the fourth consecutive quarter, with household liabilities down about $2.6 trillion since first quarter 2008. As a result, consumer debt per household has declined for five consecutive quarters, the first time it has fallen since 1975, as shown in Exhibit 2.5.

While the recent drop in household debt from peak is considerable from a historical perspective, it likely still has much further to go. Because

EXHIBIT 2.3 | TOTAL PAYROLL EMPLOYMENT

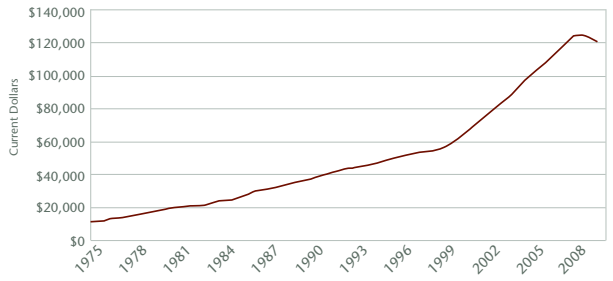
Source: Bureau of Labor Statistics, November 2009

EXHIBIT 2.4 | TOTAL PAYROLL EMPLOYMENT GROWTH BY DECADE



Source: Bureau of Labor Statistics, November 2009

EXHIBIT 2.5 | TOTAL CONSUMER DEBT PER HOUSEHOLD

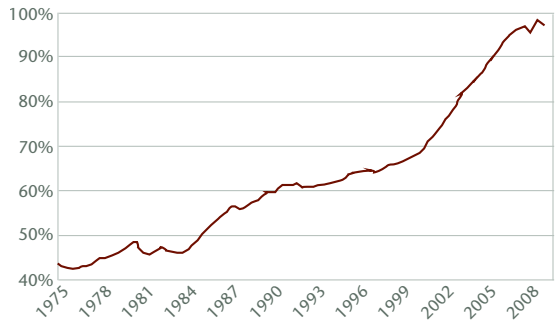


Sources: Federal Reserve Flow of Funds, Bureau of Economic Analysis, Q2 2009

consumer debt per household has fallen from peak by 2.2% during a period in which the economy contracted by 3.8%, household debt remains very high relative to GDP, as shown in Exhibit 2.6.

But deleveraging has not been the primary driver of the recent recovery in household wealth; instead it has been the rebound in asset values. According to the Federal Reserve, household net worth fell from a peak of $63.9 trillion in 2007 to about $51.1 trillion earlier in 2009 as the housing debacle continued and as the stock market hit its lowest point since early 1997. The result was a collapse in household wealth of nearly $13 trillion. However, in the second quarter a dramatic improvement in stock markets drove nearly a $2 trillion gain in household net worth. And third quarter stock returns combined with a stabilization in home prices has kept wealth rebuilding momentum going, resulting in a cumulative recovery of about 25 - 30% of the total decline in household net worth experienced peak-to-trough during the 2008 - 2009 recession.

EXHIBIT 2.6 | TOTAL HOUSEHOLD DEBT-TO-GDP RATIO



Sources: Federal Reserve Flow of Funds, Bureau of Economic Analysis, Q2 2009

On net, however, consumers are likely to contribute less to the overall growth of the U.S. economy than in the past. While consumer spending has historically averaged about 65 - 70% of economic growth, that percentage will likely begin to ease over the course of the next several years. Given consumer headwinds, it is quite conceivable that over the near-to-intermediate term personal consumption could account for only 50 - 60% of incremental U.S. GDP growth. In addition to high unemployment levels, consumers will also be confronted with higher energy prices, with oil having breached the $80 per barrel price level in October, more than double its 2009 trough. Although oil prices have recently eased to closer to $70 per barrel, the $35 per barrel increase in oil prices since first quarter 2009 represents the equivalent of an annualized tax on the U.S. economy of about $160 billion, or almost $1500 per household.

Inflation and Reflation

While highly accommodative monetary policy has generated some consternation as regards potential inflationary pressures, the likelihood of near-to-intermediate term goods and services inflation is quite low. That is partially because rapid growth in money supply is a necessary but not sufficient condition for inflation. It also generally requires a high velocity of credit formation, which has not been the case given the continued weakness in securitization markets and less than robust bank lending activity.

(Continued on page 16)

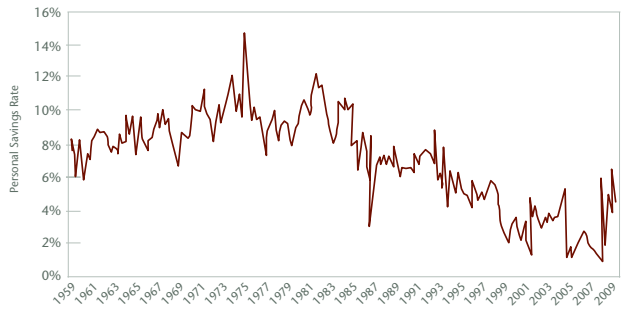
The Demographics of Savings

Among the various secular dynamics potentially facing the U.S. economy, one that would be a positive over the long term (albeit not over the short term) is an increase in personal savings rates. Even if the current recession had not occurred, pre-credit crisis savings rates (averaging only 1.8% of disposable personal income from 2005 to 2007) were not sustainable. Aside from the "Cash for Clunkers" program, even large government transfer payments included in the fiscal stimulus package did little to generate a lift in consumer spending as the personal savings rate climbed to 5.9%, an 11-year high, as shown in Exhibit 2.A. If personal savings rates continue to increase and during the next decade were to reach average levels from the 1980s and early 1990s (6 to 8%), it would have a major impact on the trajectory of near-term U.S. economic growth.

What influences households' propensity to save versus spend? To some degree, government policy plays an indirect role, partially attributable to the gap between relatively high income taxes (including income from savings) and relatively low consumption taxes, given the absence of a national value-add tax or goods and services tax in the United States. However, there are also many other elements that influence personal savings rates.

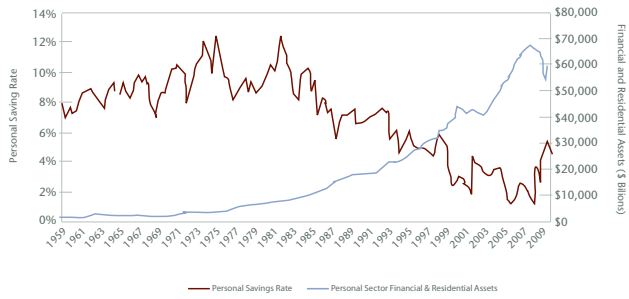
Savings levels are not explained to any material degree by whether an economy is in recession or expansion. From 1970 to 1984 (despite several interim recessions) U.S. personal savings rates averaged 9.8%, with a standard deviation of only 1.1%, indicating that it was relatively uncommon for savings rates to fall much below 8.5% or to rise much above 11%. This lack of GDP correlation is a positive, because it suggests that personal savings rates could increase without necessarily undermining long-term GDP growth. Crediting rates on savings are slightly more helpful as an explanatory variable, producing a positive yet only moderate correlation with personal savings rates. Indeed, crediting rates on savings have been very low during the current recession, yet personal savings rates have risen. Unemployment rates yield a similarly positive but only moderate correlation with personal savings rates, partially due to government safety nets that allow a certain amount of consumption to continue during periods of above average unemployment.

EXHIBIT 2.A | PERSONAL SAVINGS RATES



Source: Bureau of Economic Analysis, September 2009

EXHIBIT 2.B | PERSONAL SAVINGS RATES AND FINANCIAL/RESIDENTIAL ASSETS



Sources: Bureau of Economic Analysis, Federal Reserve Flow of Funds, September 2009

However, personal savings do appear to have a strong inverse correlation with the household wealth effect. The historical correlation between personal sector financial and residential assets and personal savings rates is approximately -.90. As can be seen from Exhibit 2.B, the secular decline in personal savings which began in 1985 was accompanied by the start of a significant increase in the valuation of personal financial assets and later a sharp run up in the value of residential assets.

Given the 2009 stock market rebound and stabilization in home prices, there has been a recovery of almost 30% of the peak-to-trough decline in household net worth. However, household net worth has a long way to go to return to its historical peak. Even at an annual appreciation rate of 5% from this point onward, it would still take almost four years for personal asset valuation levels to return to their previous peak.

Importantly, there are powerful demographic dynamics in place that will likely have a strong influence on personal savings rates. The pattern of decline in personal savings rates over the past 20 years is consistent across virtually every demographic subcategory except the age cohort of 55 and older.

Of course, this demographic segment would be expected to save more than others, given that the age 55 and older cohort generally consists of empty nesters that are past their prime consumption years. But as a combined result of its high absolute savings rates and a trend towards increased savings that runs counter to most other demographic cohorts, this older age cohort has had an increasingly outsized influence on overall personal savings rate statistics, as shown in Exhibit 2.C.

EXHIBIT 2.C | PERSONAL SAVINGS RATES BY COHORT

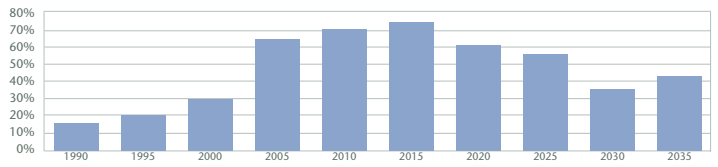
AGE COHORT	PERSONAL SAVINGS RATE – 1990'S	PERSONAL SAVINGS RATE – 2000'S
Overall Population	6.4%	1.8%
Under age 35	-2.9%	-11.1%
35 to 44	1.7%	-7.1%
45 to 54	6.5%	-1.2%
Age 55 and over	17.0%	14.8%

Source: Moody's Economy.com, July 2009

As can be seen, the personal savings rate declined from the 1990s into the 2000s for every age group. However, the trend of the older age cohort to exhibit by far the highest personal savings rate is evident. In addition, the age 55 and older cohort personal savings rate has been remarkably consistent over the past 20 years. The standard deviation of this group's personal savings rate (using quarterly data) is only 4%, indicating that personal savings rates below 11% have been uncommon.

One implication of the tendency for older age cohorts to save much more than other demographic groups is that the gradual aging of the U.S. population could, on its own, be a potential catalyst for a secular increase in personal savings rates. The age 55 and over cohort is growing rapidly, especially now that the large baby boomer generation is beginning to become part of this group. When the 1990s began, there were 52 million people in the U.S. aged 55 and over, representing 21% of the total population[1]. Today there are 74.5 million people aged 55 and over, comprising 24% of the total population. Over the next five years, the rate of growth of this cohort is expected to accelerate, reaching 88 million and 27% of the total population by 2015.

EXHIBIT 2.D | NET GROWTH OF AGED 55 AND OLDER COHORT AS A PERCENT OF TOTAL NET U.S. POPULATION GROWTH



Source: US Census Bureau, October 2009

Beyond 2015, this cohort is projected to continue to grow as a percentage of the U.S. population (as shown in Exhibit 2.D), albeit at a diminishing pace, reaching 124 million and comprising 31% of the total population by 2040. This historically high savings rate cohort therefore represents a fast growing segment of U.S. population and will likely be an increasing determinant of overall personal savings rates.

At the risk of underestimating the heretofore resilient U.S. consumer, it is not inconceivable that U.S. personal savings rates could hover in the 6 to 8% range or higher for the next several years, or at least until the negative wealth effect is erased. If that happens, it would represent a return to the highest five-year period of U.S. personal savings rates since the mid 1980s.

The impact on consumer spending would be to flatten its trajectory relative to past economic recoveries. While this would not be a positive for the retail property sector, if new retail supply adjusts to recognize this slower demand rebound, the absolute level of growth in U.S. population (averaging almost 25 million per decade) should allow absolute levels of consumer sales to increase and soak up excess retail vacancy.

[1] U.S. Census Bureau, June 2009

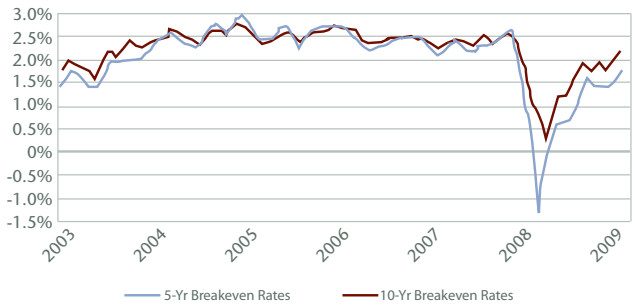
In addition, there is sufficient excess labor and production capacity across the globe that few businesses have any sustainable sales pricing power. There are some pockets of potential inflationary pressure, including energy prices and the possibility of imported inflation given a weak dollar, but these dynamics are unlikely to filter more broadly into a significant rise in goods and services inflation. As such, the capital markets remain relatively unconcerned about inflation risks, as shown in Exhibit 2.7 by the yields on inflation-protected bonds. Perhaps a bigger risk than goods and services inflation is asset reflation, with global investors able to tap into inexpensive capital as a result of ultra-accommodative monetary policy and redeploy that capital into investable assets, potentially generating other asset bubbles.

Housing Bottom Finally in Sight

After four consecutive months of stabilization in home prices per the S&P Case-Shiller Home Price Index, it appears that the three-year free fall in home prices is finally ending. Most housing indicators, including total home sales, new and existing home prices and inventory of unsold homes have been signaling favorable trends, as shown in Exhibit 2.8. And for the first time in several years, new residential construction finally added to U.S. GDP in third quarter, growing by 19.5% as new construction starts began an upturn off an extremely depressed base.

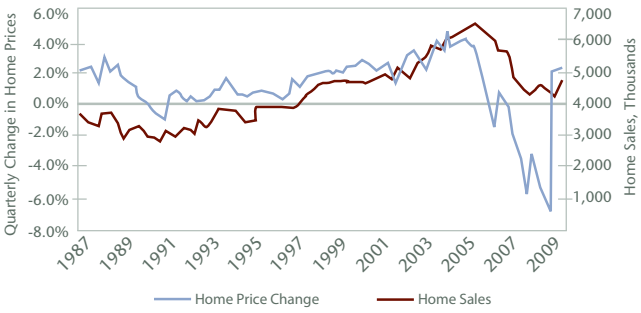
However, high unemployment rates are continuing to keep pressure on home mortgage defaults and as such foreclosures continue to be a major challenge. The recent improvement in the housing market has been greatly facilitated by government intervention, including the predominance of the government sponsored enterprises (GSEs) in the mortgage origination business and the U.S. Federal Reserve (Fed) being by far the largest acquirer of residential mortgage backed securities. In addition, a first time home buyer tax credit (recently extended and expanded) has also helped boost sales, especially of more moderately priced homes. However, the Fed has announced they will discontinue purchases of residential mortgage backed securities at the end of first quarter 2010, raising the question of whether the tentative improvement in the housing market will continue once the life support of government intervention begins to wind down.

