

Let's Be Clear

Let's be clear about how we got where we are today. It began when the Fed established a negative real short-term rate from 2001-2005, creating a powerful disincentive to invest short and safe. In addition, this artificially low short-term rate created a steep yield curve during this time period. Faced with these facts, many investors:

- invested in longer and riskier assets than usual
- played the yield curve
- borrowed artificially cheap short-term money to invest in higher yielding illiquid long-term assets.

The result was an artificial increase in the price of long-term risk assets. Yet, in spite of greatly reduced yields on almost every imaginable asset, the profits and REO of financial firms not only remained stable,

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but magically increased. This counter-intuitive outcome was largely ignored, as the profitability was generally attributed to "financial genius." This allowed Wall Street bonuses to flow like cheap champagne after a World Series victory. But this adulation hid the riskiness of their assets. In addition, the extent of leverage (and contingent liabilities) was

completely obscured via complex off-balance sheet transactions, such as Structured Investment Vehicles (SIVs) which were created for the sole purpose of legally obscuring true asset and liability positions. Many of us who were wrestling with post-Enron "bring it on balance sheet" regulations such as Fin 46 were lulled into a false sense that balance sheets (though still flawed) were far more transparent. But the exact opposite was true.

As the Fed steadily raised short-term rates, many long, mismatched and highly levered investors moved into even longer, riskier and more illiquid assets to offset the diminished yield curve spread. Others simply piled on even more debt to offset a narrowing yield spread. And some did both. Financial sector profits continued to soar

and more bonuses were paid, even as the true drivers of profitability (greater risk, less liquid assets, and ever greater duration mismatch) were carefully (but legally) hidden off-balance sheet.

By the time the Fed Funds rate reached 5.25%, the yield curve was flat to inverted, and the game was over.

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Note: Data for most graphs included in this issue are available to subscribers upon request.

In the meantime, rising delinquency rates on sub-prime residential mortgages revealed how badly these loans were underwritten, and investors asked what else had been poorly underwritten in the “search for yield.” Faced with piles of rapidly maturing short-term debt, mark-to-market balance sheet marks, debt calls, and no yield curve spread, severely mismatched highly leveraged investors (including speculative homebuyers with ARM sub-prime mortgages and many investment banks) found that prices for long-term assets were under downward

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pressure, and that their long-term illiquid assets faced 10-40 percent bid-ask spreads. But when a firm is levered 20-40-to-one, value diminutions of just a few percent wipe out all equity value.

The result is the Great Capital Strike, where long-term assets have essentially ceased

trading, and few are willing to lend or invest fresh money, lest they provide temporary liquidity to an insolvent firm. Suddenly “asset movers” found that they were “asset warehouse” for an indeterminate period, as they became the not-so-proud owners of assets they originally intended to quickly package and resell. As things unraveled, the extent of asset-liability duration mismatch began to become apparent, as did an appalling lack of balance sheet transparency. In this environment, this lack of transparency and duration mismatch turned miracle profit machines run by financial geniuses, into Kevorkian-like suicide machines.

Rumors of liquidity problems quickly became self-realizing prophecies, as the lack of balance sheet

transparency meant that everyone was unwilling to lend to anyone who needed money, as once cheap and plentiful short-term debt matured. Lending rates exploded for all but the most transparent, making it impossible for firms with thin operating margins to generate positive cash flow. Selling illiquid long-term assets was effectively declaring bankruptcy, as bid-ask spreads on these assets exceeded the equity of highly leveraged holders. Anyone needing liquidity who did not sell assets immediately became suspect, further reducing available liquidity to refinance maturing short-term debt. And selling equity meant “opening up your kimono”; and woe to the seller who after opening up could find no buyer, as it provided external verification of the rumors.

Confidence has evaporated for virtually every financial firm, as their seemingly “healthy” balance sheets were revealed to hide hundreds of billions of dollars of hidden liabilities and many near worthless (at least at current bid prices) assets. That no one can be trusted was demonstrated by the highly visible examples of Bear Stearns, AIG, Lehman, IndyMac, and Fannie/Freddie, which are followed by the business media like Britney Spears going to a child custody hearing.

A fundamental lack of transparency and mark-to-market valuations for assets that were never intended to have markets remain the main obstacles to moving capital markets forward. Until more kimonos are opened, liabilities are revealed, and assets without markets are written down only to

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reflect deteriorated cash flows, the Great Capital Strike will continue. But each corporate failure objectively moves the financial system a step forward as we get a glimpse under the kimonos of the dead, revealing a bit more about where the losses reside. In this regard, the current focus on bailouts is misguided, as it focuses on who bears the losses rather than where the losses reside. We will leave it to psychologists to opine whether government bailouts “calm” markets, but to date the evidence is murky at best. What is needed is an open

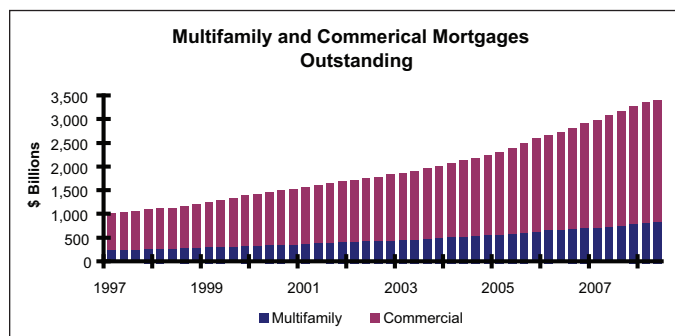


figure 1

kimono edict: every firm must reveal all liabilities of any kind by noon Tuesday, or the CEO goes to prison and the board is executed on the evening news. Such an edict would quickly reveal the losses and who is safe.

How large are the losses if we allow long-term asset holders to retain the assets to maturity? No one knows, and we will not know for many years, as they are long-

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term assets. But here are some aggressive rough numbers. There is roughly \$1.4 trillion in subprime debt. If 50% of this debt is eventually foreclosed, with a mere 50% recovery rate, the loss will be \$350 billion. And if the roughly \$12 trillion of prime mortgages have a foreclosure rate of 5%, and a 50% recovery rate, it will amount to a \$300 billion loss. Similarly, at a 10% foreclosure rate on commercial mortgages, and a 50% recovery rate, the loss would be roughly \$130 billion, with a roughly \$350 billion loss on corporate debt with similar foreclosure and recovery rates. And add about \$200 billion for consumer loans. Hence, if every lending category experiences historically high foreclosure rates and loss ratios, total losses will be roughly \$1.25 trillion, with losses more realistically around half this amount, and with the present value of these losses smaller still. And remember that much of this future loss is already now owned by the U.S. government via Freddie and Fannie obligations.

A present value loss of even \$1 trillion hardly dents the U.S. economy with a GDP of \$14 trillion and household net worth of \$56 trillion. That is, it is only 3 weeks worth of U.S. output, and less than 2 percent of net worth. Hence, the issue freezing the market is not so much about the magnitude of the losses, but rather their location. Essentially the lack of financial transparency has made every loan and many equity investment opportunities potential land mines. So everyone is standing still rather than taking a “probably safe” step forward, lest they be killed by liabilities we cannot see.

Interestingly, each time a land mine (AIG, Lehman, etc.) is exposed, the safer we objectively become as it is one less loss concentration that can unexpectedly explode on us. However, psychologically most of us felt safer in early 2007 when we did not know we were walking in this mine field.

While we do not presume to second guess the efforts of Mr. Paulson and the Fed, we are troubled by the notion of bailing out AIG and Bear, as effective capitalism demands that those who chose a highly leveraged, mismatched, high risk, illiquid strategy lose when things go wrong. In contrast, the nationalization of Freddie/Fannie was the inevitable end for once niche companies that grew to unimaginable scales through 3 decades of cunning political maneuvers. They were doomed from the beginning, as profits were extracted quarterly while liabilities were insured by a wink and nod from the government. But having repeatedly indicated that the U.S. government stood behind these assets, it was essential for the credibility of the U.S. government to honor these liabilities, thus ending an embarrassing chapter of American capitalism. We hope that the ultimate solution is an orderly liquidation of Freddie/Fannie over the next 3-5 years. However, we fear that we have just entered a new phase where residential mortgages are a matter of extensive direct government subsidies, as every politician will want to take credit back home for low mortgage rates and easy mortgage availability, especially via earmarked programs for “troubled” (that is, politically sensitive) markets.

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On the heels of the U.S. government’s \$85 billion rescue of AIG and the plan to provide up to \$200 billion to stabilize Fannie and Freddie, the Bush administration proposed authorizing the Treasury to acquire up to \$700 billion in “distressed mortgage-related assets” from private firms over the next 2 years. The concept was that the government would purchase loans and securities from financial institutions, providing clean financial firm

balance sheets and injecting cash to create liquidity in the lending market.

Some claim that this plan is reminiscent of the Resolution Trust Corporation (RTC), which was formed in 1989 to efficiently liquidate assets of insolvent S&Ls at a minimum loss. The RTC did an extraordinary job in its assignment to complete the orderly liquidation of foreclosed assets, completing its task and putting itself out of business 2 years prior to its planned sunset. It is a great role model for any new government vehicle. However, the proposed new effort is the exact opposite of the RTC's assignment, which is the orderly purchase of distressed assets, with an intent to hold. The critical difference is that the RTC already *owned* assets, whereas RTC-New must *acquire* assets. As such, the RTC did not face the difficult task of rigorous due diligence, establishing bid prices and managing acquired assets to maturity.