EXHIBIT 2.7 | TIPS BONDS BREAKEVEN RATES



Source: U.S. Treasury, December 2009

EXHIBIT 2.8 | U.S. HOUSING MARKET TRENDS



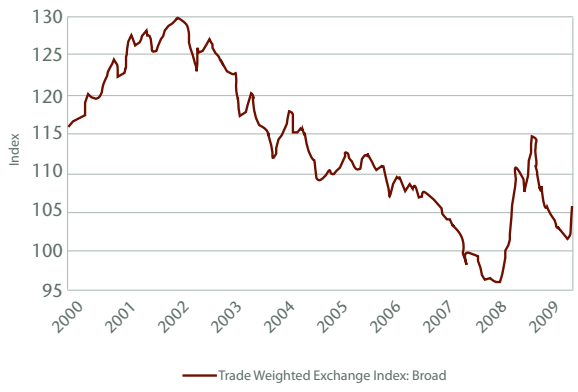
Sources: Standard & Poor's, Fiserv, Inc., National Association of Realtors, December 2009

Leaning on Exports and Business Spending

Despite weakness in consumer spending, there are areas of potential strength, especially exports. A relatively weak dollar (as depicted in Exhibit 2.9) and a strong rebound in global economic and trade volume growth should set the stage for dramatically improved export activity. Indeed, real export activity surged 17% in third quarter 2009, reaching its highest absolute level since fourth quarter 2008. Export activity continues to be a critical component of long term U.S. economic growth, with exports as a

> A relatively weak dollar and a strong rebound in global economic and trade volume growth should set the stage for dramatically improved export activity.

EXHIBIT 2.9 | TRADE-WEIGHTED VALUE OF THE U.S. DOLLAR



Source: Federal Reserve Bank, December 2009

EXHIBIT 2.10 | ANNUAL GROWTH OF U.S. EXPORTS AND IMPORTS

Sources: Bureau of Economic Analysis, Principal Global Investors, December 2009

share of GDP tripling over the past 25 years to about 15%. In 2010, that number is likely to be closer to 20%, propelled by the expectation of a sustained rebound in exports as shown in Exhibit 2.10.

In addition, strong growth in corporate earnings in 2009 along with improved access to non-bank credit markets have allowed large cap businesses to accumulate significant cash reserves, giving them ready capital firepower and the ability to expand once they gain increased confidence that the economic recovery is sustainable. While a surge in business investment is unlikely to occur until the second half of next year, given lingering uncertainty as to the strength and duration of the economic recovery, the combination of business and exports is expected to be the primary driver of private sector GDP growth in 2010 and 2011, offsetting weak projected growth in personal consumption.

The Tightening Cycle Begins

The removal of ultra-accommodative global monetary policy is officially underway with three central banks (Israel, Australia and Norway) hiking interest rates thus far in 2009. Other central banks are contemplating near-term rate hikes, including India, Brazil, New Zealand and South Korea. Most other central banks are on hold, contemplating the optimal timing of entering the global tightening cycle while balancing inflation or asset reflation risk and avoiding a premature move that increases the risk of a double dip recession.

The Fed has historically not begun to hike interest rates until a year or more after unemployment rates reach their peak. The prospect that unemployment rates may not peak until mid-2010 implies, by historical standards, that the Fed could remain on hold until mid-2011. However, there is a likelihood of rate increases before then and they could be more substantial than anticipated, given concern about the inflationary or reflationary consequences of extended accommodative monetary policy.

Limited market concern about inflation along with increased purchases of government bonds by banks have kept yields on long term Treasury rates quite low despite the return to positive economic growth. Nevertheless, the yield curve remains quite steep, although it is likely to flatten over the next few years, primarily in the form of the short end of the curve

rising as the Fed gets closer to its first rate hike. The long end of the Treasury curve is unlikely to increase as much, given limited goods and services inflationary pressures and the prospect for reasonably strong continued demand for Treasury bonds, especially among financial institutions which will strive to continue to increase the quality of their balance sheets.

Summary

Reinforced by nearly unprecedented levels of coordinated government intervention and stimulus, the global economy is emerging from its most severe downturn in the post-war era. While the recovery has been led by developing nations, facilitated by less distressed banking systems, the breadth of economic recovery is expanding. That expansion includes the United States, which emerged from four consecutive quarters of contraction with positive GDP growth of 2.8% in third quarter 2009. However, a good deal of third quarter growth was driven by a rebound in the housing and automobile sectors, both of which were given a major boost by government spending measures, thus calling into question the sustainability of the recovery once intervention efforts are withdrawn.

Given the gradual restoration of the credit markets and business investment and export driven growth, the U.S. economy is likely to continue to expand but at a rather moderate trajectory. The combination of an extended jobless recovery, consumer sector headwinds, limits to further government intervention given record budget deficits and a more highly regulated economy are likely to collectively create a drag on the trajectory of what is shaping up to be a fragile U.S. economic recovery.

Nevertheless, it appears that the worst of the credit crisis has passed and one of the contributors to expected slower U.S. economic growth, the prospect of increased personal savings and a less U.S. consumer-centric world order, will serve over the long term to facilitate a necessary rebalancing of the global economic equation. In addition, the U.S. economy has proven to be quite resilient in the past. That is likely to continue, especially in the areas of research/development and product innovation, an area of significant ongoing comparative economic advantage.

The following matrix contains the base case economic outlook as well as upside and downside scenarios for 2010 and beyond.

Reinforced by nearly unprecedented levels of coordinated government intervention and stimulus, the global economy is emerging from its most severe downturn in the post-war era.

	DOWNSIDE SCENARIO	BASELINE SCENARIO	UPSIDE SCENARIO
Description	Sharp increase in unemployment rates and weakening consumer confidence lead to contraction in consumer spending and heightened risk of double dip recession	Economic expansion continues throughout 2010 but only at a moderate pace as the economic recovery transitions away from government stimulus-driven to a more self-sustained correction	Return to a strong inventory rebuild and export driven cycle, with increased profits stimulating hiring and higher consumer confidence and spending
Probability	15 - 20%	65 - 75%	10 - 15%
U.S. GDP Growth–2010	1.5%	2.9%	3.3%
Employment	Unemployment rates climb to 11 - 11.5% in third quarter 2010, with a peak-to-trough payroll employment decline of 9 million or more	Unemployment rates peak at 10.5% in mid-2010, with peak-to-trough payroll employment decline of 7.5 - 8 million	Unemployment rates peak at 10.2%, with peak-to-trough payroll employment decline of 7.1 million
Consumer Spending	A second round of consumer retrenchment in 2010 as unemployment reaches post-war peak, with consumer spending up only .5% in 2010	Personal consumption remains positive through the recovery, but increases slowly (+1.2% in 2010) as personal savings rate continues to increase	Better employment numbers and improved wealth effect result in slightly higher consumer spending, up 1.6 to 1.75 % for 2010
Net Exports	China stimulus ends, resulting in weaker than expected developing economy and U.S. export growth; however imports fall even more and thus net exports add marginally to U.S. GDP growth	Global economic growth and weak dollar allows strong export growth to outpace import growth and as a result net exports provide a material boost to U.S. GDP growth	Even stronger than expected growth in developing economies and weak dollar results in surge in exports that far outpace import growth, providing strong boost to net exports
Inflation	Excess capacity increases even more as global economies slow; risks shift to deflation	Limited signs of goods and services inflationary pressure; core CPI of 1.5%	Inflationary pressures similar to base case, given that upside growth is not strong enough to incrementally reduce excess capacity; core CPI of 2%
Interest Rates	Fed on hold throughout all of 2010; risk aversion and deflationary concerns push 10 year Treasury yields below 3%	Fed on hold through at least mid-2010 but setting the stage for rate increases in late 2010 or early 2011; 10 year Treasury yields range-bound at 3.5 to 4%	Fed begins to send signals of earlier rate hike and definitive end to unconventional intervention in capital markets; 10 year Treasury yields move into range of 4 to 4.5%
Housing	Fragile housing recovery goes into reverse, as high unemployment rates cause foreclosures to accelerate and reduce buyer demand for new and existing homes	Housing recovery continues at a moderate and sustained pace, with new home construction up 8% in 2010; home prices continue to gradually recover, and unsold inventory keeps shrinking	Similar to baseline scenario, but with slightly faster improvement in housing recovery dynamics

3 The Long Road to Deleveraging

The inherent cyclicality of commercial real estate has once again made its presence felt quite strongly during the global and U.S. recessions

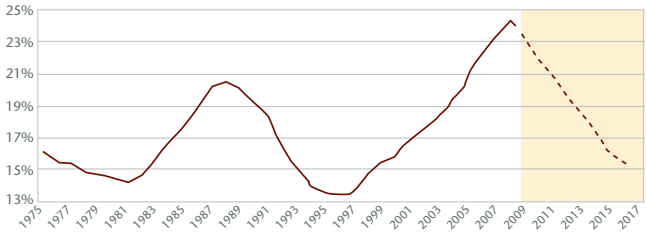
Although its pace of restoration has trailed most other sectors of the credit markets, the commercial real estate debt market has seen discernible improvement throughout the course of 2009. That gradual rebound has been the result of both direct government intervention and the coattail impact of overall improvement in the broader credit markets. However, major challenges remain in accessing debt capital in what is still an unsettled market, as the inherent cyclicality of commercial real estate has once again made its presence felt quite strongly during the global and U.S. recessions. This cyclicality is evident not only in the rise and fall of property values (with the NCREIF Index down 28% from peak at the end of third quarter 2009 and with transaction-based indices down even more), but also in the historical and projected patterns of deployment of financial leverage as shown in Exhibit 3.1. The commercial real estate asset class is now moving into its second major era of deleveraging in the past 20 years.

A historical review of the deployment of commercial real estate debt can be instructive in projecting the future course of debt capital markets. Following the 1982 recession, property appreciation began to rebound and remained positive throughout the rest of the 1980s. This period coincided with a gradual decline in interest rates and increasingly accommodative debt capital markets. As a result, commercial real estate borrowing increased sharply from 1982 until 1988 in both an absolute and relative sense, ultimately peaking at just below 21% of U.S. GDP. That run up in

leverage (which culminated in over $1 trillion in debt outstanding) was facilitated by aggressive lending, particularly on new construction by savings and loan institutions, many of which ultimately failed and were taken over by regulators.

The first wave of deleveraging got underway shortly thereafter, as a massive oversupply of commercial real estate ran head on into the recession of 1990 – 91. After peaking in 1989, commercial real estate values per NCREIF fell by slightly more than 32% over the ensuing five years. Commercial real estate leverage declined during this period as well, with outstanding debt

EXHIBIT 3.1 | COMMERCIAL MORTGAGE DEBT OUTSTANDING AS A PERCENTAGE OF U.S. GDP



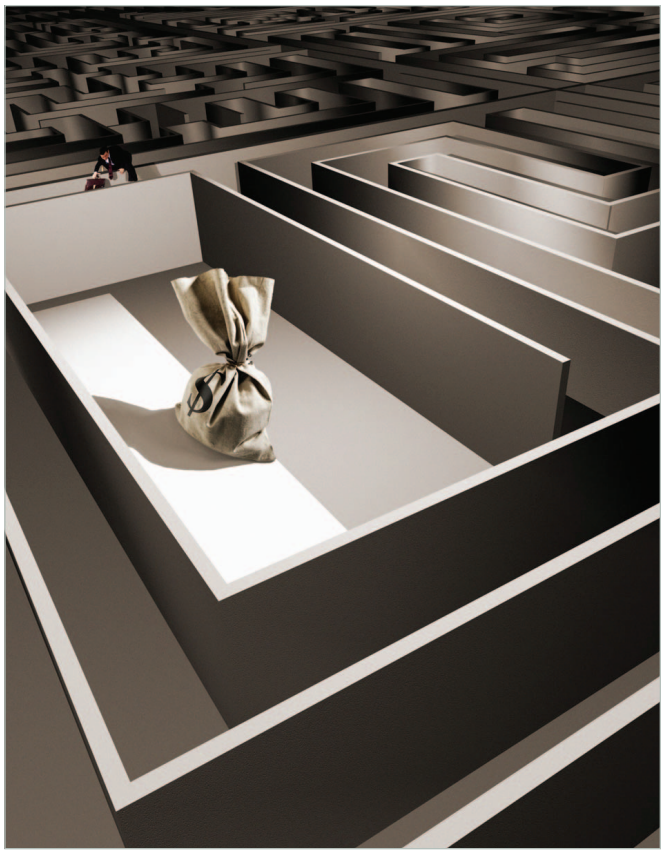
Sources: Federal Reserve Flow of Funds, Bureau of Economic Analysis, Principal Real Estate Investors, July 2009

falling by about 10%. That corresponded to a decline from peak levels of 20% of GDP to slightly above 13%, as deleveraging ran its course over an eight-year period.

By 1997, however, with property values beginning to rebound, leverage began a second and even more significant upward march. Despite a temporary setback in property appreciation during 2001 as a result of a mild recession and the events of 9/11, increased use of leverage continued uninterrupted for over a decade. This extended era of borrowing resulted in a massive increase in both absolute debt (more than tripling to $3.5 trillion) and relative to GDP, pushing well past the 1990s high water mark. This surge was facilitated not just by accommodative real estate debt markets, including rapid gains in securitization's market share, but also by low interest rates, as long-term Treasury yields averaged less than 5% during this extended period of increasing leverage. Rapidly increasing property values and the search for alpha also contributed to overleveraging. Most of the surge in property values happened post the September 11th terrorist attacks, as average annual net property appreciation soared to 9% from 2004 to 2008. This unprecedented run in property appreciation resulted in the peak valuations in late 2007 that were often referred to as real estate being "priced for perfection".

Today, given space markets distress and a major downward correction in property values that is occurring much more rapidly than in the 1990s, the next era of commercial real estate deleverage is clearly under way, albeit still in its early stages. Foreclosure activity is thus far proceeding rather slowly as lenders prioritize loan restructures and extensions as opposed to foreclosures, with support from bank regulators concerned about the impact of a high level of foreclosures on a still frail banking system. In addition, federal government intervention programs are providing increased leverage, a countervailing force to the broader dynamics of deleverage. Nevertheless, with property values in the United States likely to decline by even more during this downcycle than was the case during the 1990s, a significant amount of net deleveraging will eventually need to occur.

An approximation of the ultimate amount of deleveraging can be derived by assuming that commercial mortgage debt-to-GDP ratios gradually revert to historical long term averages, as they did during the real estate downcycle of the 1990s. The long term average is approximately 17%, although during the 1990s (a period perhaps more akin to the upcoming decade



from a deleveraging perspective) the average was 15.4%. If commercial real estate debt outstanding gradually falls to 15% of U.S. GDP over the course of the next several years, it would equate to net debt declining by approximately $600 billion. That would gradually reduce outstanding commercial real estate debt from its 2008 peak of $3.5 trillion to approximately $2.9 trillion, thus reverting over time to roughly 2006 debt levels. Although it utilized a different methodology, a recent real estate report[2] produced a similar outcome, estimating that the financing gap in the U.S. commercial real estate market ranges from $610 to $825 billion, based on projected real estate price corrections and an outlook for tighter lending standards going forward.