Because RTC-New will have the mandate of buying problem assets, it faces two immense challenges in comparison to the RTC. First, it will require significantly more human capital to sort through the vast array of securitized assets and tranches, assigning bid prices for each. Whether RTC-New hires full-time employees or outsources to consultants, this will require an army of talent.

The second RTC-New challenge is how much to pay for any asset. If RTC-New simply bids at current bid levels, then it will have accomplished nothing, as they cannot force the holders to sell at those prices. And if the government offers the ask prices, then the government will end up owning everything, not to mention the fact that ask prices will steadily increase. The proposed reverse auction will not work, as most tranches are owned by a single investor, so no offer can undercut the original offer. The intuition of the program is that the government should be able to bid higher than the current bid prices, as they can unambiguously hold assets to maturity without fear of being squeezed by liquidity constraints due to ridiculous mark-to-market marks. But the question remains as to how much of the current bid-ask spread is attributable to the liquidity premium, and how much is due to underlying asset risk.

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After the assets are acquired by RTC-New, it will have to evaluate whether to subsequently sell the assets, sell them with government guarantees (as covered bonds), restructure the notes, or simply hold to maturity. A further complicating nuance is that acquiring the smallest, crappiest, most illiquid and most subordinated assets will do the most to clean up balance sheets, but entails an enormous amount of work. In contrast, the best assets will allow capital to be deployed with the least effort, but will leave the junk hidden on lender balance sheets.

The sad truth is that the Administration and Congressional leaders have created a false sense of dire emergency. The politicians' desire to "save the world" from imminent demise led them to declare that without them there was only hopelessness and despair. The leadership of both parties, including both presidential candidates and the current president, worked to create a plan they announced would "save mankind," only to find that they were not really leaders after all. The bi-partisan defeat of the Bail-out bill, in spite of unanimous support of bi-partisan Congressional and presidential "leadership," underscores the appalling lack of political leadership which has been endemic since the Clinton impeachment began over a decade ago. They are leaders only in name, but not in substance. The fact that the bill failed in spite of support from both Obama and McCain underscores our long-held view of a recession in 2009 due to political uncertainty. And after the bill failed, the market cast its vote by falling nearly 10 percent, saying in effect that this type of "leadership" is disastrous not just for this bill but for future political clarity.

As we note elsewhere in this issue, we believe things are very tough out there, and capital markets are nearing non-functional. But Main Street's resilience in the face of Wall Street chaos serves as a reminder that capital is just the lubricant, not the economy's engine. However, even a great machine cannot run effectively forever with ever diminished lubrication. The fact that the financial sector is far more consolidated than during previous "worsts" means that the failing companies are household names. This is in marked contrast to the

1970-1995 era, when huge numbers of financial firms (representing a much larger share of the nation's financial assets) failed, each so small as to only garner passing local attention. But make no mistake, financial failures of this magnitude, though not of this concentration, have occurred in previous downturns.

Where do we go from here? We need to press for greater and more rapid full disclosure, the return of a normal capital market will be underway by mid-2009. And the real economy will struggle forward with little growth (that is, basically zero per capita growth).

But it is now at least as much a political issue as an economic issue. And we do not know either who the President or the composition of Congress will be in 2009,

If regulators press for greater and more rapid disclosure, the return of a normal capital market will be underway by mid-2009.

is rapidly implementing full and unconditional disclosure of assets and liabilities. There is no need for firms to value them for us. They just need to tell us what they own and what the liabilities are – both direct and contingent. And there is no need for safe harbors or materiality tests, but rather a simple requirement that any firm with access to the Fed window, federal deposit guarantees, or state insurance guarantees must disclose everything. Then let the market sort through this information to determine who is alive and who is dead. Once this becomes clear, capital will resume flowing to the living, the dead will be buried, and their assets will be redistributed.

An unintended side effect is that it will be harder to raise taxes with this degree of near-term economic uncertainty. On the other hand, the political need to “do something” is always dangerous. In many ways we are experiencing first-hand how the citizenry of Germany's Weimar Republic thrust powers on the government to “save them.” We believe that creating more regulatory apparatus almost invariably leads to less effective regulation, as it results in more things being done poorly, rather than a small number of critical things being done

very well. But more regulations, as opposed to better transparency, are definitely in the offing. The goal for tomorrow, next year and the next decade should be improved transparency. Just demand the simple truth.

The following article was written in conjunction with John Williams, the Chief Executive Officer of Williams Realty Advisors, LLC, and the founder of Post Properties. This article has been condensed from the complete version which will be published in the Fall 2008 issue of The Wharton Real Estate Review. Also note that this article was written prior to the Wall Street shake-up of mid-September, and will be updated in subsequent issues of The Linneman Letter.

Is This the Worst Ever?

Today we have the Great Capital Strike. To put the current slowdown in perspective, it has yet to be categorized as a recession even using today's watered-down definition. But how bad is it? To separate myth from fact, we compared the economic performance during the first seven months of 2008 with U.S. recessions of the past 40 years.

According to the current definition of the National Bureau of Economic Research: “A recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales. A recession begins just after the economy reaches a peak of activity and ends as the economy reaches its trough. Between trough and peak, the economy is in an expansion. Expansion is the normal state of the economy; most recessions are brief and they have been rare in recent decades.” This is a more elastic approach to defining a recession than the Bureau's previous definition of “two consecutive quarters of negative real GDP growth.”

Using the current definition, there have been six recessions over the past 40 years. The key features of the six recessions, and the first seven months of 2008, are summarized in figure 2.

The Evidence. The longest recessions occurred in 1973-75 and 1981-82, each lasting 17 months. The average recession duration has been 11 months, and the shortest was three months.

“Worst Ever” U.S. Recessions Over the Past 40 Years

	Dec 1969- Nov 1970	Nov 1973- Mar 1975	Jan 1980- Mar 1980	July 1981- Nov 1982	July 1990- Mar 1991	Mar 2001- Nov 2001	Jan 2008- July 2008
Duration in Months	12	17	3	17	9	9	6
Change in GDP (%)	-0.4%	-3.5%	-0.7%	-2.7%	-1.4%	-0.2%	1.3%
Change in Payroll Employment (%)	-1.2%	-1.6%	0.2%	-3.1%	-1.1%	-1.2%	-0.3%
Change in Real Household Net Worth (%)	1.7%	-10.1%	-1.8%	-1.4%	-3.5%	-3.4%	0.2%
Change in Auto Sales (%)	-29.2%	-30.4%	-15.9%	-12.5%	-15.2%	-6.2%	-5.9%
Change in Industrial Output (%)	-7.1%	-15.0%	-0.8%	-8.5%	-4.4%	-4.0%	-1.4%
Change in Real Sales by Retail Stores (%)	-2.1%	-9.5%	-4.9%	-5.1%	-5.2%	-1.3%	-1.9%
Change in Construction Contracts for C&I Buildings (%)	-37.6%	-52.2%	-21.1%	-41.3%	-25.0%	-33.6%	-28.6%
Percent Real Return in S&P 500	-23.2%	-39.9%	-12.9%	-23.2%	-16.5%	-11.3%	-10.1%
Change in Real Median Home Price (%)	-15.8%	-4.0%	-3.1%	-8.7%	-6.2%	-1.1%	-3.2%
Change in Real After Tax Profit (%)	-13.3%	-30.4%	-12.7%	-6.8%	-12.3%	-8.3%	0.5%
Lowest Consumer Confidence Level (Monthly)	72.4	57.6	62.1	65.7	65.1	88.6	59.1
Change in Housing Starts	-17.5%	-30.5%	-32.7%	-25.1%	-31.6%	2.1%	-13.7%
Highest Inflation Rate (Monthly)	6.4%	12.2%	14.6%	11.0%	6.4%	3.6%	4.9%
Highest Unemployment Rate (Monthly)	5.8%	8.3%	6.3%	10.7%	6.8%	4.8%	5.7%

figure 2

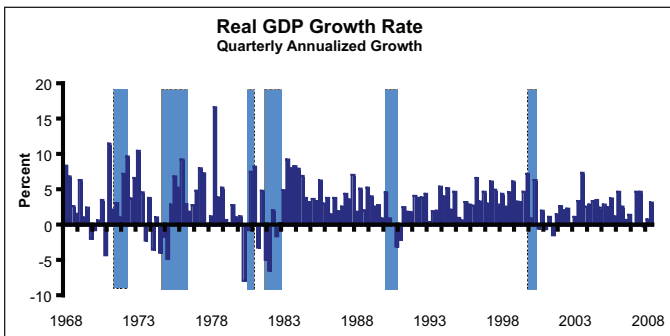


figure 3

The greatest decline in real GDP was a staggering -3.5%, and took place in the 1973-75 recession. Through July of 2008 (hereafter referred to simply as “2008”), the current slowdown registered a relatively buoyant 1.3% real GDP growth. This means that per capita GDP is increasing by about 0.3%. In 2008, payroll employment fell by 0.3%. This pales in comparison to the 3.1% decline registered during the 1981-82 recession.