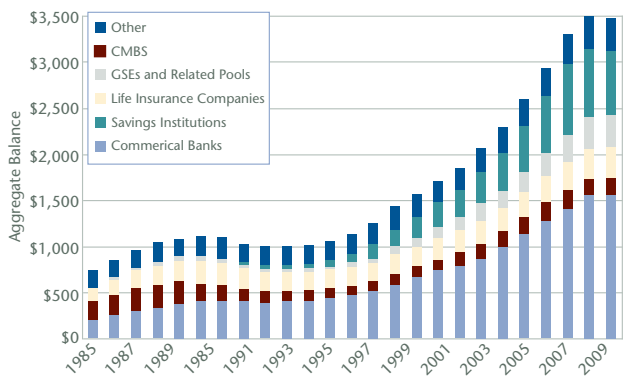
The Securitization Gap

During the last major real estate price correction in the early 1990s, a shortage of commercial real estate debt capital opened the door for an emerging securitization market to fill the gap. The financing void of the 1990s was partially the

[2] Prudential Real Estate Investors, *Life After Debt: Coming to Grips with the Funding Gap*, September 2009

result of the failure and takeover of numerous thrifts and commercial banks, as more than 1800 banks in the United States failed from 1988 to 1992. Starting from virtually a zero base, commercial mortgage securitization grew dramatically, eventually generating over a third of total lending activity and one fourth of all mortgages outstanding (as shown in Exhibit 3.2) before the CMBS issuance market shut down in 2008. In sharp contrast to its more favorable role in the 1990s, the securitization market is now a major contributor to the financing gap.

EXHIBIT 3.2 | COMMERCIAL MORTGAGES BY LENDING SECTOR



Source: Federal Reserve Flow of Funds, Q2 2009

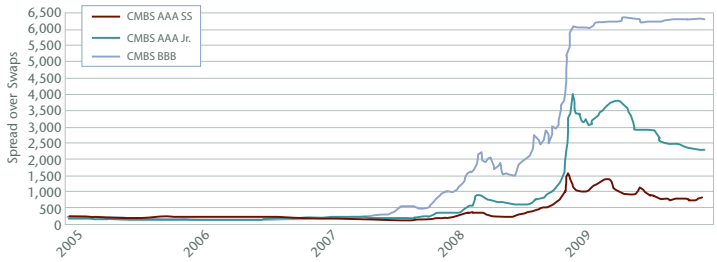
The collapse in the CMBS issuance market quickly drove its previously considerable market share of new lending activity to essentially zero, with no new issuance of CMBS (ex GSE) in the United States since mid-2008 until the recent successful issuance of a single borrower CMBS transaction, which hopefully represents a turning point.

Government intervention programs have clearly helped reduce the extreme volatility in the legacy CMBS market, with spreads on higher quality tranches narrowing dramatically from their widest levels of late 2008 and early 2009. CMBS spreads had gapped out significantly on multiple occasions over the past year, initially when the Treasury under the Bush administration announced in November 2008 that, contrary to original plans, they did not plan to purchase any securitized investments under the Troubled Asset Relief Program (TARP). The second major widening occurred in March 2009, coincident with extreme risk aversion in the market that drove stock prices to a decade low. That latter period also coincided with significant rating agency CMBS downgrade activity and tremendous market uncertainty at that time as to whether any government programs would actually be launched to help resuscitate the securitization market.

In each widening situation, spreads on the highest-rated (super senior AAA) tranches of CMBS gapped out to well over 1000 basis points above swap rates, as shown in Exhibit 3.3. Likewise, spreads on junior AAA (AJ) tranches exceeded 3500 basis points over swaps during those peak volatility periods, before narrowing over the last few months. Spread narrowing occurred as a result of increased clarity regarding government intervention initiatives which brought CMBS buyers back into the market, executing front-running trades in anticipation of increased demand.

CMBS spreads have managed to narrow despite a continued deterioration in space market fundamentals, partially because earlier price corrections in the highest quality tranches were overdone. In addition, government intervention initiatives, including both legacy TALF and the Public Private Investment Program (PPIP), have dramatically increased liquidity and helped reduce the severe technical pressure that had crippled the CMBS market. PPIP has been especially helpful in restoring price stability to the mezzanine AAA (AM) and junior AAA (AJ) classes because the tranche eligibility criteria for PPIP is more flexible than for legacy TALF. Through the first five subscription windows for legacy CMBS financing, $7.4 billion in applications for government debt were approved, providing some additional buy-side firepower to a market that had seen liquidity dry up dramatically. In addition, a significant amount of equity capital has also been raised by the nine firms chosen to participate in the PPIP program, with that capital now beginning to be deployed into CMBS.

EXHIBIT 3.3 | CMBS SPREADS OVER SWAP RATES



Source: Barclays Capital, December 2009

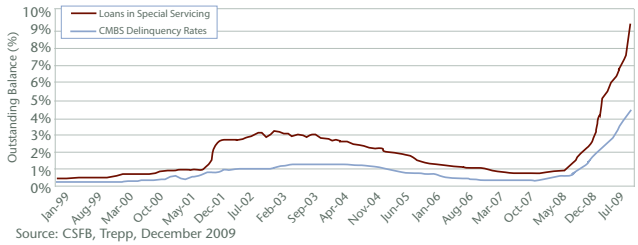
A Return to Fundamentals

As a result of both current and anticipated government debt and equity infusion into the CMBS market, fundamentals are now a much more dominant element of pricing in the legacy CMBS market. This development is the opposite of a year ago when technical factors, including extreme risk aversion, mark-to-market issues and resultant liquidity problems caused spreads to widen to unprecedented levels. In moving towards a greater emphasis on fundamentals, CMBS pricing is also starting to recognize the significant collateral differentiation across pools, and as a result the dispersion in pricing of similarly rated tranches has widened materially.

Medium-quality tranches of CMBS have also seen an improvement in pricing as a result of a combination of improved market sentiment, the coattail effect of more favorable pricing on higher quality tranches and a clarification from tax authorities that gives special servicers more flexibility to modify loans before they become troubled. Investors are anticipating that more troubled loans will get extended as a result, thus reducing the immediacy of foreclosures and delaying the timing of subsequent losses that could pierce farther into the middle part of the capital stack.

These pricing improvements have occurred despite significant increases in both CMBS loan delinquencies and loans transferred to special servicers. As of the end of November, the 60-day CMBS delinquency rate had increased to 4%, while the percentage of loans transferred to special servicers jumped to 9%, as depicted in Exhibit 3.4.

EXHIBIT 3.4 | CMBS LOAN DELINQUENCY AND SPECIAL SERVICING RATES



Source: CSFB, Trepp, December 2009

The sharp contraction in tenant demand that has sent vacancy rates soaring combined with continuing difficulties in refinancing maturing balloons has contributed to a significant increase in the outlook for eventual delinquencies and losses, especially in recent vintage CMBS. Per estimates from Principal Real Estate Investors, CMBS delinquencies are likely to reach 4.25% by year-end 2009, and could conceivably climb to 9% or higher by year end 2010, especially if the trajectory of economic and job growth struggles to gain momentum.

In addition to the challenge of refinancing maturing balloons, term defaults are a growing concern given space market deterioration and declines in rental rates, as well as an increasing number of CMBS loans that are approaching re-set dates that shift payments from interest only to amortization. A leading indicator of CMBS delinquency trends is the percentage of underlying commercial mortgage loans that are below breakeven (less than 1.0) or have between a 1.0 and 1.1 debt service coverage ratio (DSCR). Based on data from Trepp, the percentage of loans across the entire CMBS universe with less than a 1.0 DSCR is 10.6% and an additional 5.3% are between 1.0 and 1.1 DSCR.

Thus almost 16% of CMBS loans, comprising $107 billion, are either already below breakeven or dangerously close. Almost 45% of this debt service coverage challenged universe resides within the 2007 CMBS vintage, with another 22% in the 2006 vintage. As shown in Exhibit 3.5, the nearly $65 billion of CMBS loans now in special servicing is dominated by retail, multifamily and hotel properties, both in absolute dollars and in proportion to their representation in the broader CMBS universe.

EXHIBIT 3.5 | CMBS LOANS IN SPECIAL SERVICING

PROPERTY TYPE	BALANCE ($ MILLIONS)	PERCENTAGE OF PROPERTY TYPE IN SPECIAL SERVICING	PROPERTY TYPE SHARE OF SPECIAL SERVICING	PROPERTY TYPE SHARE OF ALL CMBS LOANS
Retail	$20,752.3	9.7%	31.8%	29.5%
Multi-family	$14,354.7	13.0%	22.0%	15.2%
Hotel	$12,536.6	17.3%	19.2%	9.9%
Office	$10,717.1	4.9%	16.4%	30.2%
Industrial	$1,465.4	4.1%	2.3%	4.9%
Other	$5,384.8	7.2%	8.3%	10.3%
Total	$65,211.0	9.0%	100%	100%

Sources: JP Morgan, Trepp, December 2009

Despite improvement in the technical aspects of the CMBS market, the credit curve in CMBS remains very steep, with spreads having narrowed the most on the highest quality tranches. Increasing loss expectations help explain why (despite broader spread tightening in the CMBS market) many recent vintage CMBS bonds rated AA and below are trading at dollar prices at or well below $30, implying an expected 100% credit loss in those tranches. The primary issue driving pricing is how long it may take before such losses are actually incurred, given insufficient subordination to survive projected collateral value declines. Potential losses, especially under a further downside scenario, also create vulnerability for some of the junior AAA (AJ) classes, which have improved in price but continue to trade at steep discounts to book value given borderline subordination levels.

Tentative Signs of Restoration in Other Sectors

Other sectors of commercial real estate financing are gradually showing signs of life. Multifamily lending has been the least disrupted by the credit crisis and recession, primarily because the GSEs remain very active and dominate the current lending market, climbing to nearly 40% of all multi-family debt outstanding from just under 21% at the start of this decade. Across other property sectors, lender competition on more moderate loan-to-value transactions with higher occupancy levels and manageable near-term lease rollover has increased dramatically in the second half of 2009. Insurance companies and better capitalized banks, including foreign banks, have brought significant capital availability to that space, driving spreads down dramatically, as depicted in Exhibit 3.6.

EXHIBIT 3.6 | 10-YEAR COMMERCIAL MORTGAGE SPREADS OVER TREASURYS

Source: Principal Real Estate Investors, December 2009

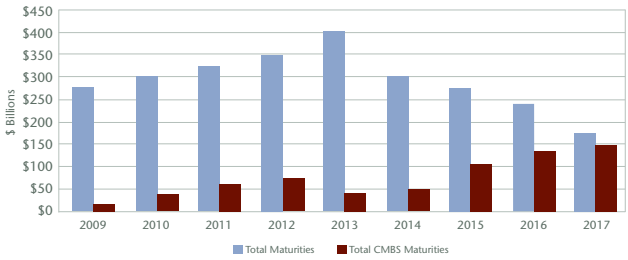
This is partially because corporate bond spreads have narrowed so significantly that commercial mortgage yields offer strong relative value within the fixed income universe. Heightened activity in the corporate bond market has also been favorable for publicly traded equity REITs, which year-to-date have issued $8.5 billion of unsecured debt, already surpassing full year 2008's total of $5 billion. Other potential sources of debt financing include the recent launch of a few publicly traded mortgage REITs, as well as a number of commingled funds and institutional investor separate accounts targeting debt strategies ranging from senior secured debt to mezzanine financing. In addition, seller financing of transactions is occasionally available in the market.

However, the cumulative size of these capital sources pales in comparison to the financing gap from the upcoming wall of maturing debt that confronts the commercial real estate market, as shown in Exhibit 3.7. This is partially because the single largest lending sector, commercial banks, remains quite inactive in terms of real estate credit formation. Better capitalized banks, including those that received TARP capital and a number of large cap banks that have been through the Treasury stress tests and subsequently improved their capital ratios, remain active on select loan deals. But there is a material absence of local and regional banks that find themselves overweight to commercial real estate and are focusing their attention on stabilizing legacy loan portfolios instead of actively engaging in new lending activity. Debt capital shortages are also more acute on large transactions, partially because the loan syndication market remains largely inactive.

The volume of troubled real estate has continued to increase throughout 2009, partially as a result of challenges in refinancing maturing loans. Real Capital Analytics estimates that total distressed assets[3] in the United States reached nearly $140 billion as of August 2009. Of that total, retail and apartment represent the largest absolute dollar amount in distress, although office is not far behind. Distressed hotel properties are also quite high as a percentage of the total hotel universe. In addition, the data shows that problem deal resolutions are occurring at a fairly slow pace, likely due to lender extensions currently being the primary mechanism for dealing with problem loans.

It is quite likely that distress in the commercial real estate markets will persist for an extended period, as declining property values collide with an increase in maturing loans over the next few years. Calendar years 2012 and 2013 comprise the greatest volume of loan maturities, largely due to the magnitude of intermediate term loans made in the 2006 – 2008 era. However, the tail of refinancing activity extends well

EXHIBIT 3.7 | COMMERCIAL REAL ESTATE DEBT MATURITY SCHEDULE



Sources: ACLI, Federal Reserve, Deutsche Bank, Intex, Trepp, Principal Real Estate Investors, November 2009

[3] Distressed assets include foreclosures, bankruptcies and restructured or modified debt that includes some form of lender forbearance or economic give-up in the capital stack.

into the middle-to-latter part of the next decade, primarily due to the longer duration of recent vintage CMBS loans.

Refinancing challenges in the first half of 2010 should be relatively manageable, largely because the refinancer of choice will likely either be the government (for multifamily loans) or the existing lender (who in many cases is likely to agree to forced refinances or extensions of maturing loans). But at some point, unless values rebound strongly (which is unlikely in a job-challenged market), a significant amount of deleveraging will eventually need to take place.

Based on the projected trajectory of deleveraging as noted in Exhibit 3.1, commercial real estate debt balances could decline by $600 billion or more over the next several years. Where will the necessary capital to deleverage come from? Some will be in the form of fresh equity injections, as has happened in the public REIT markets with several secondary issuances raising approximately $25 billion thus far in 2009. These equity raises have helped REITs de-risk their balance sheets and contributed to a strong rebound in REIT share prices. Other equity could come from private real estate operating companies converting to publicly traded REITs, selling equity interests in IPOs to raise capital in order to deleverage balance sheets or for blind pool acquisitions. In addition, investors underweight to U.S. real estate, including certain domestic plan sponsors, high net worth investors and sovereign wealth funds will also likely be buyers of equity real estate, especially as further price corrections result in more compelling investment opportunities.

Some elements of deleverage will come from discounted payoffs, whereby borrowers buy back their own debt at a discount to face value, forcing lenders to take a loss but not having to take over ownership of the property. However, as with most severe downturns, the majority of deleveraging will likely ultimately come from lenders converting their debt claim to an equity claim through the deed-in-lieu or foreclosure process. This trend will be reinforced by general partners (often acting in a fiduciary capacity on behalf of limited partners) electing not to inject incremental capital into overleveraged properties, instead exercising their put option on non-recourse debt to transfer the property back to the lender.

In Search of a Solution to the Financing Gap

A successful market recovery will entail not only the deleveraging of existing properties and portfolios, but also an increasing availability of debt capital to facilitate new acquisitions. As noted earlier, there have been preliminary signs of real estate debt capital market restoration, especially renewed issuance of unsecured bonds from better capitalized REITs, increased portfolio lender competition on relatively conservative and moderately-sized senior secured debt and government-sponsored debt initiatives. Beyond those areas, debt capital remains in short supply, especially given limited real estate credit creation activity by many small to mid cap banks amidst the prospects for an increasing number of bank failures in 2010.