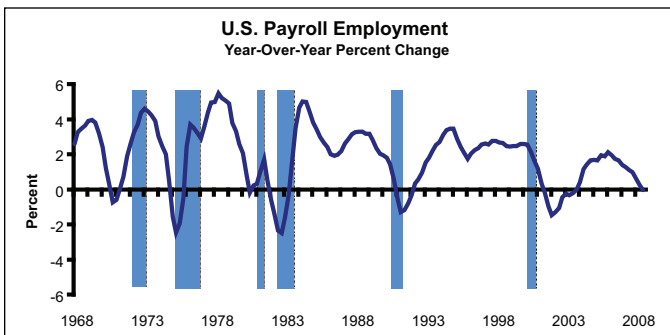


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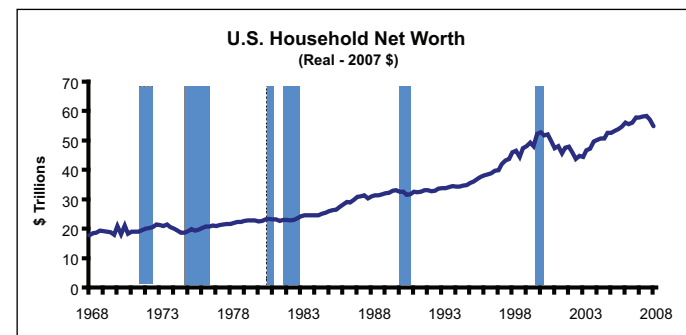


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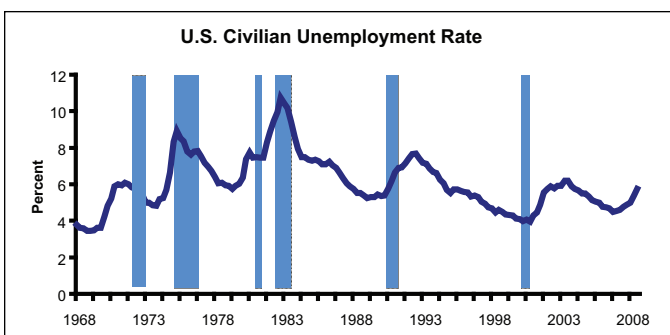


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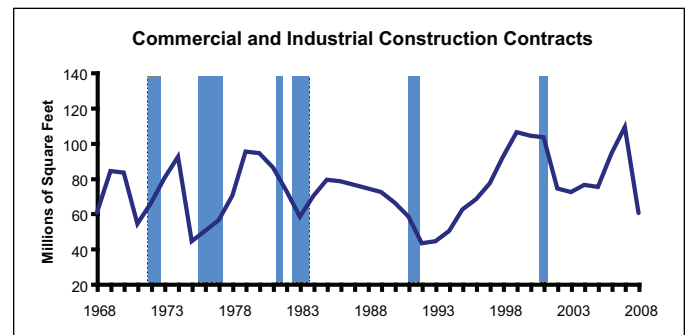


figure 7

Real household wealth has risen by just 0.2% in 2008. Thus, on a per capita basis, real wealth has fallen by 0.8%. In contrast, real wealth fell by a staggering 10.1% in the 1973-75 recession (11.1% per capita) and by 3.5% in the 1990-91 recession (4.5% on a per capita basis). The 5.9% decline in unit auto sales in 2008 is dramatic and painful, but only about one-fifth of the 29.2% and 30.4% declines registered in the 1969-70 and 1973-75 recessions, respectively. And while real sales by retail stores have weakened, the 2008 decline is small relative to the other recessionary periods, with the exception of 2001.

New construction contracts for commercial and office buildings have invariably suffered, and the decline of nearly 29% in 2008 is no exception. However, contracts fell by 52% from 1973-75 and 41% from 1981-82 in a matter of months due to a complete absence of capital. This serves as a dramatic reminder that the Great Capital Strike of 2007-08 is hardly the first time that capital has disappeared seemingly overnight (and “forever”). The -10.1% return on the S&P 500 in 2008 is extremely painful, but the 1973-75 recession registered a negative return four times as large, wiping out 40% of its value in just 17 months.

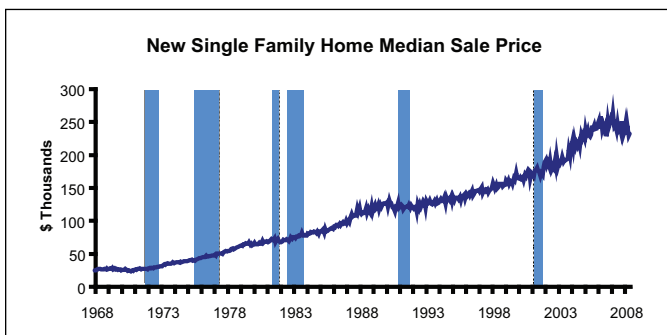


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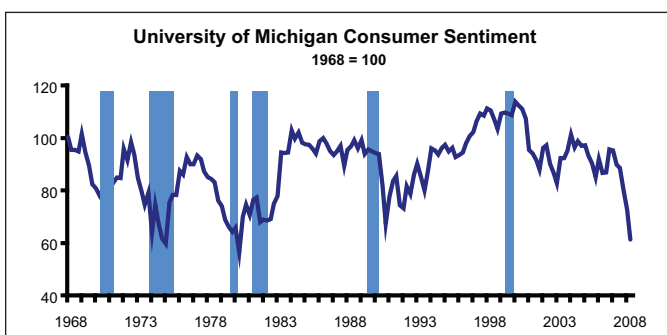
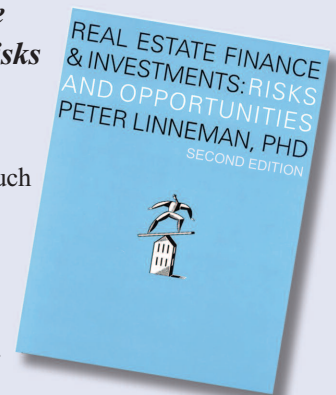


figure 9

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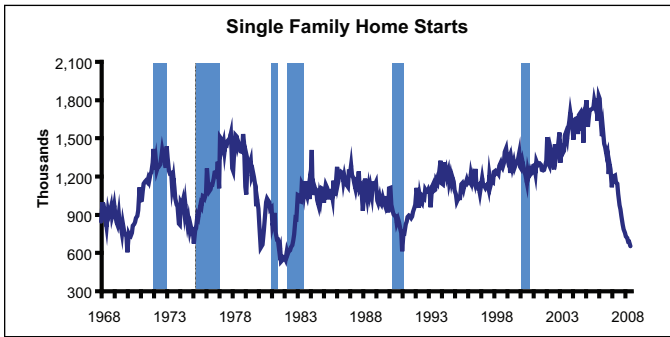


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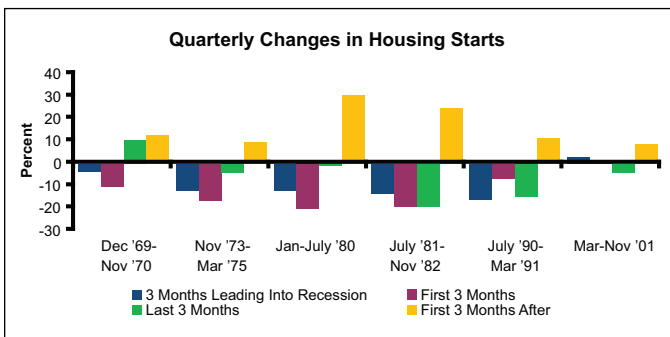


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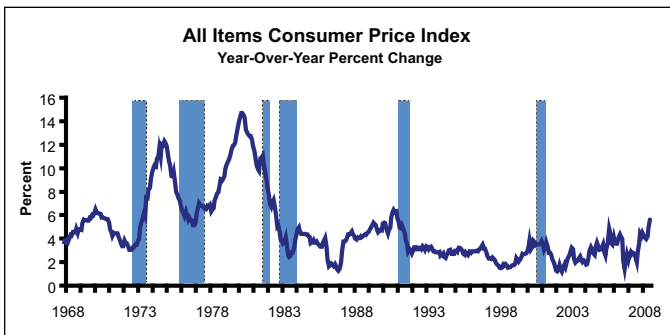


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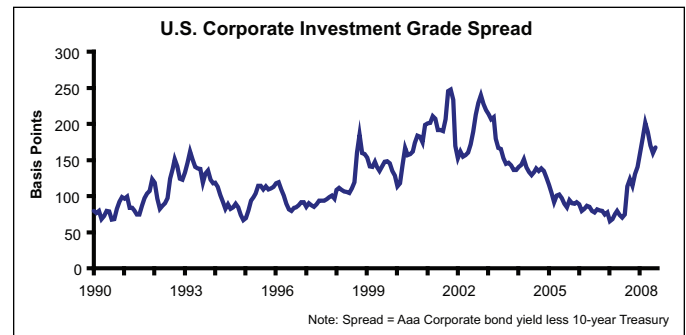