It is quite likely that levels of distress in the commercial real estate markets will persist for an extended period, as declining property values collide with an increase in maturing loans over the next few years.

A significant portion of the banking industry is likely to stay in credit retrenchment mode for some time, with an emphasis on capital preservation and thus limited willingness or ability to take on incremental commercial real estate exposure. Bank loan portfolios also contain a significant element of risk, given exposure to undeveloped land, condominium projects, and construction activity. Commercial real estate loans as a percent of assets at banks with total assets ranging from $100 million to $1 billion are currently at 23%, per data from the Federal Deposit Insurance Corporation (FDIC), much higher than the overall bank industry average of 9.5%. In addition, commercial real estate loan exposure as a percent of Tier 1 capital for the mid cap banks stands at 253%, well above the industry average of 118%. While mid cap banks' real estate loan delinquency rates are similar to the overall banking industry average of 4%, their higher exposure means that non-performing loans as a percentage of Tier 1 capital are nearly double the industry average. With commercial real estate values still under downward pressure, mid cap banks are in no position to increase exposure to commercial real estate lending. And even the large banks (with assets of more than $1 billion) are likely to be cautious about their real estate exposure, with commercial loans as a percentage of Tier 1 capital exceeding 100%.

In addition, many government intervention programs will likely be wound down before the commercial real estate space and capital markets are fully restored. It is also unclear whether the GSEs will be subject to the regulatory reform measures in which financial institutions that pose systemic risk are pressured to shrink, generating uncertainty as to the sustainability or breadth of their multifamily lending activities.

Despite the reputational damage that shadow banking has suffered over the past few years, a likely key to recovery in the commercial real estate debt markets is a functioning securitization market, albeit a new and much improved version. Even though less overall debt will be needed in a market that is deleveraging, the demand for debt capital will still likely be too large to be met solely by portfolio lenders and government lending initiatives. Most portfolio lenders have less capacity for incremental real estate exposure than was the case earlier in the decade and there are limits to additional government lending programs in the face of huge budget deficits.

The broader corporate market, including publicly traded REITs, has access to an alternative route to credit that is not dependent upon the banking system, namely corporate bond issuance. But the commercial real estate market remains a fragmented and largely private asset class that is still quite dependent upon a well functioning traditional and shadow banking system for credit access. However, given a still unsettled banking system, some form of restoration in the securitization markets will be vital to an earlier recovery in real estate credit markets.

Despite the success of the TALF program in reenergizing other parts of the new issuance securitization market, until recently that success had not included CMBS. Although CMBS has been eligible for new issuance TALF, a number of obstacles stood in the way, including initial Fed reluctance to underwrite a single borrower deal, uncertainty as to a market acceptable structure, and wide spreads on legacy CMBS that made new issuance pricing uncompetitive. Fortunately, the drought was broken in November 2009 with the first successful, non-GSE CMBS issuance since second quarter 2008. Developers Diversified Realty (DDR), a publicly traded REIT, was able to issue $400 million of CMBS bonds in a transaction that was heavily oversubscribed and generated a much lower cost of capital than the initial price talk. Whether this proves to be a watershed event for a sustained return of shadow banking to the commercial real estate markets is unknown, but it was a very welcome development nonetheless. Importantly, the DDR issuance would have likely been successful even if it had not been TALF eligible. In fact, TALF applications for financing on the deal were rather light, representing less than 22% of the bond issuance. The real importance of the first successful CMBS issuance in over a year is that it potentially reopens an alternative avenue to debt capital for private quadrant investors in the face of a banking system that is not well positioned to provide much debt capital over the near-term to the real estate asset class.

However, a larger scale re-energization of the new issuance CMBS conduit market faces certain challenges, including access to warehouse lines to accumulate a pipeline of loans for securitization and ongoing investor wariness about the health of the property markets. It is important to note that not only was the leverage in the DDR deal very low, but was also essentially cross-collateralized which will not be the case for conduit deals. Nevertheless it is quite conceivable that with the appropriate securitization structure, including more conservative lending practices; increased subordination levels; improved alignment of interest including the issuer retaining a risk position

in the bond structure; a less complicated tranching structure; and improvements in governance and servicing practices the CMBS conduit market could indeed re-emerge in 2010 and beyond.

This is especially true if the real estate space markets bottom out and begin to show improvement during 2010. Even if a new CMBS issuance market could only manage by 2011 or 2012 to match its average annual conduit new issuance levels of 1997 to 2000 (approximately $35-40 billion per year) it would help considerably in terms of an estimated $600 billion-plus financing gap as the commercial real estate market deleverages to its long term historical trendline. The coming months will provide more evidence as to whether the CMBS market is ready to return, but momentum is building given that there have been two additional single borrower, non-TALF eligible new issuance CMBS transactions completed in December as well as other single borrower deals in the pipeline. In addition, a few commercial and investment banks are beginning to quote loans in anticipation of executing a multi-borrower CMBS issuance in 2010.

Spreads on the higher quality tranches of legacy CMBS will need to continue to stabilize in order to make new conduit issuance feasible, which is why the legacy CMBS and PPIP programs have been critical to improved market readiness for the return of CMBS issuance. If spreads on corporate bonds continue to narrow as the economy improves and the credit crisis ends, new issuance of CMBS conduit deals becomes even more feasible as it should attract renewed interest from traditional fixed income investors (assuming an improved structure that avoids many of the flaws of the previous generation of CMBS). In some ways, CMBS became a victim of its own success, leading to excessive lending practices at insufficient pricing relative to the risks taken, and as a result has gone through its own version of creative destruction. Hopefully it can emerge from its implosion and enter the creative and reformative phase of its product lifecycle. It is highly unlikely that securitization will return to its former dominance, nor would that necessarily be desirable, but its return will play an important role in the upcoming era of commercial real estate's road to recovery.

4 The Weight of Capital Becomes the Wait for Capital

Over the past 18 months the commercial real estate markets have been rocked by a sudden and severe dual reversal of fortune.

Over the past 18 months the commercial real estate markets have been rocked by a sudden and severe dual reversal of fortune. The first was the rapid swing from an overwhelming weight of capital moving up the risk spectrum in search of alpha to a sudden disappearance of capital availability into a black hole of risk aversion. The second was a false sense of security regarding market fundamentals that was buoyed by disciplined new supply, but got sideswiped by a massive, unexpected contraction in employment and tenant demand.

But the timing of pricing corrections in the face of the real estate storm has been far from synchronized across the public and private equity sectors. The publicly traded REIT market in the United States peaked in February of 2007, whereas the pinnacle of the private real estate equity market was not reached until third quarter 2007 (per Moody's/REAL CPPI) or first quarter 2008 (per the NCREIF Index), as shown in Exhibit 4.1. And while the publicly traded REIT market has rebounded strongly, up over 100% from its 2009 trough, it is likely that neither of the private equity market indices have yet reached bottom. Part of the reason

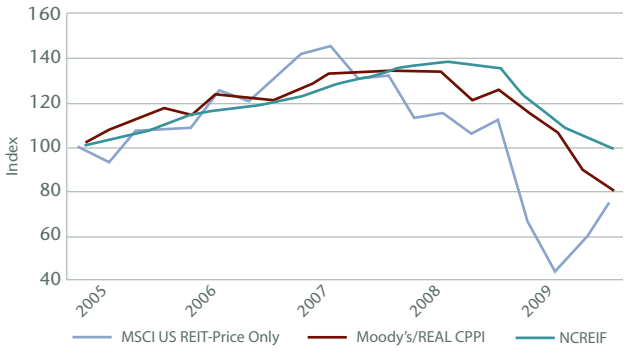
is a less efficient private equity quadrant that has had to endure a longer wait for a return of investor capital to help with the deleveraging process.

No Longer Priced for Bankruptcy

The rebound in REIT pricing since first quarter 2009 is a reflection of various factors, but the primary driver has been the dramatic improvement in credit markets. That turnaround has contributed to an overall rebound in the broader stock market, and specific to REITs, significant progress in balance sheet restoration and a less draconian market view of the value of their real estate portfolios. The public REIT market has been able to take advantage of better access to restorative debt and equity capital compared to the private real estate equity quadrant. This is especially true for debt capital, given REITs' ability to by-pass commercial banks by issuing unsecured corporate debt.

That capital access advantage has allowed the REIT market to move away from being essentially priced for bankruptcy in early 2009 to being

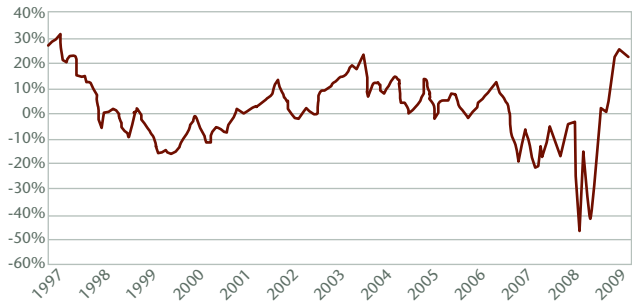
EXHIBIT 4.1 | PUBLIC AND PRIVATE REAL ESTATE EQUITY PRICE PERFORMANCE



Sources: Morgan Stanley, Moody's, NCREIF, December 2009

priced for recovery, albeit still confronted with weakening space market fundamentals. With share prices still more than 50% below peak, REITs face many ongoing challenges but have made more progress than the private market in de-risking balance sheets. Those favorable steps include reducing near-term loan maturity risk and overall levels of leverage. U.S. publicly traded REITs have raised about $24 billion in equity (the largest annual issuance this decade) and $8.5 billion in unsecured debt year-to-date.

EXHIBIT 4.2 | REIT SHARE PRICE PREMIUM/DISCOUNT TO NET ASSET VALUE



Source: Real Estate Securities Monthly, Greenstreet, December 2009

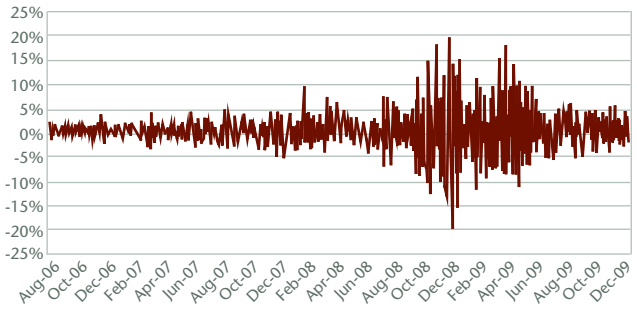
The markets have rewarded those recapitalization efforts by pushing share prices to their highest level since October 2008, with REITs on track to post their first calendar year of positive total returns since 2006. Improved sentiment regarding REITs is also reflected in their share prices trading above estimated NAV for the first time in over two years, as shown in Exhibit 4.2, implying a market perception that REITs are increasingly well positioned to make accretive acquisitions of distressed assets. The implied cap rate on REIT property holdings has compressed by over 200 basis points since their cyclical wide point of first quarter 2009 as improved credit conditions have caused investors to revise their assumptions regarding the underlying value of REITs real estate portfolios.

Other REIT metrics have also moved back in the direction of pre-credit crisis levels, including the spread between REIT dividend yields and risk-free rates. Those spreads have narrowed to below 100 basis points after having been as wide as 700 during late 2008, as shown in Exhibit 4.3. Admittedly, some of the narrowing has been a result of reduced dividend payouts or dividends paid in a non-cash form, but the majority has been due to the recovery in share prices. Importantly, consistent with the broader stock market, daily volatility in REIT share prices has also been declining and has nearly returned to pre-credit crisis levels, as depicted in Exhibit 4.4. Short selling of REIT shares has also seen a significant decline since March 2009, another reflection of improved sentiment in the market.

EXHIBIT 4.3 | U.S. REIT DIVIDEND YIELD SPREAD OVER 10-YEAR TREASURIES

Sources: FTSE NAREIT, U.S. Treasury, November 2009

EXHIBIT 4.4 | DAILY RETURNS ON PUBLICLY TRADED REITS

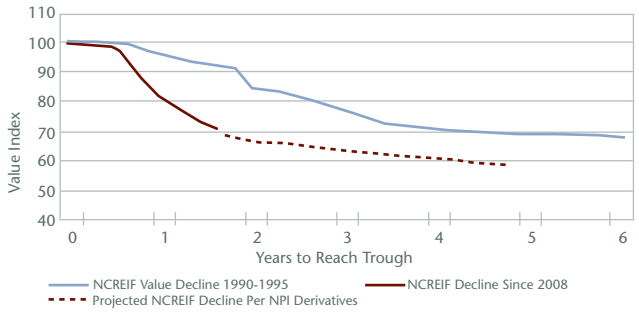


Sources: IDC, Exshare, November 2009

Getting Closer to the Bottom

In contrast, private real estate equity price corrections are not yet complete. However, they appear to be approaching a cyclical bottom, and as a result, investor interest in private real estate equity is growing. Investors are attracted to improved relative value and the opportunity to acquire assets at a steep discount to both replacement costs and previous peak valuation levels. At the beginning of 2009, institutional investor interest tended to be primarily focused on real estate debt strategies, given uncertainty regarding the duration of the recession and perceptions that equity corrections still had a long way to go. But as the market transitions into 2010, investor perceptions of relative value are beginning to change.

EXHIBIT 4.5 | COMPARATIVE NCREIF PRICE CORRECTIONS



Sources: NCREIF, Markit, November 2009

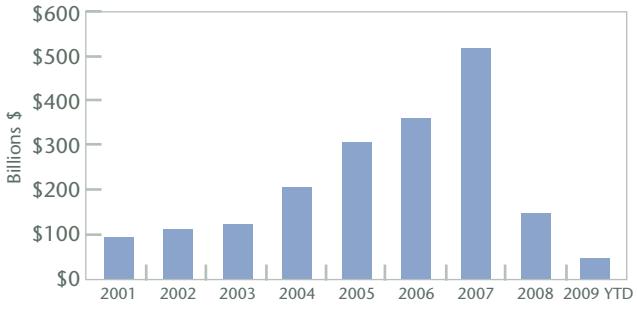
Debt strategies still offer attractive spreads (especially compared to other fixed income alternatives) but the debt market is in a more advanced phase of recovery than private real estate equity. As a result, private equity strategies have increasing appeal. This is partially because valuation corrections are occurring faster than during the last downcycle, as shown in Exhibit 4.5. But increased investor appetite is also attributable to less uncertainty about underwriting assumptions impounded into potential acquisitions, given that the economy is back in an expansion mode. As can be seen in Exhibit 4.5, the market anticipates that peak-to-trough corrections in core property values during the current downcycle will be about 40%, although it is likely that real estate values will rebound sooner than the NPI derivatives market is anticipating.

Despite growing investor interest, actual transaction volume in the private real estate equity quadrant continues to be quite low, as shown in Exhibit 4.6. This is partially because of reduced debt capital availability for new purchases (ex multi-family) and partially due to still limited situations in which borrower distress leads directly to a transfer-of-ownership oriented resolution. Stated another way, even though commercial real estate is caught in the vice of weak space markets and still volatile capital markets, there continues to be fairly limited actionable distress. That is because, despite multiple pressure points on the liability side of the real estate balance sheet, market dynamics have not reached the point whereby forced property transfers are the predominant resolution mechanism.

Some of the liability-side pressure points include borrower debt covenant violations, loan maturity defaults, term defaults resulting from increasingly common sub-breakeven debt service coverage ratios, and redemption queues in open-end funds. But in many cases there are countervailing forces that are defusing or delaying some of the liability side pressure, and thus many property ownership situations remain status quo. Overleveraged owners are, for the time being, often given a reprieve by lenders who prefer in many cases to leave the existing borrower in place instead of executing a deed-in-lieu or foreclosure.

This is particularly true for lenders with limited equity management capabilities or that are not sufficiently capitalized to absorb anticipated losses from a foreclosure. In other cases, loan extensions represent the best way for lenders to manage regulatory risk based capital requirements. Further, some extensions are occurring because participants in syndicated loans are unable to reach consensus on any resolution action save for a loan extension. In addition, recent guidance from the Internal Revenue Service that gives CMBS special servicers greater flexibility to modify loans before they become non-performing could serve to increase loan extensions and ease foreclosure levels over the near term[4].

EXHIBIT 4.6 | U.S. COMMERCIAL PROPERTY SALES



Source: Real Capital Analytics, December 2009

[4] Additional government clarity regarding the minimal relationship of collateral value to restructured loan amount will be needed, given tax penalties for prohibited types of modifications.

Thus, the market occasionally finds itself in the unusual position of lenders being more desirous than borrowers to avoid foreclosure, especially when the borrower perceives no opportunity to achieve a return of, or adequate return on, further capital infusions into the property. As a result, some lenders have been willing to extend loans and thus the borrower's imbedded put option on non-recourse debt at a low incremental cost, with the result being fewer foreclosures (and thus few opportunities for buyers to procure distressed deals) than might otherwise have been the case.

In the case of redemption queues in open-end funds, many funds have begun to sell properties, but the fund manager's fiduciary obligation to manage the fund in the best interest of all investors has meant few instances of liquidations at deep discounts to the property's market value. Further, rapid declines in unit values (largely a result of asset writedowns that are occurring nearly twice as fast as the last downcycle) could ultimately result in a significant number of investors rescinding their redemption requests. For many funds, by the time sufficient cash becomes available to redeem investors, unit values may have repriced to levels that produce sufficiently compelling forward-looking returns to encourage investors to remain in the fund. In addition, these potential returns are likely to compare favorably to alternative investments that have already seen strong price recovery, such as stocks, corporate bonds and commodities.

Yet, given the massive amount of deleveraging needed in the system, it is likely that distressed transaction volumes will begin to increase in 2010, particularly in the second half of the year. To some degree, an uptick in transactions is already underway with third quarter 2009 sales transactions about $3 billion higher than second quarter, per Real Capital Analytics. Once the banking system begins to regain stability, regulators will likely begin to exert more pressure on banks to deal with loans in some manner other than repeated extensions. Further, an expected increase in bank failures in 2010 means that the better-capitalized acquiror banks will likely proceed to foreclose on and subsequently sell the troubled properties of failed banks. Gradual recovery in lending markets combined with an increasing arsenal of buyer capital (including foreign investors with currency-enhanced buying power, given the weak dollar) means that transaction volumes will likely begin to increase over the next several quarters.

In 2009, annual property sales and transfers (including deed-in-lieu and foreclosure activity) are estimated to reach

just $60 billion, the lowest volume in this decade. That total produces an annual turnover of just over 1% of the total beginning of the year market value of all institutional quality property, down dramatically from an average turnover of approximately 8% over the past five years. Even if the market only manages to climb back to half that recent historical turnover average over the next few years, sales volume in 2010 and 2011 would reach approximately $80 - 100 billion and $100 - 125 billion, respectively. Of that total, foreclosures and deed-in-lieu activity could represent as much as half of the sales activity, providing a growing quantity of distressed buying opportunities[5]. The ongoing rollover of leases with above market rents, especially in office properties, will contribute to continuing pressure on commercial mortgage delinquency rates and likely add to eventual foreclosure activity.

[5] If 2010 - 2011 total industry loan delinquencies average 5%, and if 25 - 30% of those delinquencies lead to a foreclosure or deed in lieu in that year, it would produce about $45 - 50 billion of foreclosures per year. Estimated foreclosure activity year-to-date 2009 is approximately $18 billion.

Excluding highly distressed sales, there are a number of consistent themes that have characterized sales transaction activity thus far in 2009. Properties that have transacted have been generally high quality from a physical condition perspective, were located in primary markets, had occupancy levels in excess of 90% with minimal near term rollover and were less than $50 million in size. From a property type perspective, the best relative execution on a pricing and liquidity basis has come from multifamily properties due primarily to strong lending support from the GSEs and buyer perceptions that declines in net operating income are largely complete, given apartments' short lease duration. Grocery anchored retail properties with minimal local shop space also proved to be a relatively liquid property type in an otherwise highly illiquid 2009 marketplace.

The build up in private real estate equity capital that the markets have been waiting for is gradually falling into place. Many traditional sources of institutional capital that earlier in 2009 were both hamstrung by the denominator effect and preoccupied with legacy problems will be in a better position in 2010 to consider new investment opportunities. That would represent a major change from 2009, a year in which institutional investors' share of acquisitions has declined to just 12%, a record low for this decade. In addition, unlisted REITs, publicly traded REITs, sovereign wealth funds and domestic institutional investors that were well underweight to real estate heading into the credit crisis appear to be in advanced planning stages for real estate equity acquisition strategies. Some of that capital, especially from smaller to mid cap investors, will likely flow into open end funds whose asset writedowns are reaching a more compelling pricing level and whose redemption queues are stabilizing or declining. That could allow commingled equity funds to gradually return to the acquisitions market in late 2010 or 2011, following a year in which their market share of acquisitions has fallen to just 6%, down dramatically from 24% in 2007 and at their lowest level since 2003. A limited amount of investor capital may find its way into secondary market purchases of closed end fund units. However, most incremental equity capital will probably go into fresh acquisition activity, as increasing mortgage delinquencies result in an increase in acquisition opportunities in second half 2010 and beyond.

The Road Forward

Since the real estate market downturn was attributable to a collision of unfavorable space market and capital market dynamics, there will need to be substantial improvements in both markets on the long road to recovery. Although the deleveraging process still has several years to go, capital markets restoration has made reasonably good progress. It is conceivable that cap rate expansion is largely complete. The space market recovery, however, remains uncertain given the tepid nature of the economic recovery (which has been mostly government-driven thus far) and a job market that appears to be bottoming out but whose outlook remains quite weak. As a result, it is the prospect of further declines in net operating income, as opposed to even higher cap rates, that is the primary source of further downside property valuation risk.

Looking into 2010, a more complete restoration of real estate capital markets is unlikely to occur until the commercial banking system recovery is further along, partially because commercial banks have maintained a leading position in commercial real estate credit creation despite the growth in shadow banking. Given still limited bank lending activity, it is important that some form of securitization issuance market reemerges to provide alternative access to debt financing. To that end, the first successful post credit crisis CMBS issuance, which occurred in November 2009, hopefully proves to be a watershed event for the commercial real estate credit markets.

The pivotal point of improvement in space markets, however, has likely not yet been reached and likely will prove elusive until there is a sustained resumption in employment growth. While the job market is likely to be weak for a number of years amidst elevated unemployment rates, payroll employment growth should return to positive territory in first quarter 2010, absent a double dip recession.

The pivotal point of improvement in space markets, however, has not yet been reached and likely will prove elusive until there is a sustained resumption in employment growth.

In addition, 2010 should bring an uptick in property sales despite the preponderance of loan extensions, as lenders and regulators begin to seek more complete resolution of troubled loans. Property sales momentum should also increase as a larger critical mass of investors begin executing acquisition strategies. An increase in the velocity of transfer of troubled assets from overleveraged borrowers to better capitalized new ownership entities will also be an important step in the commercial real estate recovery process.

REIT price signals in early 2007 proved to be an effective leading indicator, peaking a little over a year before the NCREIF Index did. As a result, it is conceivable, with the trough in REIT prices having been reached in first quarter 2009, that the private equity markets could bottom in mid-2010. However, REITs have had a derisking and deleveraging advantage due to their ability to bypass inactive banks and dormant securitization markets by accessing the corporate debt and equity markets. This alternative route to capital is generally not available in the private real estate equity quadrant, which could delay the bottoming of the price correction until banks and securitization markets become more active. Nevertheless, it is likely that private equity real estate values will bottom in late 2010 or early 2011. The pricing improvement that has already occurred in three of the four real estate quadrants provides hope that the private equity quadrant is a step closer to pricing stabilization, especially given its more rapid pace of price corrections relative to past downturns.

Once at or past the bottom, however, the trajectory of recovery is likely to be only gradual. The U.S. economy still has to demonstrate that it can achieve sustainable growth once government monetary and stimulus measures are withdrawn. Structural changes in the economy, including the likelihood of less robust consumer spending, could keep the trajectory of economic growth low relative to past recoveries. A moderate recovery pace combined with the likelihood of continued strong productivity growth are not ingredients for strong job growth.

However, there is room for optimism even with this less than robust economic outlook. If the real estate industry can keep new supply tightly constrained during the next decade, it can gradually grow its way out of weak space market fundamentals. That is because the U.S. economy is not only quite resilient but is also somewhat demographically unique amongst large developed nations. A total population that is growing by some 20 - 25 million per decade generates a significant amount of absolute organic growth that should help offset the relatively slow per capita growth in personal consumption that would result from increased personal savings rates.

Commercial real estate underwriting will need to recognize the new reality of the secular changes that are likely to adversely impact the strength of economic recovery and not only adjust new supply accordingly, but also impound realistic assumptions of leasing activity and rent growth into property pricing. Investment selectivity will also be critical. The transition from systemic to idiosyncratic risk means that there will be significant variations across geographies, property types and formats, and relative strength of investment management organizations as the markets move into a new decade. New opportunities abound in the current real estate environment, and although risks have re-priced they are still present. As such, a continued heightened focus on risk management will be critical to effective navigation in the new era of commercial real estate.

5 The Great Demand Contraction

Restrained new supply has been overwhelmed by a massive contraction in demand that has swamped virtually all property types.

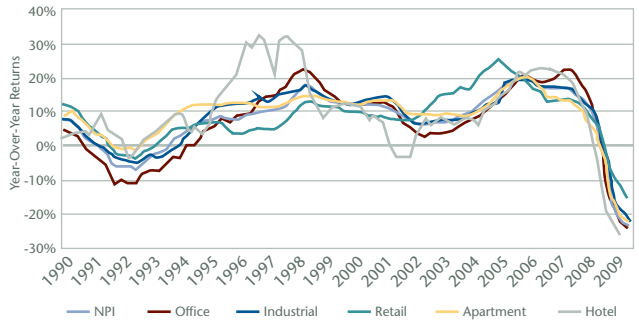
Although there were clearly some exceptions, a notable feature of the U.S. space markets during the first decade of the new millennium was reasonably disciplined levels of new supply. Construction as a percent of existing stock across the four primary property types averaged just 1.3% over the past five years, less than half of the pace of the late 1980s to early 1990s. Part of the reason for reduced supply in the United States was a trend toward what might be described as the offshoring of new development, as opportunistic strategies in search of higher returns took many of the world's construction cranes to foreign markets, especially developing nations. But restrained new supply has been overwhelmed by a massive contraction in demand that has swamped virtually all property types.

If there is a saving grace, it is that deterioration in space markets would obviously have been much worse had the record demand pullback occurred in the middle of a construction boom. Even absent the cranes, however, the damage has been done to the space markets. Vacancy rates across virtually all property types are already at or likely headed for levels exceeding the 1990s peak. Total job losses have reached 7.1 million, or 5.2% of the beginning employment base. White collar job losses have fared even worse, declining by more than 7.0% from peak. Business bankruptcies have increased for 10 consecutive quarters, with an average 2009 quarterly bankruptcy rate of 46,000 entities, per data from Moody's Economy.com. Real consumer spending was negative in 2008, its first calendar year decline since 1980, and is likely to remain in negative territory throughout 2009. The epicenter of the space markets downturn has been a sudden and nearly unprecedented contraction in tenant demand.

Unsurprisingly, negative net absorption has been the norm in 2009 across all property types, accompanied by sharp declines in property values, as shown in Exhibit 5.1. There has also been a significant jump in sublease space availability as record numbers of employees have been laid off. The surge in layoffs has contributed to a major increase in productivity and reduced unit costs that have facilitated a corporate return to profitability. Productivity growth, although critical to long-term economic prosperity, is not a near term ally of real estate net absorption.

Just as an economy going through a surge in productivity growth is able to do more with less labor, it can also do more with less real estate space usage. The result is a consolidation of space, and when consolidation occurs in an environment of declining occupancy costs, many tenants will tend to move up in quality, as they can often get better space for the same or lower

EXHIBIT 5.1 | NCREIF TOTAL RETURNS BY PROPERTY TYPE



Source: NCREIF, October 2009

cash outlay. Tenants may also move in the direction of increased energy efficiency, which tends to produce a competitive advantage for green or sustainable buildings. This is particularly true for office space, although it is applicable across the other property types as well.

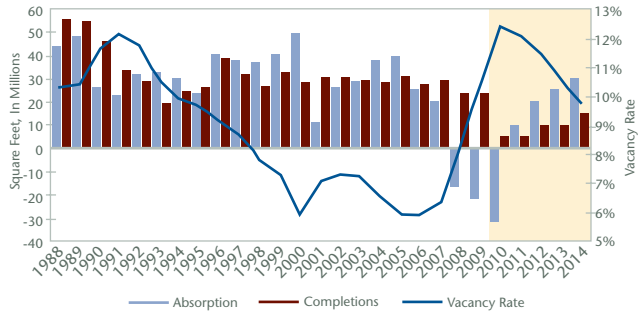
As the market has swung decisively away from any semblance of landlord pricing power, tenants not only have increased negotiating leverage but are also wary of the financial capability of landlords. This is especially true in instances of material capital obligations that the landlord must fulfill in order to prepare the space for tenant occupancy. As a result, successful investment strategies increasingly hinge on getting back to basics, including retaining existing tenants, luring new tenants away from competitors, and helping tenants reduce overall occupancy costs by effective operations, including energy efficiency.

The prospects for recovery of space market fundamentals are a function not only of cyclical dynamics but also how possible secular changes impact tenant demand patterns going forward. The outlook for recovery of all property types is linked directly or indirectly to job growth, and in that sense the prospects for space market recovery are one of very gradual improvement. Potential structural changes impacting user demand include the wave of baby boomers entering their retirement years and the impact on personal savings and consumption, which in turn will influence the performance of both retail and warehouse properties. It will also continue to drive home regional differentiations in the United States, given uneven population growth across states. The sharp decline in housing prices in some of the demographically stronger markets could paradoxically serve to reinforce their already considerable momentum in achieving a disproportionate market share of population growth, unless those states or cities (in order to overcome budget problems) engage in significant tax hikes that ultimately deter population growth and business formation.

Retail

Despite facing some of the most significant potential secular changes of any property type (especially personal consumption headwinds), retail total returns during the downturn have thus far outperformed the other property types. This outperformance is perhaps understandable for those retail centers comprising strong anchor tenants on longer-term leases, given the bond component of the investment structure and its ability to bridge over the market downturn. However, it is also somewhat counterintuitive in a broader sense. Retail construction has slowed but not as dramatically as the other property types. New retail deliveries, combined with negative net absorption, are projected to push retail vacancies into the low 12% range in 2010, eclipsing vacancy levels seen during the real estate debacle of the late 1980s, as shown in Exhibit 5.2.