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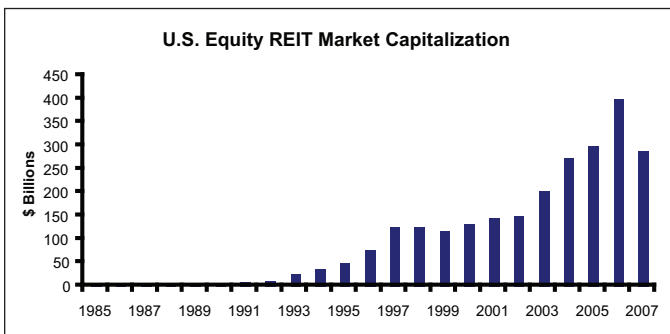


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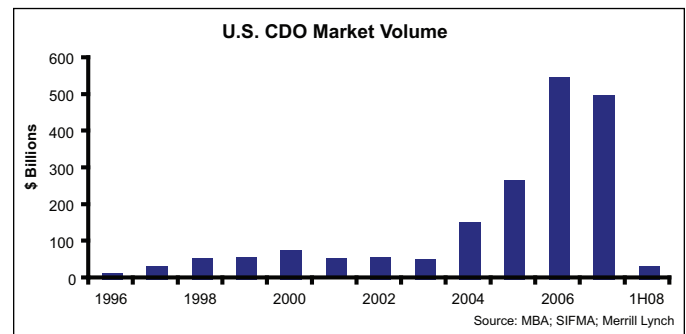


figure 15

Real median home prices (measured by the Census Bureau's index of new residential sales) have fallen in all six previous recessions, with the 1969-70 recession registering double-digit declines. The current home price decline is "only" 3.1% from the same time last year. The corporate sector as a whole registered modest real after-tax profit declines of 0.5% in 2008, in spite of staggering losses in the financial sector. Consumer confidence in 2008 plummeted to levels not seen since the recessions of 1973-75 and 1980. Interestingly, all three periods share abnormally high gasoline prices, serious geopolitical disturbances, domestic political uncertainty, and constricted capital markets.

Today's anemic rate of housing starts is breathtaking. However, the percentage declines in 2008 are similar to those registered in the 1969-70 recession, and about half or more of the declines in 1973-75, 1980, 1981-82, and 1990-91. Only the 2001 recession witnessed an increase in housing starts.

Inflation has once again reared its ugly head in 2008, with annual inflation reaching 5.5% in July as measured by CPI including food and energy. But this rate is just one-third of inflation registered in the 1980 recession,

“Worst Ever” U.S. Recessions Over the Past 40 Years

	Dec 1969- Nov 1970	Nov 1973- Mar 1975	Jan 1980- Mar 1980	July 1981- Nov 1982	July 1990- Mar 1991	Mar 2001- Nov 2001	Jan 2008- July 2008
	Rank Order (7 is Worst; 1 is Best)						
Duration in Months	5	6.5	1	6.5	3.5	3.5	2
Change in GDP (%)	3	7	4	6	5	2	1
Change in Payroll (%)	4.5	6	1	7	3	4.5	2
Change in Real Household Net Worth (%)	1	7	4	3	6	5	2
Change in Auto Sales (%)	6	7	5	3	4	2	1
Change in Industrial Output (%)	5	7	1	6	4	3	2
Change in Real Sales by Retail Stores (%)	3	7	4	5	6	1	2
Change in Construction Contracts for C&I Buildings (%)	5	7	1	6	2	4	3
Percent Real Return in S&P 500	5.5	7	3	5.5	4	2	1
Change in Median Home Price (%)	7	4	2	6	5	1	3
Change in Real After Tax Profit (%)	6	7	5	2	4	3	1
Lowest Consumer Confidence Level (Monthly)	2	7	5	3	4	1	6
Change in Housing Starts	3	5	7	4	6	1	2
Highest Inflation Rate (Monthly)	3.5	6	7	5	3.5	1	2
Highest Unemployment Rate (Quarterly)	3	6	4	7	5	1	2
Total Rank Score	62.5	96.5	54	75	65	35	32
Number of Worst	1	10	2	3	0	0	0
Number of Best	1	0	4	0	0	6	4

figure 16

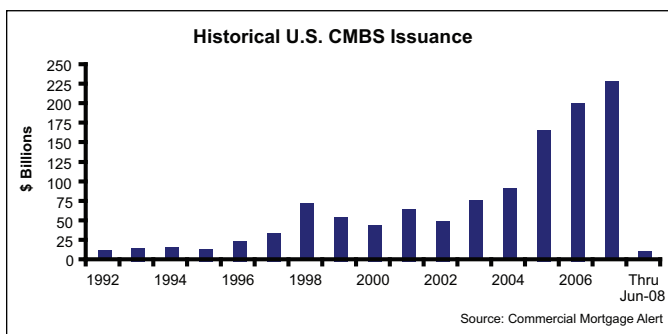


figure 17

and well below the double-digit rates of 1973-75 and 1981-82. The U.S. unemployment rate rose to 5.7% in 2008. When viewed as a whole, the Great Capital Strike merits a position on the list of worst U.S. economies of the past 40 years. But it is very clearly (at least so far) far from the worst. Far and away, the worst recession of the past 40 years appears to have occurred in 1973-75, with the second-worst taking place in 1981-82. The Great Capital Strike is (so far) the mildest, as the current period has exhibited the strongest growth in GDP, auto sales, S&P returns, and after-tax profits (all in real dollars) compared to the previous six recessions.

We ranked each of the seven episodes on a scale of one to seven (seven for the worst, six for the second worst, etc.) for each of the selected 15 metrics. The worst possible score is 105 (the worst score for each of the selected 15 metrics), while the best possible score is 15

(the least bad on each of the 15 selected metrics). The total score for each of the seven episodes is displayed at the bottom of figure 16.

Commercial Real Estate. We lived through our first real estate recession in 1969-70. In some ways, this recession was just a “blip on the radar screen,” in that there was “only” a short-lived 37.6% decline in construction activity, and no substantial change in lending activity.

Economic conditions in 1980-82 were unique for the commercial real estate industry, in that the recession was entirely due to monetary policy and had nothing to do with supply and demand fundamentals. In 1987, a change in the tax treatment for commercial real estate set the stage for a disastrous national downturn in real estate. Real estate “suddenly” became very illiquid. This recession heralded the end of an era of commercial real estate financing, requiring the evolution of entirely new sources of capital.

It took some 7-8 years for a new era of real estate capital to evolve, characterized by REITS, CMBS, and private equity funds. The 2001 recession had only a limited effect on most real estate markets. However, capital flows remained plentiful and real estate sales abounded.

The current episode has affected the for-sale housing markets in a predictable way. The generous availability of financing to home buyers (including “investment” purchasers), no document loans, and customers walking out of closings with large sums of money clearly foreshadowed the current depression in the for-sale business.

We suspect it will be another decade before we again have a healthy condominium business. However, thus far the Great Capital Strike has largely caused development to be put on hold, as people wait to see how things evolve. Also, cap rates have increased by 5% to 20%, and there are few transactions. The apartment business remains solid.

The run-up in construction costs during the previous two years has kept construction pipelines conservative. As a result, development plans are being scuttled everywhere, particularly in the hotel sector, due to greater market transparency. In almost every way, at least so far, the early 1990s were objectively much worse than today for commercial real estate, as neither debt nor equity was available then at any price. Today we have little excess supply, and we have some liquidity to prevent widespread defaults and bankruptcies.

Lessons Learned. It is tough out there, and may get tougher, but we have survived much worse over the last 40 years. In fact, we not only survived, we subsequently soared to undreamed-of new heights. As domestic demands in India and China evolve, the world economy is performing better than during past U.S. downturns. Also of relevance is the fact that the U.S. (and the world) is ever less dependent on manufacturing.

In the worst recessions of the past 40 years, manufacturing accounted for 20-25% of U.S. employment. Today, it accounts for less than 10%. As the importance of manufacturing declines, so too does the magnitude of the economy's cyclical ups and downs.

Another important lesson from the past is that recessions end well before most observers realize they are over, and in the end, "our" troubles always seem worse than "their" problems back in the long forgotten days of yore. After all, many observers never experienced the 1973-75 or 1981-82 recessions. And most of those who did retain distorted memories. Add to this an unhealthy dose of Boomer narcissism ("What happens to me is always the most intense"), and you can grasp why people today think the Great Capital Strike is the worst ever. But it is not. It is not even close to the worst of the past 40 years.

History suggests that unless you think that the Great Capital Strike will yet evolve into a repeat of the Great Depression, it is a sucker's bet to bet against the U.S.

The Linneman Letter Look-Back: Betting Against the U.S. Economy

In the Winter 2002 edition of *The Linneman Letter*, we warned readers of betting against the U.S. economy, as the entire global economy was dependent on U.S. success.