EXHIBIT 5.2 | RETAIL SUPPLY AND DEMAND



Source: REIS, Principal Real Estate Investors, November 2009

As a result, retail rents have declined by almost 9% in 2009 and are projected to fall by another 5% in 2010. Expected weak consumer spending is likely to lead to a third consecutive year of negative net absorption in 2010 before returning to positive territory in 2011. Given only a gradual return to leasing momentum, it will likely be 2014 before net absorption rebounds to its average in the 2005 - 2006 era, at which point vacancy rates are expected to decline below 10%.

Retailer bankruptcies and store closings have been quite significant, although the number of large retailers declaring bankruptcy has been less than originally feared. Fortunately, the outlook for retailer credit risk has improved dramatically along with the broader recovery in credit markets and bond spreads. Credit default swap (CDS) spreads roughly doubled across most retailer categories (ex supermarkets) from pre-credit crisis levels to the point of maximum stress in fourth quarter 2008. Since then, however, there has been a significant narrowing of retailer CDS spreads. However, consistent with the idiosyncratic nature of the recovery, there has been a wide variation across specific retail names in terms of credit recovery. In general, big box and price discount retailers have recovered about 85 - 90% of their spread widening, getting back close to pre-credit crisis levels. The story is similar for supermarkets, although they had suffered less overall spread widening. Department stores have recovered the least from a credit perspective, although even they have seen CDS spreads recover more than half of their spread widening.

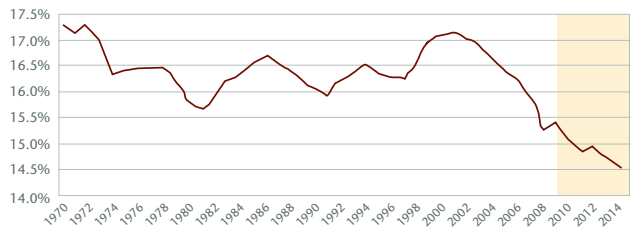
Consumer Displacement?

A significant portion of the world population still faces very difficult living conditions and extreme poverty. Nevertheless, the economic progress of developing economies, which are collectively leading the world out of recession, is both impressive and gradually lifting the standard of living in those nations. One of the key catalysts of those nations' increasing role in the restoration of global economic growth is the burgeoning consumer buying power of their emerging middle classes. As a result, the future of the global economy (including trade flows) is arguably increasingly a function of the consumption patterns of non-U.S. households. This represents a significant departure from the historical dominance of the U.S. consumer as the go-to driver of economic growth, a sector that has averaged almost 17% of global GDP over the past 15 years despite representing only 4.5% of world population.

Several members of the G-20 are nations that have the potential for strong household consumption growth, including China, India, Brazil, Indonesia and Mexico. These five countries collectively comprise almost 50% of the world population, but currently account for only 14% of global GDP. But these nations (particularly China) are in a rapidly improving state of readiness for their emerging middle classes to become a strong contributor to global growth, and in the process gradually displace the U.S. consumer as the fallback world economic engine. The collective consumer spending patterns of the households of developing nations could therefore represent a key force of sustained correction in one of the pre-credit crisis global imbalances, that being the historical reliance on the U.S. consumer sector as a catalyst of global economic growth.

It is important to note that the U.S. consumer will continue to be a major global force in an absolute sense. Indeed, the beleaguered U.S. consumer continues to show signs of resiliency, with retail sales in the United States gradually improving. But as U.S. households continue their long road to deleveraging, increase personal savings rates, confront more restrictive credit standards, and face the prospect of extended high unemployment levels, their relative contribution to global GDP is likely to shrink over the next several years, as shown in Exhibit 5.A.

EXHIBIT 5.A | U.S. PERSONAL CONSUMPTION AS A SHARE OF GLOBAL GDP



Sources: International Monetary Fund, Moody's Economy.com, Bureau of Economic Analysis, October 2009

In addition, demographic forces are no longer working as strongly in favor of U.S. consumption growth as they once were, as the baby boomers age and exit their prime consumption years. As a result, the prime consumption-age cohorts are expected to grow more slowly than the overall U.S. population over the next 40 years. While the U.S. Census Bureau projects total annual population growth of 0.89% between 2010 and 2050, the high consumption 20-to-55 year old cohort is expected to grow annually by just 0.59%, adding only 40 million people while the overall U.S. population is expected to grow by approximately 129 million.

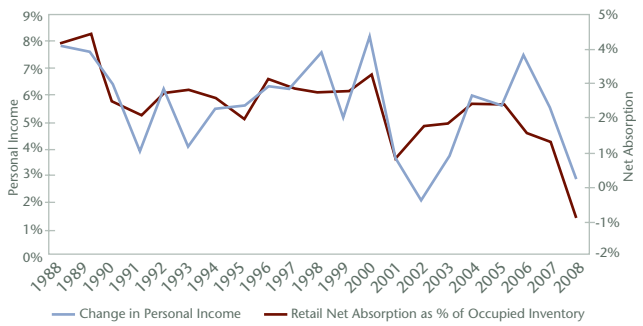
As a result, the U.S. economy will likely need to look beyond household spending (and its historical 65-70% contribution to U.S. GDP) for growth drivers. One of the key candidates is exports, which will likely be helped along by a weak dollar and offshore demand for U.S. goods and services, a good deal of which is expected to come from developing nations.

The current decline in U.S. consumer spending relative to global GDP is unique because it has occurred during a time when global GDP was also contracting dramatically, highlighting the severity of the consumer pullback. And unlike past recoveries, it is likely that the U.S. consumer share of the global economy will continue to trend downward for several years. While not necessarily favorable for countries that have come to rely on exports to U.S. households, this trend of less reliance on American consumers will nevertheless be a positive development over the long term from a global rebalancing perspective and for an undersaved U.S. economy.

Nevertheless, retailers continue to be under financial stress as evidenced by negative net absorption in 2008 and 2009 (and expected continuation of that trend in 2010). Many retailers are not renewing maturing leases, while others are going dark during the lease term, often putting in play co-tenancy clauses that trigger springing options for other tenants which collectively result in significant downward pressure on net operating income. And there could be another wave of bankruptcies in early 2010 if 2009 holiday sales turn out to be as weak as the prior year.

Retail net absorption is closely tied to growth in household income, and the latter is facing significant headwinds, as shown in Exhibit 5.3, calling into question how long retail's relative outperformance over other property types can last. In addition, the dispersion of total return performance across various retail formats has been quite low, with a standard deviation of less than 5% since the credit crisis and write-downs began. That means that even the more vulnerable retail center formats such as lifestyle centers and power centers have outperformed the overall NCREIF Index by a material margin.

EXHIBIT 5.3 | PERSONAL INCOME AND RETAIL NET ABSORPTION



Sources: Bureau of Economic Analysis, REIS, November 2009

The tight dispersion of total returns across retail formats is somewhat counterintuitive because the recession has led to a "trading down" theme among shoppers, with a movement to discount-oriented stores and an increase in internet shopping. The idiosyncratic nature of the recovery in the retail sector, with still wide disparities in individual retailer's credit outlook and significant variations across retail formats in terms of reliance on discretionary spending, does not seem to have crept into retail price corrections quite yet. Part of the explanation may be that, despite a significant share of retail loans being in special servicing, actual delinquencies remain below the average for all property types, likely attributable to typically longer retail leases. In any event, it is unclear whether the retail sector's sizable relative total return outperformance since the real estate downturn began is sustainable.

Retail sales transaction volumes, like all other property types, have declined dramatically. As was noted in Chapter 4, some of the drop off is due to a proclivity for lenders to extend and not foreclose, resulting in fewer distressed sales. Of the five main property types, retail sales transactions through November 2009 have fallen the least year-over-year, down 57% compared to an average decline of 70% across all property types. Retail properties' share of total sales volume thus far in 2009 has jumped to 20% compared to 14% in 2008. This trend is partially attributable to the defensive nature of some types of retail, especially grocery anchored, that has attracted risk-averse buyers. In addition, given the typical bond nature of retail properties, upward cap rate movement has been relatively moderate, increasing by 90 basis points (bp) relative to same period 2009, contrasted with an average of a 120 bp increase across all property types, per data from Real Capital Analytics.

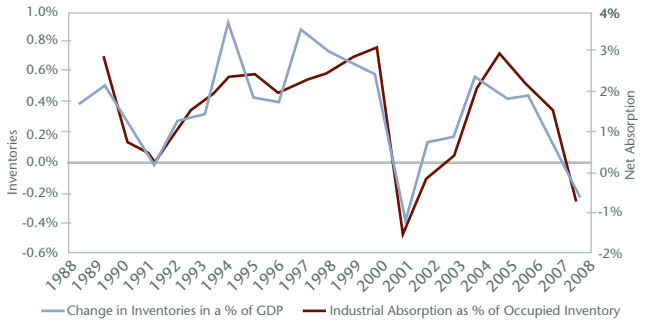
Retail likely is at a pivotal point, potentially facing a major secular shift driven by heightened personal savings, declining personal income in the face of elevated unemployment rates, and deleveraging of household balance sheets. If personal savings rates were to increase materially and remain elevated, there will likely be a need for an acceleration of conversion or demolition of less functional retail product to bring net supply back in line with weaker demand levels until the dynamics of net population growth can close the gap. Projected population growth in the United States, which at 20 - 25 million per decade is considerable on an absolute scale, equates to a growth rate of 0.8 - 0.9% per year. In an environment in which real per capita personal consumption may struggle to grow, it is important to retail space market recovery that annual net additions to new supply remain below that number for the foreseeable future. Of course, those dynamics will vary dramatically from market to market, given the uneven distribution of U.S. population growth. Some cities, especially those in population growth-challenged areas such as the Midwest, have an excess supply of older regional malls, some of which will likely need to be demolished or converted to a non-retail use.

The recession has led to a "trading down" theme among shoppers, with a movement to discount-oriented stores and an increase in internet shopping.

Industrial

Dealt a double blow by both a sharp decline in consumer spending and the biggest annual decline in global trade volume in the post war era, the industrial market has seen its vacancy rates push through the peaks reached in the early 1990s. Although total new supply in the current cycle remained reasonably well controlled, what did get built tended to be larger than during past construction cycles, with a discernible trend toward big box construction over the past few years. In 2004, warehouses over 500,000 square feet in size were quite rare, representing only 15% of total new construction. By 2008, that percentage had climbed closer to 50%. The strong pre-credit crisis surge in personal consumption, new home construction and associated durable goods sales and rapid global trade growth dramatically increased the volume of physical goods flowing through the U.S. logistics system. In order to better manage the flows, demand in the logistics business transitioned to larger boxes in order to increase operational efficiencies. Unfortunately, when user demand collapsed during the recession it left some rather large warehouses unoccupied. The recession has seen a sharp contraction in inventory, both as a result of reduced global trade and reduced consumer spending. The result has been a sharp decline in demand for industrial space, as depicted in Exhibit 5.4.

EXHIBIT 5.4 | INVENTORY LEVELS AND INDUSTRIAL DEMAND

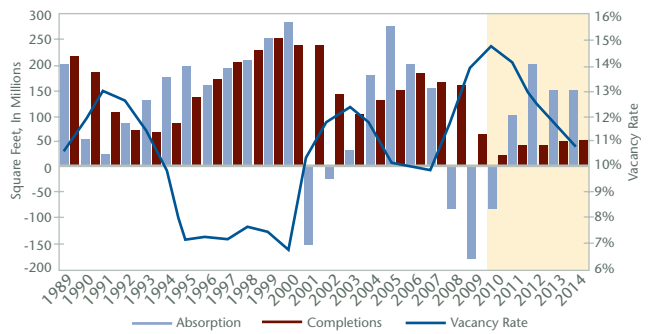


Sources: Bureau of Economic Analysis, CoStar, November 2009

Of the two key demand drivers of industrial space, global trade currently has more momentum than U.S. consumer spending. Global trade is expected to increase to 2.5% in 2010 after a precipitous decline of 11.9% in 2009, per projections from the International Monetary Fund. Third quarter U.S. GDP was characterized by very strong growth in both exports and imports. Protectionism remains a threat but is unlikely to cause a serious decline in warehouse demand unless it becomes pervasive across numerous goods sectors. Indicators of global trade volume including the Baltic Dry Index (which measures maritime shipping rates for bulk goods) have seen sharp increases during the year, up five fold from the beginning of 2009 and doubling in the fourth quarter. However, as noted earlier, the outlook for a strong rebound in consumer spending is less robust.

Toward that end, the recovery in industrial net absorption will likely be fairly gradual. Vacancy rates have already exceeded their 1991 peak and will likely climb higher in 2010, peaking at just under 15%. Net absorption in 2010 is likely to improve dramatically relative to 2009, but is still projected to be negative, as shown in Exhibit 5.5. Positive net absorption is unlikely to occur until 2011 and is then projected to outpace new supply, but not by enough to drive industrial vacancy rates back to 10% until 2014. As a result, industrial rent growth is likely to continue to decline in 2010 by about 5% (its third consecutive year of decline, per data from PPR) before beginning to stabilize in 2011.

EXHIBIT 5.5 | INDUSTRIAL SUPPLY AND DEMAND



Source: CoStar, Principal Real Estate Investors, November 2009

Industrial sales transactions have slowed sharply (down 69% year over year), but have not been an outlier relative to other property types. However, cap rates have increased significantly, up 110 bps from year ago levels to an average of 8.3% per data from Real Capital Analytics. Industrial, historically a low volatility property type, has experienced value corrections of over 27% during the past year, exceeded only by hotel and office. The increased volatility relative to historical trends is attributable to the sudden and severe increase in vacancy rates and uncertain outlook for a resumption in net absorption, given the challenges confronting consumer spending dynamics. The outlook for export growth is currently more favorable than for personal consumption, and as a result port-oriented industrial will likely fare better over the

near-to-intermediate term than other industrial properties. However, inland industrial markets that have a concentration in export-oriented goods production should also see some benefit from the rebound in global trade.

Much like retail, the prospects for industrial recovery rest heavily on keeping net new supply even more constrained than in the past, and allowing the dynamics of net U.S. population growth to chip away at the high vacancy rates. As with retail, this process would be helped by accelerated demolition of obsolete industrial product.

Multifamily

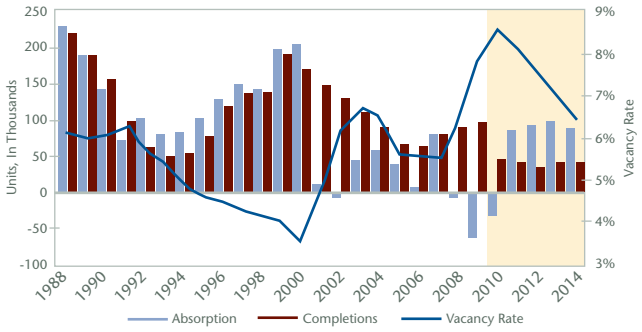
Multifamily fundamentals have suffered significantly during the downturn despite record numbers of home foreclosures that presumably could have pushed more displaced occupants in the direction of apartments. However, continued competition from vacant single family homes and condominiums along with apartment occupants doubling up or moving in with parents have conspired to reduce the rate of household formation and pushed multifamily vacancy rates to all-time highs. As shown in Exhibit 5.6, multifamily vacancy rates at end of third quarter 2009 reached nearly 8%, far surpassing previous peak vacancy levels experienced in 1990 and 2001. Vacancy rates are likely to continue to increase, eclipsing 8.5% in 2010 before finally beginning to subside in 2011. Even by the end of 2014, however, apartment vacancy rates are likely to still be slightly above where they were pre-credit crisis, suggesting only a gradual recovery given the continued overhang of shadow space competition as well as the prospects of a relatively slow job recovery.