"The U.S. economy has slowly begun to rebound. While much gloom remains, a solid recovery from a mild recession is underway. Manufacturing activity has bottomed and industrial production is growing again. Excess inventories have been burned off, and inventory-to-sale ratios are back on their historic trends. While U.S. employment growth is substantially below sustainable levels, the unemployment rate is only 6%. To put this in perspective, unemployment levels this low are not achieved in continental Europe during economic booms, much less during recessions. We forecast that the U.S. economy will add approximately 1.5 million jobs during the next 12 months. While less than the 1.7-1.9 million jobs which the U.S. economy is capable of adding on a sustained basis, this growth demonstrates the power of the American economic machine, as well as the danger of 'betting' against the U.S. economy over the long-term."

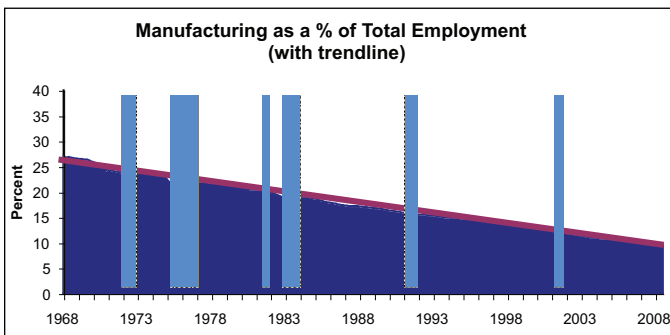


figure 18

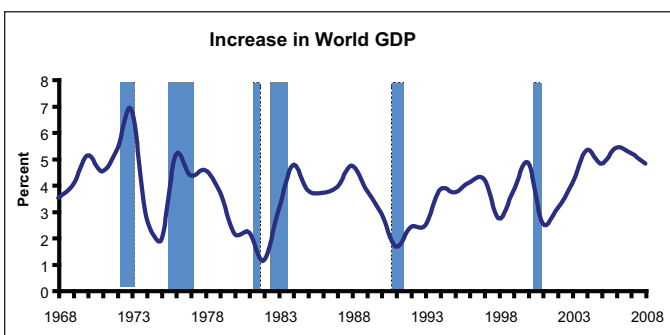


figure 19

economy. The U.S. is fueled by too much entrepreneurship and innovation to stay down for long. So stay liquid, be patient, and focus on long-term growth.

It's Amazing

The only thing more remarkable than how weak the U.S. economy is today is how resilient it is! The fact that the economy has yet to fall into recession, despite oil prices well in excess of \$100 per barrel, soaring food prices, and a year-long capital strike, is truly remarkable. This performance in the face of the confluence of continued

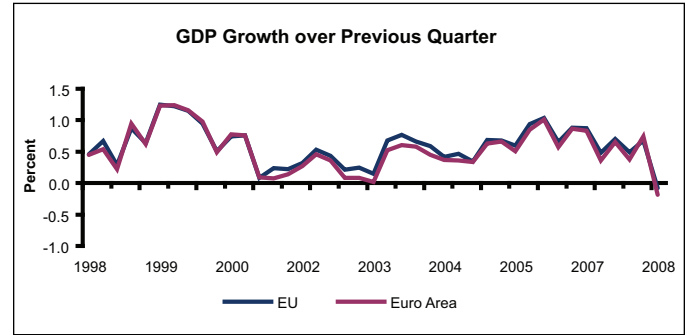


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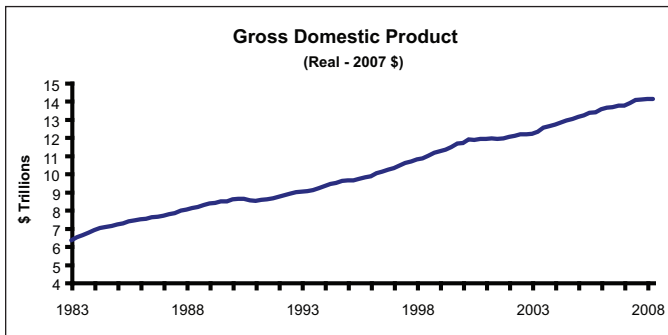


figure 20

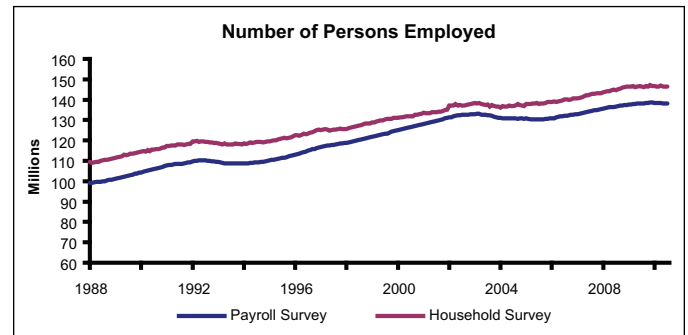


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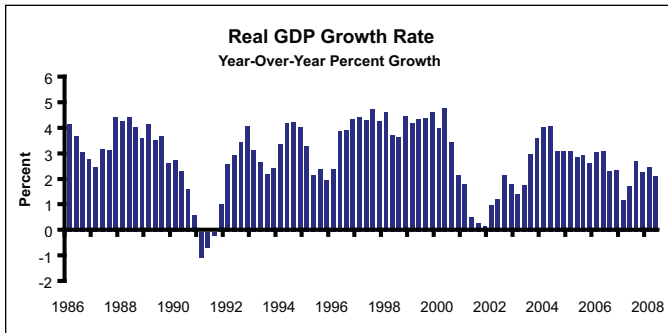


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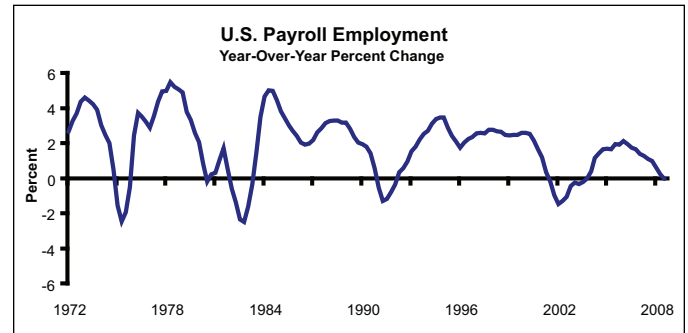


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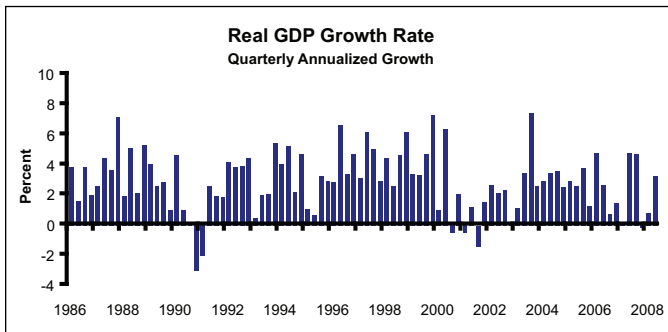


figure 22



figure 26

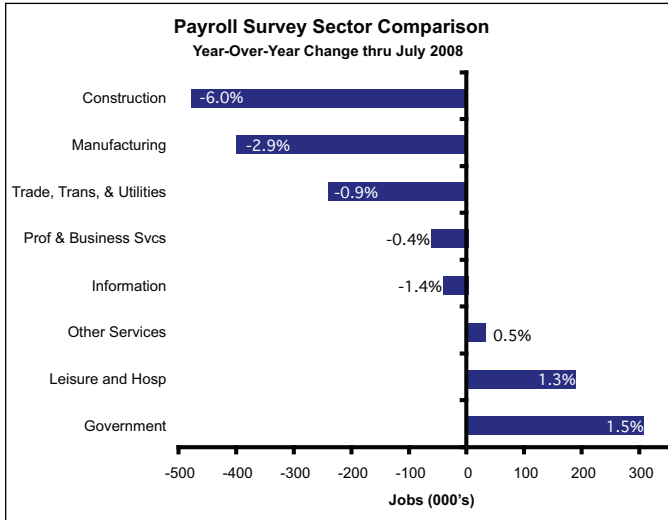


figure 30

care sectors continue to add jobs. Five of the MSAs we track added notably more than 1% to their employment bases on a year-over-year basis through July 2008, based on both the Payroll and Household surveys. Ask someone in Houston, Dallas, Austin, Charlotte, or D.C. about the recession, and they respond with a puzzled look. But 11 of the MSAs we track recorded negative job growth in both surveys.