Rent levels for apartments have been under significant pressure, including the highly visible return of free rent. However the short lease duration of apartments relative to most other property types means that apartment net operating income has already taken

the brunt of the deterioration in market fundamentals. Rents have declined by about 6% in 2009, far more than in any previous real estate downturn and will likely continue to fall throughout 2010 before stabilizing in second half 2011.

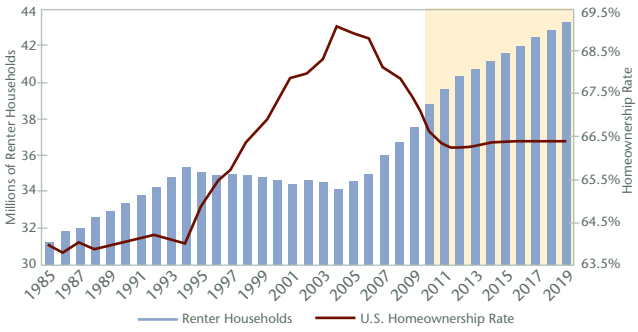
Fortunately for multifamily, homeownership levels as a percent of households will likely continue to decline over the next few years before leveling off, as shown in Exhibit 5.7. Despite the recent extension and expansion of tax credits for homebuyers, tightened

EXHIBIT 5.6 | MULTIFAMILY SUPPLY AND DEMAND



Sources: Reis, Principal Real Estate Investors, November 2009

EXHIBIT 5.7 | U.S. HOMEOWNERSHIP AND RENTER TRENDS

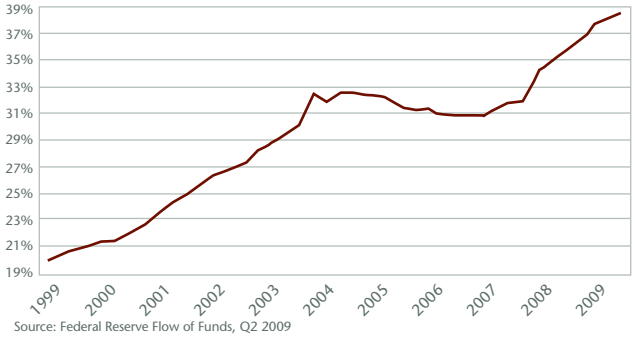


Source: Census Bureau, Moody's Economy.com, Principal Real Estate Investors, November 2009

lending standards and continued high unemployment rates will make it difficult for homeownership rates to improve, with the result that the number of renter households will continue to increase.

A key capital market risk facing multifamily involves a possible withdrawal of subsidized government financing. Fannie Mae and Freddie Mac have used both the absence of CMBS and their cost of capital advantage to begin to dominate multifamily lending, offering well below-market interest rates on apartment loans. Indeed, it is not uncommon for interest rates on GSE multifamily loans to be 75 to 100 bp below rates quoted by banks and insurance companies. As a result, the GSEs market share of multifamily lending has increased dramatically, reaching an all-time high of almost 39%, as noted in Exhibit 5.8, a significant increase from 21% in 1999. As recently as 2006, GSE market share was just under 31% and had actually lost ground since 2003 to competitors, especially CMBS lenders. But since 2007, the GSEs have represented about 70% of net growth in multifamily commercial mortgages outstanding.

EXHIBIT 5.8 | GSE OWNED AND BACKED MULTIFAMILY MORTGAGE POOLS SHARE OF MORTGAGES OUTSTANDING



Source: Federal Reserve Flow of Funds, Q2 2009

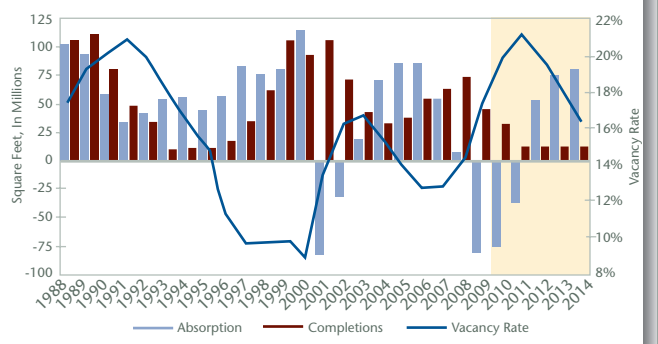
However, continued availability of accommodative capital from the GSEs will be partially a function of whether heightened regulatory oversight of financial institutions that pose systemic risk in the sense of being too big to fail will be applied to the GSEs. While cap rate expansion appears to be over for most property types, a dramatic shrinkage in GSE lending activity as a result of regulatory initiatives could contribute to a further rise in multifamily cap rates, putting valuation levels under renewed downward pressure. The GSEs are also facing increased credit losses, given that their heightened market share of apartment lending overlapped the large run up in property values, possibly leading to public resistance to put additional taxpayer capital at risk. As a result, it is possible that the reform of the GSEs that was part of the original conservatorship plan could start with a curtailment of their apartment lending activity or a reorientation of their lending activity toward lower income multifamily only. Congress may be forced to defend continuing to subsidize a property type that competes with single family housing, the latter of which the government is trying to stabilize through home mortgage modifications and extensions of home buyer tax credits.

Office

Despite record white collar job losses that have exceeded 7% of the peak office employment base, the office market has yet to absorb its most severe downward pressure on net operating income, given longer duration leases that have yet to rollover. Although the eventual maturities of those leases and reversion to much lower market rents is already impounded into declining office values, the corresponding level of office mortgage distress is relatively low at this stage. That is because the most intense pressure on debt service coverage ratios will be delayed until a greater critical mass of office leases mature. As a result, office loans are currently under-represented in the CMBS distressed loan universe, given that office accounts for over 30% of all CMBS loans but only 16% of loans in special servicing.

The dramatic decline in office-using employment has shredded office net absorption, as shown in Exhibit 5.9. The magnitude of negative office net absorption in 2009 has been similar to what it was following the 2001 recession and terrorist events, but is likely to last longer this time with negative demand expected through 2011 as additional leases matures and tenants downsize and consolidate. While new construction will continue to fall dramatically, three consecutive years of negative absorption are

EXHIBIT 5.9 | OFFICE SUPPLY AND DEMAND



Sources: CoStar, Principal Real Estate Investors, November 2009

projected to drive office vacancy rates to slightly more than 21% in 2011, eclipsing the previous high water mark of office vacancy reached in 1991. As a consequence, market rent declines have been (and likely will continue to be) quite substantial, down over 10% in 2009 and projected to fall by another 9% in 2010.

Consistent with other property types, office transaction volumes have been quite low in 2009. However, partially due to more challenging comparisons with the outsized office volume of past years, office transaction declines (-75% year-over-year) exceed the average for all other property types. Office value declines also have been severe, down 29% per NCREIF data over the past year (exceeded only by hotels). Accordingly, cap rates on office transactions have increased by 150 bp on a year-over-year basis, per Real Capital Analytics.

Recovery in the office markets will be largely a function of white collar job recovery, which is likely to occur fairly slowly. There is some hope that office-using employment could bounce back reasonably quickly, given a major improvement in corporate profitability and a large build up of cash on business balance sheets, improving corporate readiness to expand when confidence regarding the sustainability of the recovery is in place. However, even when corporations resume hiring, there will likely be a material delay in that translating into net absorption, given a significant amount of leased but vacant or underutilized office space. In addition, a good deal of office job creation has come from small to medium businesses whose access to credit is heavily linked to local and regional banks. The financial health and velocity of credit formation emanating from those banks is still under pressure, generating concern as to the trajectory of job creation among small to medium enterprises.

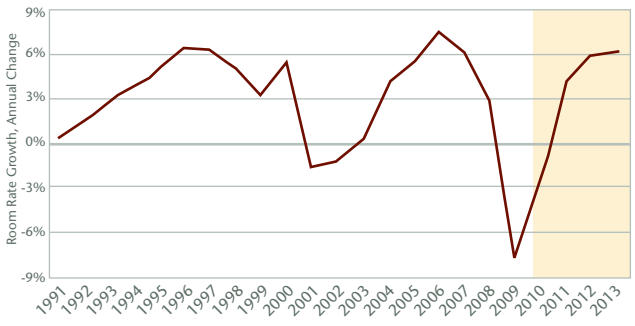
Hotels

After several consecutive years of record industry earnings, hotel fundamentals began to deteriorate during the second half of 2008 and then significantly worsened throughout most of 2009. Consistent with the magnitude of the economic and job market contraction, the hotel downturn has also been much more severe than anticipated. Both business and leisure travel ground to a halt in the first half of 2009 and have struggled to regain traction. Further exacerbating poor hotel financial performance has been the notable and unprecedented decline in average daily rates (ADRs), as highlighted in Exhibit 5.10. The challenges facing hotels can also be seen in the severity of price corrections, with hotels suffering the largest negative appreciation of all property types, per NCREIF data. Hotel price corrections are a combined reflection of the immediacy of declines in operating income, high operating leverage, and sharp increases in required risk premiums for owning and lending on hotel properties.

With the pace of revenue decline expected to ease in 2010 and new hotel deliveries winding down, there is guarded optimism that the industry could make material progress toward recovery in 2011, once economic expansion becomes more sustained and business spending regains momentum. However, institutional investor and lender wariness of hotel investments could keep required risk premiums elevated, given the recent and harsh reminders of the hotel industry's significant volatility.

In the past, ADRs have managed to recover fairly quickly once economic growth resumes, but that may not be the case during the current cycle. Both consumer and business travel segments have been simultaneously pummeled, forcing hotels to cut ADRs much more than during past downturns, in an

EXHIBIT 5.10 | HOTEL ADR GROWTH RATES



Sources: Smith Travel Research, Jones Lang LaSalle Hotels, Q3 2009

attempt to arrest the decline in occupancies. And while the pace of decline in Revenue Per Available Room (RevPAR) has been decelerating, there is little evidence of positive growth, as noted in Exhibit 5.11.

Hotel occupancies, which have declined to about 54% as shown in Exhibit 5.12, likely need to recover to at least the 60% occupancy level for there to be any semblance of pricing power to drive room rates upward. However, occupancies are not projected to regain that level until around 2013, setting the stage for the next few years to continue to be a struggle for the hotel industry. In general, business travel drives revenues and hotel pricing power is at its maximum when mid-week occupancies climb to the 90% plus occupancy level. As a result, mid-week, business-driven occupancy levels are a key leading indicator of the hotel industry's return to health. In the meantime, hotels will likely need to continue to discount room rates in order to maintain occupancy or drive it higher, since many corporate travel offices and meeting planners have gotten accustomed to their new found leverage in negotiating favorable room rates for both group meetings and individual stays. In addition, the longer room rates stay depressed, the more that lower pricing points become embedded in hotel guest expectations, making it more difficult to hike room rates.

An outlook for continued weak hotel revenues for 2010, combined with higher operating costs, will keep hotel net operating income and profit margins under considerable pressure over the near term. The high fixed cost nature of hotel operations and resultant high operating leverage mean that the management skills of the hotel operator will become an increasingly critical driver of hotel performance. Some owners have had success in obtaining fee concessions from management companies and franchisors, in addition to deferring capital projects and foregoing contributions to furniture, fixture and equipment reserves. While these concessions are not a long-term solution, over the short term they can help in meeting debt service requirements. However, while hotels have generally done a commendable job cutting expenses in 2009, there may be little left to cut in 2010 without adversely impacting customer satisfaction.

The outlook for hotels varies by flag, location and product. Luxury hotels will likely continue to underperform due to both continued business sensitivity to public and legislator perceptions regarding lavish hotel outings as well as increased consumer frugality. In general, hotels in major markets that are branded, well located and well managed should outperform hotels located in secondary and tertiary markets on a relative basis. However, as with most other property types, the ultimate resolution for weak hotel performance is a combination of the passage of time to allow a more complete restoration of economic and business activity, accompanied by a shutdown in new supply. Those dynamics will gradually allow hotels to raise occupancies and increase rates. In the meantime, hotels will need to focus on both price and non-price strategies (including branding and frequent guest loyalty initiatives) to gain market share in a broader market that is not expected to experience much net growth in demand until 2011.

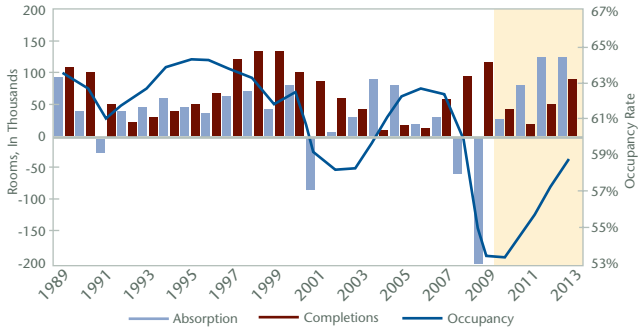
Data from Real Capital Analytics indicates that hotel transactions through October 2009 have totaled only $3 billion, down sharply from $12 billion a year ago and a heady $89 billion in 2007. Average cap rates on hotels have increased by almost 200 bp over the past year, as the required risk premiums for hotel ownership have spiked. It is likely, however, that cap rates for high quality, major market hotels (especially in gateway markets, those that cater to business travelers, and certain leisure hotels that cater to foreign visitors who have enhanced currency-driven buying power) will remain lower than hotels in other sectors and markets.

There is a possibility that distressed hotel sales will increase in 2010, given that there are over $12 billion of CMBS hotel loans currently

EXHIBIT 5.11 | HOTEL REVPAR GROWTH

Sources: Smith Travel Research, Jones Lang LaSalle Hotels, Q3 2009

EXHIBIT 5.12 | HOTEL SUPPLY AND DEMAND



Sources: Smith Travel Research, Jones Lang LaSalle Hotels, Q3 2009

in special servicing, in addition to many non-performing hotel loans on the books of portfolio lenders. Perhaps even more so than other property types, however, lender extensions of hotel loans have become the norm, with few lenders having a strong desire to foreclose on and step into the ownership of a highly management intensive asset in the midst of extremely weak fundamentals. The universe of potential buyers ready to acquire distressed hotel assets or discounted loans appears to be growing, but their pricing expectations reflect extremely deep discounts to previous valuation levels and replacement cost, further reinforcing lender decisions to extend rather than foreclose.