On a year-over year basis through July 2008, the Employers' Survey indicates that U.S. employment decreased by 202,000 jobs (-0.15%), while the Household Survey indicates that 1.9 million jobs (0.8%) were added to the economy. The rosier outlook provided by the Household Survey reflects an increasing number of self-employed individuals and independent contractors, as larger payroll firms cut back on overhead. In addition, the unemployment rate continues its upward drift, standing at 6.1% as of August, versus 4.7% a year ago. And

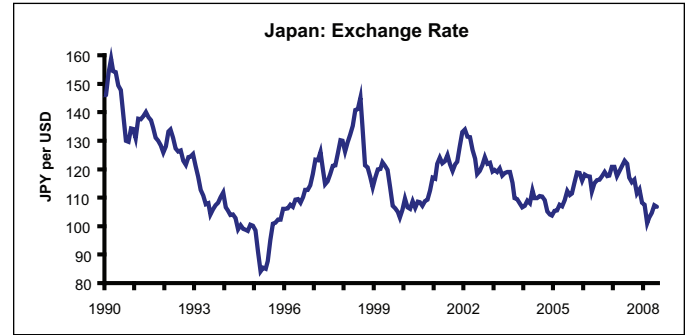


figure 32



figure 33

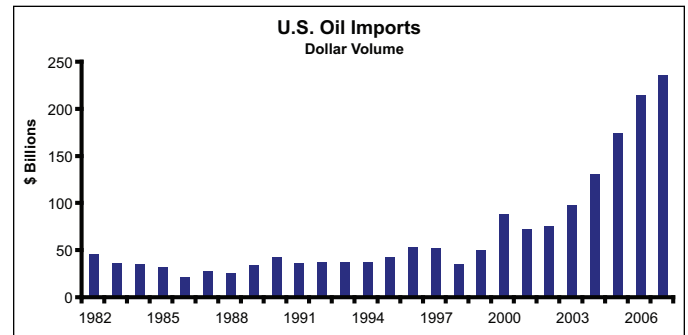


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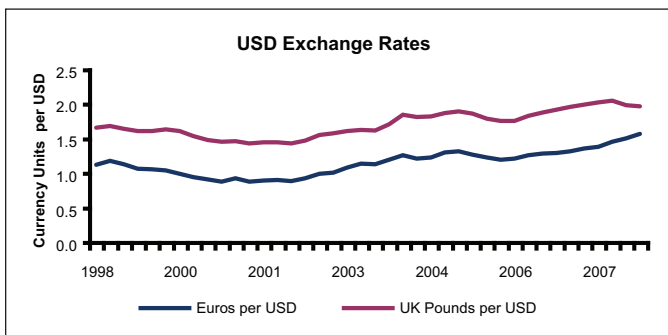


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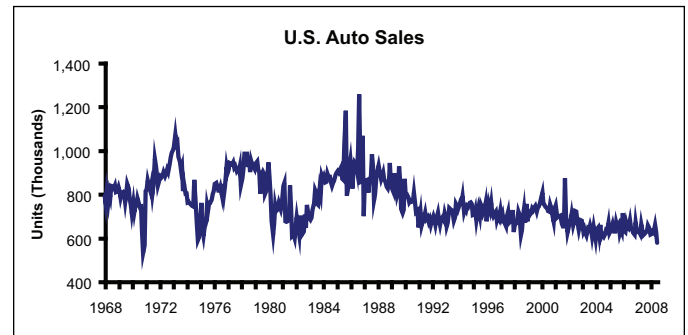


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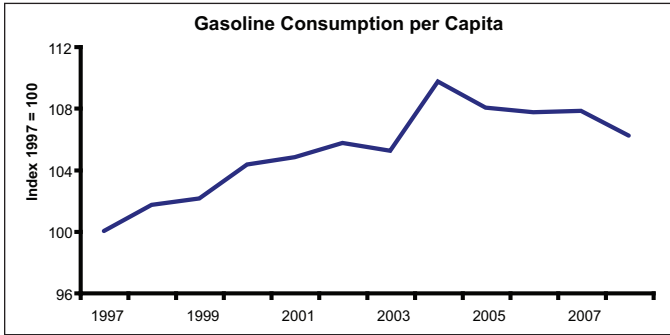


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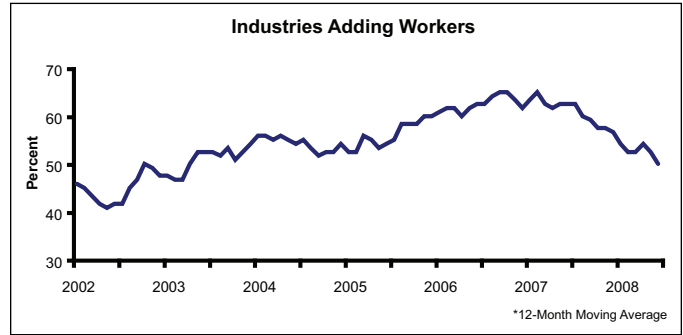


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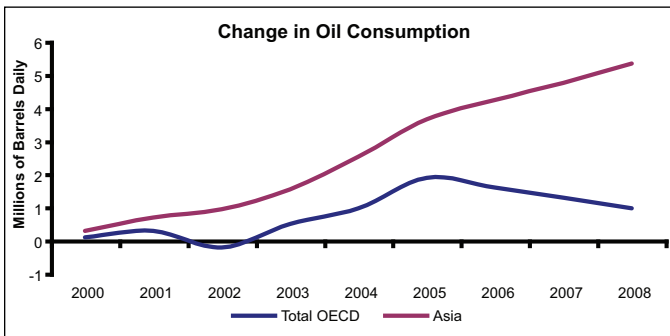


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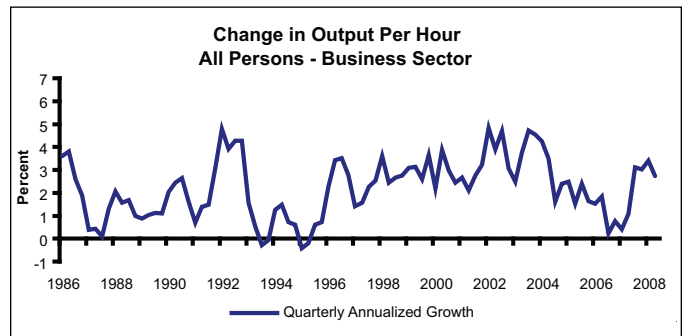


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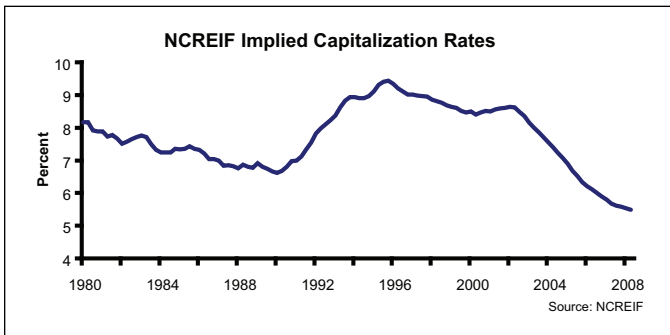


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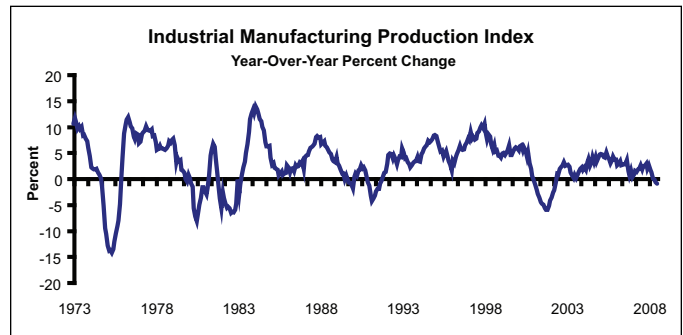


figure 41

unemployment claims have risen to in excess of 4.95 million for the first quarter of 2008, a threshold which, if sustained, is normally associated with a recession.

Charlotte and the Texan trifecta of Houston, Dallas/Ft. Worth, and Austin are far outpacing the rest of the nation. A handful of “solid” markets such as Seattle, Boston, and Raleigh/Durham exhibited greater than 1% growth in at least one survey, and positive growth in the other. But it is not pretty overall, with about 30% of the markets falling into the “weak” category (one survey showing negative growth and the other indicating positive

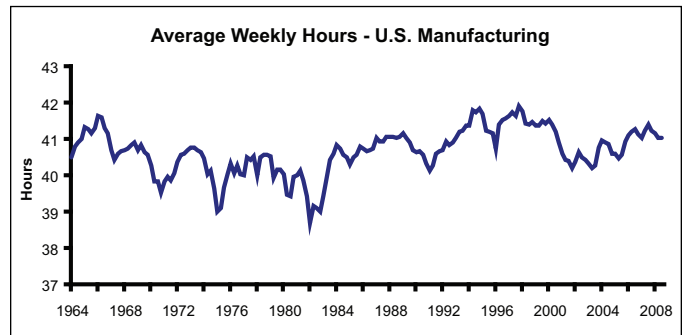


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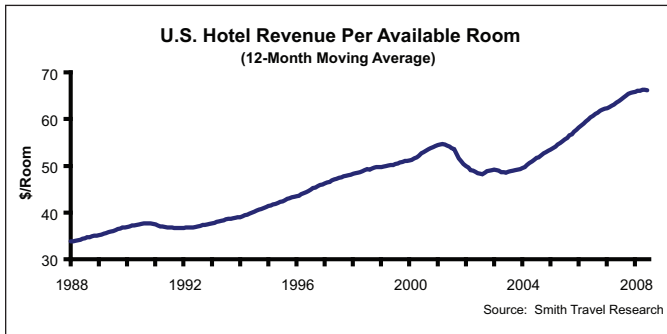