Summary

The commercial real estate market has been caught in the crossfire of two distinct but interrelated market collapses. The capital markets near miss with a systemic meltdown led to a sharp reduction in capital availability and increase in the cost of capital due to a surge in required risk premiums. Secondly, the most significant demand contraction in the post-war era overwhelmed reasonably well controlled supply, decimating space market fundamentals. Of these two dynamics, the capital markets have been the first to see improvement. Conversely, space markets remain under pressure as payroll employment continues to decline amidst the prospect of further negative net absorption as leases mature. In fact, the outlook is for negative net absorption in each of the five primary property types in 2010, albeit in most cases slowing from 2009's pace of contraction.

As vacancies continue to rise, the commercial real estate space market predicament is not dissimilar to other industries with excess capacity. The challenges are quite daunting, but also straightforward. Overcapacity can be dealt with in two primary ways on the supply side: stop adding new capacity (by driving construction activity as close to zero as possible) and remove existing capacity (through select property demolitions of obsolete assets or conversion into a non-competing use). Hopefully both will happen over the next several years in order to reduce net growth of new supply to a rate well below that of population, job and GDP growth.

On the demand side, the key near term strategy is to gain market share of what demand there is, while awaiting a resumption of more meaningful demand growth in the broader system. In the case of real estate, that essentially means taking tenants away from weaker and less well-capitalized competitors until net job growth and tenant expansion activity rebounds. For many property types, the rapid market swing from landlord pricing power to users taking control means that tenants will likely try to move up in both property quality and location, positioning themselves for the upcycle without incurring higher occupancy costs. In a broad sense, that likely means a tenant migration towards premium yet affordable space, increasing the likelihood that (all other things being equal) properties of higher quality will gain market share. In addition, properties that are green (or can be readily converted to green) will also likely have a competitive advantage in that they will remain eligible for consideration amongst the growing universe of users for whom sustainability is a selection criteria.

Further, increasing tenant concerns about the financial wherewithal of landlords means that better capitalized owners have a better chance to gain market share than in situations whereby either the owner or lender is unable or unwilling to advance incremental capital into a property. As the deleveraging process runs its course, there will almost certainly be growing instances of transitional ownership, creating uncertainty amongst prospective and existing tenants as to the real decision makers and their commitment to the property, thus providing a leasing advantage to properties with well capitalized, stable owners.

The real estate market has come full circle, moving beyond the financial engineering-driven era and getting back to basics. One of the primary basics is improved property operations, including leasing effectiveness and ensuring a high level of tenant satisfaction and retention. Operational excellence also entails the ability to generate material net absorption and occupancy gains in a client portfolio or fund within the confines of a broader real estate system in which overall net absorption is flat to negative. Survival of the fittest is an inherent part of the dynamics of creative destruction that have enveloped commercial real estate in the wake of a global credit crisis and recession that has ushered out what has proven to be a highly volatile first decade of the new millennium. The hope is that, with the benefit of lessons learned, the second decade will be both less volatile and allow for a complete restoration of both real estate space and capital markets.

6 Looking Through the Haze

Despite the need for caution regarding the strength and sustainability of the global recovery, the new decade represents an opportunity to remedy a number of the global excesses and imbalances that characterized the past decade, hopefully without creating new excesses.

Through the gradually clearing smoke of the now largely extinguished global economic and financial market conflagration, an increasingly discernible road to recovery is finally coming into view. Although progress continues to be non-linear and uneven, evidence continues to mount that the global economy, U.S. economy and credit markets have reached a key turning point. In addition, given significant improvement in the pace of decline in payroll employment in fourth quarter 2009, the job market is hopefully on the verge of stability and gradual recovery as well. Business profitability has returned, with a major assist from improved credit markets, strong productivity growth and increased global demand propelled by developing economies and a weak dollar.

And if a true turning point has indeed been reached at the macro level, it will also represent a major step in the recovery of commercial real estate markets. Of the two interrelated markets that drive commercial real estate, capital markets restoration is well ahead of space markets recovery. The repricing of commercial real estate risks appears to be complete in three of the four real estate quadrants, and in the private real estate equity quadrant cap rate expansion appears to be nearly over. The remaining pockets of downward valuation pressure are mostly linked to further potential declines in net operating income that is not already impounded into current values. Property types whose contractual income has already largely or completely adjusted to market as a result of shorter leases are beginning to see a floor settle around their pricing levels. But because private equity property values are unlikely to rebound rapidly, the next few years should represent an excellent opportunity for investors to either build new portfolios or add to existing portfolios at an attractive cost basis relative to legacy holdings.

However, 2010 will also present numerous remaining challenges and uncertainties, including high unemployment rates, a still weak banking system with limited credit formation and an unsettled housing market troubled with high foreclosure rates, all of which are keeping the risk of a double dip recession uncomfortably higher than the market would ideally like. As a result, careful investor navigation through the still hazy economic environment will be critical to investment outperformance. As noted earlier, the recovery will likely be characterized by a mixture of cyclical and secular recovery dynamics, thus placing investors in somewhat uncharted waters, especially in regard to the unknown boundaries of government intervention. One likely result of collective secular changes is a less U.S. centric world economic order and the implications for effective investment strategies and risk management over the next decade.

The relative health of banking systems varies dramatically across the globe, with the velocity and magnitude of credit creation quite uneven across nations and regions. In particular, the United States faces significant remaining fragility in its traditional banking system and also has a long way to go in terms of recovery in shadow banking. Unemployment rates vary dramatically across regions and nations. Accommodative monetary policy has created concern that sporadic asset bubbles may be re-emerging, including resurgent prices in certain commodity sectors and residential properties in parts of the Asia-Pacific region. Differences in the timing of central bank tightening cycles have also led to a weakening of the dollar, a near-term positive for the U.S. economy as global trade begins to rebound, but a significant challenge for export-oriented nations with an elevated currency exchange rate.

Despite the need for caution regarding the strength and sustainability of the global recovery, the new decade represents an opportunity to remedy a number of the global excesses and imbalances that characterized the past decade, hopefully without creating new excesses. Some of the resolutions to previous and current imbalances will undoubtedly result in adverse short-term impacts within certain nations (including cross-border readjustments in savings, spending, and leverage patterns) but their long-term effects will likely be positive for the stability of the broader economic system. In the case of the United States, there will be an adjustment period concurrent with certain developing economies (including China, India and Brazil) beginning to play a much bigger role on the world economic stage. But rather than representing a threat to the United States, these dynamics are perhaps better viewed as a source of regenerative growth, allowing the United States to utilize its comparative economic advantages to export higher-value goods and services to increasingly consumption-oriented developing nations. Perhaps a bigger threat to a strong and sustainable U.S. recovery are the unfavorable and unintended consequences of new barriers to the free flow of goods, services, capital and labor that might be put in place by government entities in response to the aftershocks of the credit crisis.

While government intervention initiatives have clearly been a critical element in stabilizing the capital markets, it is also true that recovery dynamics could not have achieved their considerable progress to date without the private capital markets. Excesses in the private market were indeed part of the problem, but that same sector will also be an integral part of the solution. Indeed, private capital has been the source of bank repayment of a significant amount of Troubled Asset Relief Program (TARP) capital. And domestic and foreign capital sources will become an increasingly critical element of the sustained restoration of credit markets as record government debt and budget deficits place limits on further federal capital infusions into the markets. A key issue for government is to avoid enactment of new tax or regulatory measures that restrict or deter the flow of private capital, and thus prove to be counterproductive to a complete and timely restoration of the credit markets.

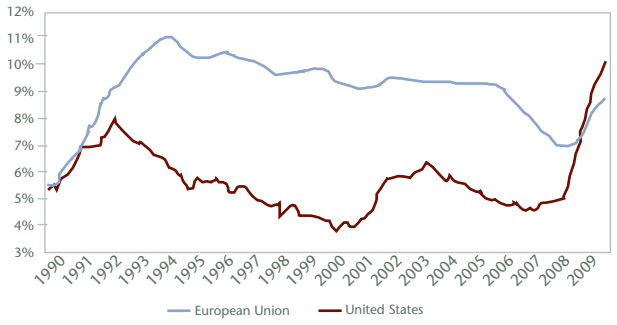
Economic Challenges Await

Some of the economic and policy issues confronting the United States invite comparisons to other developed nations. Japan has undergone a secular surge in government debt relative to GDP, but despite a long series of stimulus initiatives, has not been able to generate sustainable GDP or consumer spending growth. From 1990 to 2005, Japan's gross government debt as a percent of GDP nearly tripled, yet annual real GDP growth averaged only 1.2%. Their economy has experienced recurring bouts of deflation and their regulatory policy allowed financial institutions to delay recognition of credit losses that kept their financial system on a weak footing for an extended period. While comparisons between Japan and the United States have their limitations, especially given the differences in population growth that give an advantage to the U.S. economy, there are similarities worth noting. U.S. government debt as a percentage of GDP is likely to double between 2008 and 2012 and remain high for an extended period, and the subsequent increases in taxes required to service and eventually reduce that debt burden will likely create a drag on economic activity. In addition, the

prevalent current approach for many lending institutions in dealing with troubled commercial real estate loans through repeated loan extensions may in many cases simply be delaying the inevitable. That tends to create inefficiencies by constraining lender capacity for new credit creation, especially in regard to small and medium sized businesses that are not large enough to bypass the banking system and access credit through the bond market. Banks and regulators are understandably concerned about capital preservation, but markets are generally better served if troubled assets are promptly transferred from undercapitalized to better-capitalized owners.

The other dilemma that the United States must guard against is structurally high unemployment rates, a situation that has troubled Europe for most of the last 15 years. Unemployment rates in the European Union have averaged more than 9% since peaking in 1994. As shown in Exhibit 6.1, U.S. employment rates have recently moved above those in Europe for the first time since June 1991. Rigidities in the European labor markets have contributed to historically higher unemployment rates than in the United States. A key issue for the U.S. economy is to keep labor markets highly flexible and to build upon its global leadership in innovation and research/development. Of particular importance is avoiding restrictions on immigration, especially skilled and highly educated foreign labor which has been a critical contributor to U.S. leadership in technology and innovation.

EXHIBIT 6.1 | COMPARATIVE UNEMPLOYMENT RATES



Sources: Bureau of Labor Statistics, Global Insight, November 2009

Government regulatory and tax policy not only has implications for the broader economy, but also for the real estate asset class. To date, intervention has generally been helpful to commercial real estate, both directly and from the coattail effect of improved credit markets. As such, there a number of incremental government activities that would be helpful to ensuring that the commercial real estate market recovery maintains momentum. An extension of the TALF legacy and new issuance CMBS programs until there is more complete restoration of the securitization markets merits strong consideration, especially given the credit retrenchment of small to mid cap banks. Increased bank regulator clarity is needed to provide the proper balance between bank capital preservation issues and the pressing need for credit formation to assist small to medium businesses and commercial real estate with recapitalization and growth initiatives. Tax policy is also important, particularly the need to avoid enactment of tax initiatives that adversely impact the real estate asset class. The need to reduce barriers to global capital flows also reinforces the importance of reforming the Foreign Investors in Real Property Tax Act (FIRPTA) to increase tax efficiency for inbound capital into the U.S. real estate markets.

Industry proposals to expand government intervention support for the commercial real estate industry, including government credit enhancement of commercial real estate loans, government liquidity mechanisms to create a secondary market for commercial mortgages and other entirely new programs may merit further consideration if the restoration of commercial real estate capital markets were to stall. However, such new programs increase the risk that entirely new taxation initiatives aimed at the real estate industry will be enacted to pay for such programs. In addition, government intervention tends to result in government selected winners and losers, which can distort prices and redirect capital flows in an inefficient manner.

Most government intervention initiatives have understandably been directed at the recovery of capital markets, as opposed to restoring user demand in space markets. However, from a commercial real estate perspective, it is currently the latter that is most in need of recovery momentum. Perhaps the most pressing need at this stage is for incremental government policy to be directed at increasing credit flow to small and medium businesses and provide assurances that such businesses will not

be burdened with significantly higher costs from health care reform and future tax hikes. Reduced uncertainty in those areas would likely provide a stronger economic foundation for a resumption of business formation and net job growth.

Rebalancing Opportunities

The new decade will provide the global economy and capital markets an opportunity to remedy past imbalances. Similarly, the next several years will also create an opportunity for investors to rebalance and reposition commercial real estate portfolios. Price corrections in CMBS, REITs, and private mortgages have already provided opportunities for investors to dollar-cost average their way into a much lower cost basis and achieve current yields that are accretive to legacy holdings.

While the window of price corrections in private real estate equity is likely to remain open for some time, investor strategic and tactical flexibility and readiness will be important to maximize the opportunity. From its valuation trough in 1995, commercial real estate unleveraged total returns (using NCREIF data) averaged 10.8% over the ensuing five years. Of course, that doesn't necessarily imply that the next five years will be able to match or exceed that performance, especially given robust job creation in the late 1990's relative to the current outlook. However, for those investors seeking to take advantage of a market that is now priced for extended imperfection, increased readiness to execute investment strategies will be important. That is because while the transaction pipeline will likely grow significantly over the next few years as the deleveraging process proceeds, the accumulation of capital from investors competing to acquire those properties may grow even faster.

In addition to opportunities to dollar-cost average into a price corrected market, the next few years will also allow institutional investors to rebalance their portfolio composition. For many investors, this will include upgrading portfolio quality, reducing leverage and enhancing risk management mechanisms, reassessing the proper mix between domestic and foreign strategies and making geographic and property type weighting adjustments. It will also allow investors to reduce fees, adjust governance and control provisions, improve alignment of interest, and in many cases consolidate their spectrum of investment advisors. Unlike the 1990s when real estate market difficulties led many institutional investors to either exit, or dramatically reduce exposure to, the asset class, the general theme in the current market environment is one of maintaining a strategic commitment to commercial real estate in the context of balancing defensive and offensive strategies to effectively reposition portfolios. In essence, that involves determining which legacy investments to provide incremental capital support to (especially highly leveraged investments) and where to allocate dry powder capital in order to take advantage of major real estate price corrections. Lingering concerns about longer-term inflationary pressures also means that certain investors will increasingly evaluate both nominal and real return metrics when developing investment strategies.

The opportunity set is large and increasingly compelling, but many challenges remain. The space market road to recovery is likely to be a long one, given an economy that will likely grow more slowly than in past recoveries, especially given the weakened consumer sector. Labor productivity growth will likely continue to challenge the trajectory of net job growth. Fortunately, long-term commercial real estate demand drivers in the United States continue to be favorable, in the form of demographic dynamics that are projected to carry total population above 400 million by 2050. Demographics are a critical factor, because even if per capita personal consumption flattens, there will still be considerable absolute growth in an economic system that is adding approximately 20 - 25 million in net population growth per decade.

However, there is also a pressing need to keep net new supply of commercial real estate well in check for most of the next decade to work off space market overcapacity. The weakened and more risk averse banking sector will do its part by dramatically reducing the availability of construction loans, but once space market fundamentals begin to improve, continued investor supply discipline will be critical. That discipline will hopefully be reinforced by not only remembering but also effectively applying the lessons learned from the current downturn, as the market works through its second major real estate correction over the past 25 years.

As the new decade begins, the road to recovery is beginning to come into view, but a good deal of investor caution and selectivity will be necessary to successfully travel down that road. That is especially true of an economy whose recovery is likely to be characterized not only by conventional cyclical recovery dynamics, but also by significant secular changes that will almost certainly lead to unexpected twists and turns along the way.

www.principalglobal.com

FF6309