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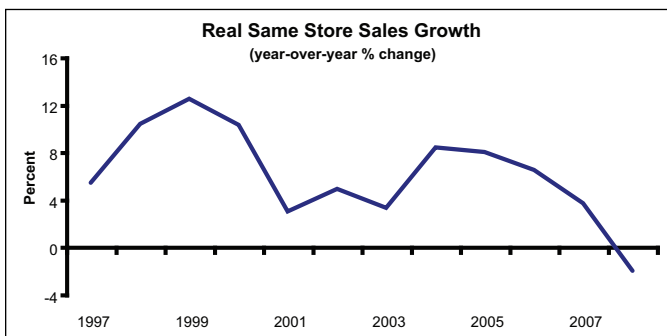


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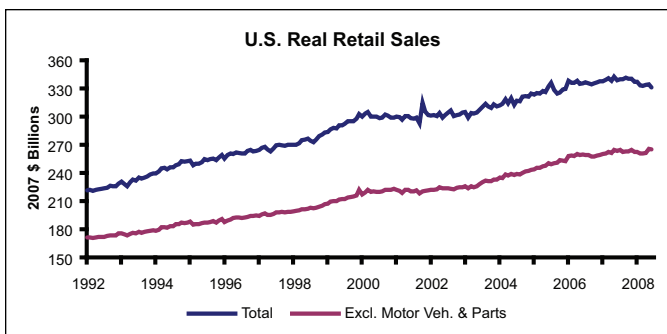


figure 45

year-over-year growth). And our “disaster” category includes markets like Detroit, Orange County, and San Bernardino. These MSAs registered negative annual job growth through July 2008 in both surveys. Under the “questionable” category, Nashville registered growth of 0.6% in the Payroll Survey, but -1.3% in the Household Survey. Conversely, Las Vegas, Atlanta, and Phoenix posted over 0.5% year-over-year growth based on the Household Survey, but less than -0.2 in the Payroll Survey.

Examining the Payroll Survey on a sectoral basis, construction jobs declined by nearly 500,000 over the 12 months through July 2008 (-6.0%). The manufacturing

sector lost more than 400,000 jobs (-2.9%) over the same period. In contrast, the government sector added just over 300,000 jobs (1.5%), and the leisure and hospitality sector gained about 185,000 jobs (1.3%) over the last 12 months through July.

Despite mixed employment trends, watching the flurry of retail activity on New York’s Fifth Avenue suggests a booming economy, as foreigners flock to shop with their massively over-valued currencies. Real exports, also benefitting from an excessively debased dollar, are rising at nearly 10%. But a visit to auto dealers across America reveals overflowing lots filled with unsold SUVs, as auto sales have plunged by 5.6% over the past year. July 2008 auto sales dropped by nearly 34,000 cars as compared to July 2007, and the only autos which are selling are lower-priced, smaller vehicles. As a result, real personal consumption expenditures on autos have fallen by nearly 10%.

The economy’s diffused signals are further underscored by the fact that 50% of all industries continue to add jobs, and productivity continues to grow in excess of 3%. Hotel revenue per available room (RevPAR) is rising in most markets, though advance bookings for

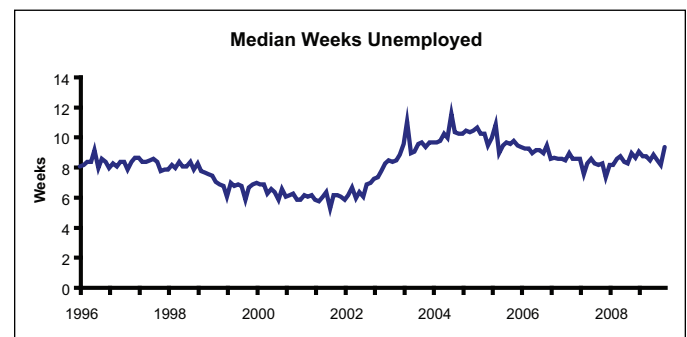


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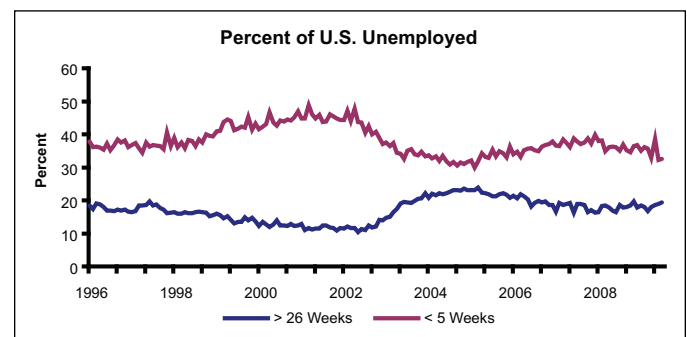


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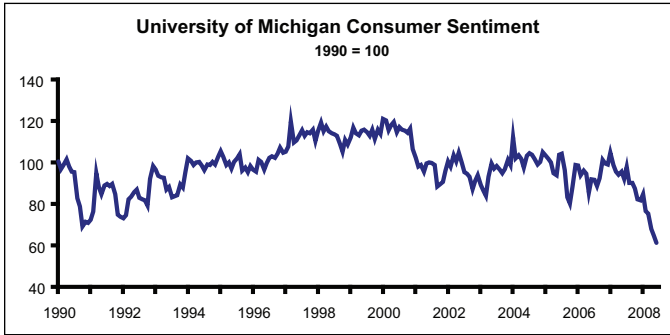


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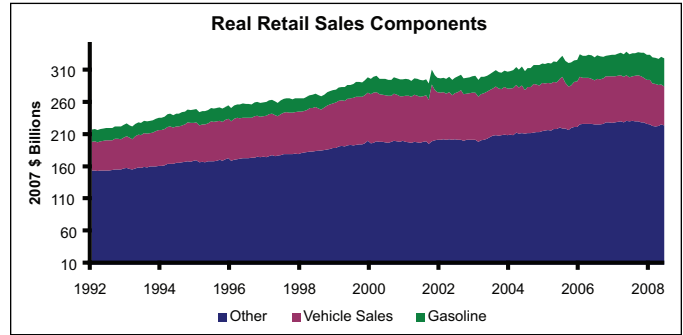


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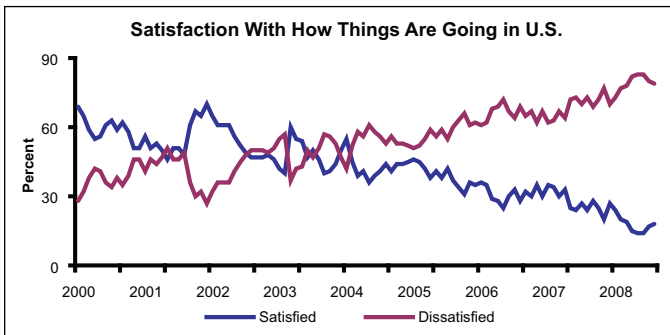


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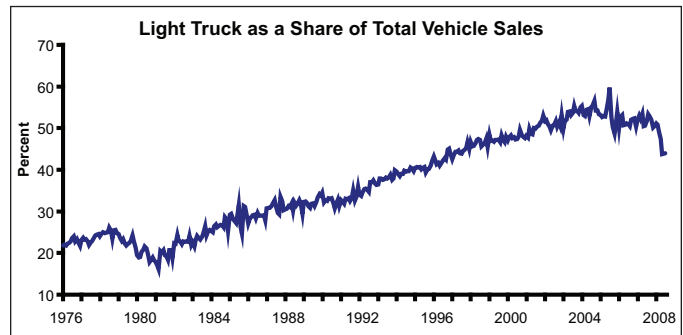


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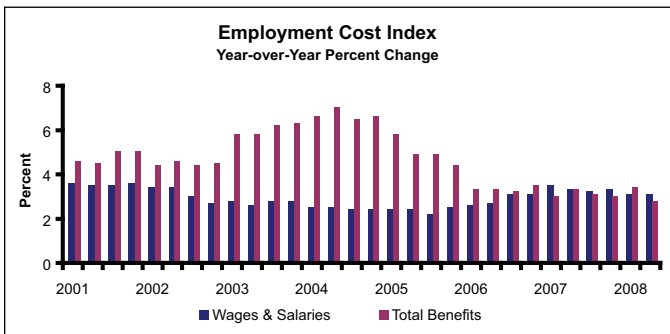


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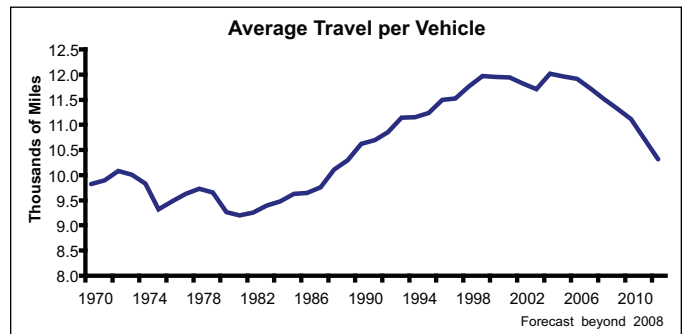


figure 53

next year are off substantially. Retail sales are down by 2% on a year-over-year basis through June. Same store sales by mall specialty stores and anchors are down roughly 4% over the past year. In other words, for every ray of sunshine on the horizon, there is a dark storm cloud.

Not surprisingly, the substantial increase in the minimum wage has increased the unemployment rate, particularly among 16-19-year-olds. As is always the case, the unemployment rate for this group jumped by 220 basis points from the previous month in July when the minimum wage rate increase took effect, with the brunt of this increase falling on the least-skilled minority and



figure 54

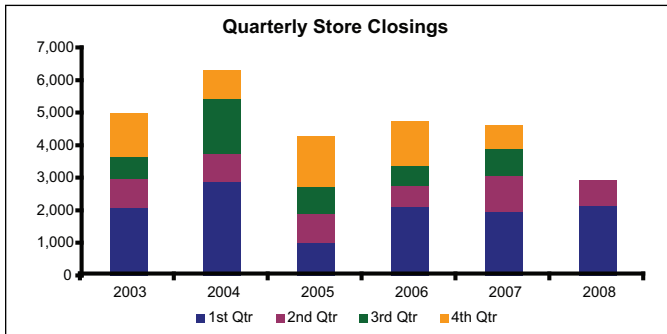


figure 55

economically disadvantaged workers. These France-like youth unemployment rates are unacceptable, and show the inevitable impact of establishing high mandatory wages for the least skilled. While you utilize your connections to help your children keep their jobs at higher minimum wages, America's "unconnected" youth lose employment opportunities and valuable working experience.

The average (and median) unemployment duration remains flat, even as the percent unemployed more than 26 weeks (largely youth) has risen to 19.1%, while the

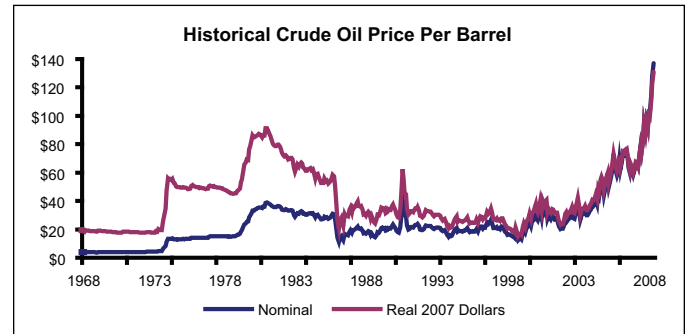


figure 58

percent unemployed fewer than five weeks has fallen to 32.2% of the unemployed. But all of this is occurring even as real wages are rising by 3.2% over the 12-month period ending in June, benefits are increasing by 2.9%, and total real compensation is rising by 3%. These are complex economic currents indeed.

These conflicting economic patterns have undermined consumer confidence, which stands at its lowest level in the past 40 years. Every day, consumers are told by politicians and the media that the world is coming to an end (unless some politician comes to their rescue) and that new jobs are scarce. And filling their beloved SUV gas tanks becomes ever dearer. It is no wonder their confidence is low. As we have previously noted, consumer dollars are not flowing to more gasoline expenditures, as real personal consumption expenditures on gasoline are down 10% over the past year, auto miles are down, and public transit ridership is up.

And while headlines highlight the fact that retailers are closing stores through the first six months of 2008, store closings are at the same level as in the previous two years. The problem is less an increase in store closings, as weak retailers invariably go dark, than the slowed rate of store openings. Reduced store openings reflect the fact that even strong retailers are husbanding their capital, lest a prolonged Great Capital Strike catch them with an overextended balance sheet.

The BLS commodity index has been increasing since January 2007, but reversed course in August 2008. As we wrote in the Spring of 2007, commodity prices are way out of line. Since June 2007, they have risen by 15.5%, with gold increasing by 38% (Sept 24th price of \$900.00) and silver increasing by 6.4% (Sept 24th price of \$13.30). In contrast, oil prices have declined slightly (down 7%) while platinum prices have declined significantly (down

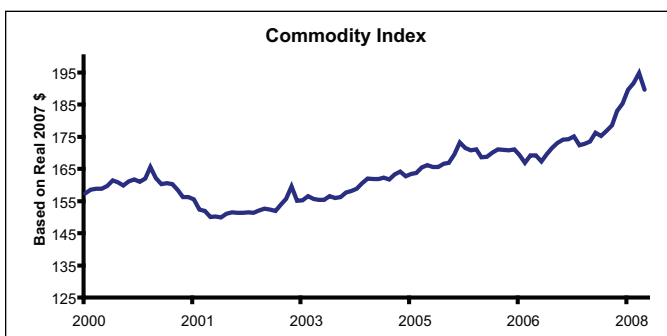


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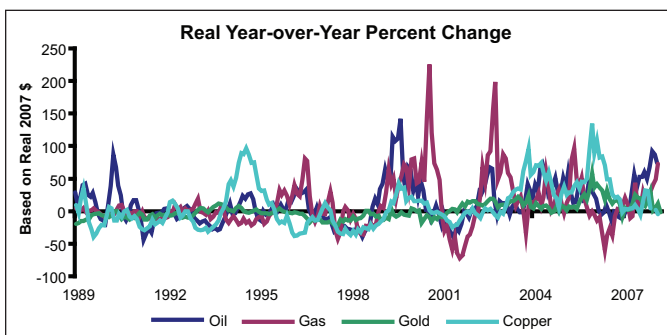


figure 57

The Linneman Letter Look-Back: **Commodity Prices**

In the Spring 2007 issue of *The Linneman Letter*, we pointed out that commodity prices were too high, and said that excess supply would lead to falling prices:

“Today, ‘it’ is oil, but in the past ‘it’ has been coal, kerosene, timber, land, iron ore, gold, tin, corn, wheat, sugar, and water. And yet an apocalypse has never occurred, and we have never run out of any of these commodities. Somehow, in spite of ceaseless demand growth, new supply and alternative products ‘magically’ appear to save us from disaster. Of course, the ‘magic’ is simple: markets work. As demand grows relative to supply, the price of the endangered commodity is pushed upwards. Markets respond by:

- finding alternative ways to fulfill the tasks done with the product;
- reducing demand;
- developing more efficient usage technologies;
- increasing exploration for supply sources; and
- making previously marginal supply sources profitable.

These market forces accelerate as prices rise, and before long, the excess demand becomes an excess supply, causing prices to decline, and the cycle begins again.”

41%) since June 2008. This suggests that some commodity prices may finally be reverting to comprehensible levels. We expect additional commodity declines as global growth slows.

It is sad that we have yet to permit shelf oil exploration in U.S. territory, even as we pressure foreign countries to increase their oil production (including in equally environmentally sensitive habitats) in order to reduce our gasoline prices. It is wrong for us to expect from others what we are not willing to do for ourselves. While the argument that it will take years before such new oil supply is brought online is true, it is like saying that there is no need to stop smoking today because it will be many years until you get lung cancer. Expanding supply is the ultimate solution to high oil prices, so let’s get started.

The Basics of Inflation. Five years ago, we wrote that the Fed’s (and the media’s) obsession with deflation was wrong, and led to one of the great monetary policy

errors of the past century. At that time, measured inflation was being temporarily reduced by declining goods prices resulting from excess goods supply. It was clear to us that this was not a sustained deflationary phenomena, as the prices of the majority of things we consume (services and housing) continued to rise even as goods prices were plunging. The Fed’s reduction of interest rates could not reduce the excess supply of goods, and merely injected needless excess liquidity into the system. Sure enough, as economic growth and obsolescence eliminated excess goods capacity, the supposed deflationary demon magically disappeared, and we were left with an inflationary spike.

*While the argument
that it will take years before
such new oil supply
is brought online is true,
it is like saying that
there is no need to stop
smoking today because it will
be many years until you
get lung cancer.*

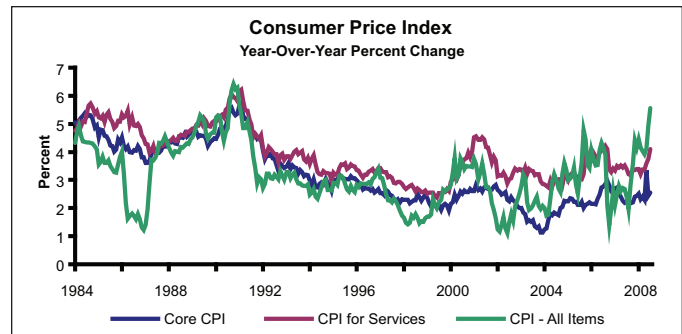


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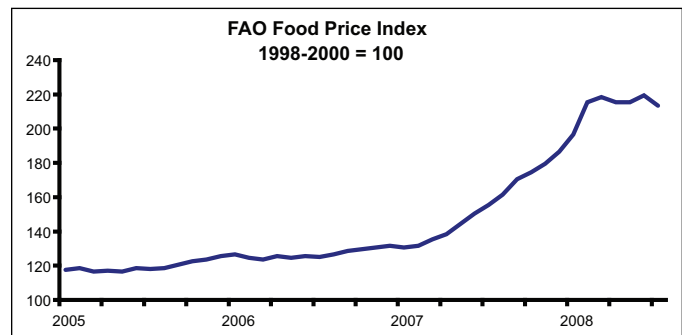


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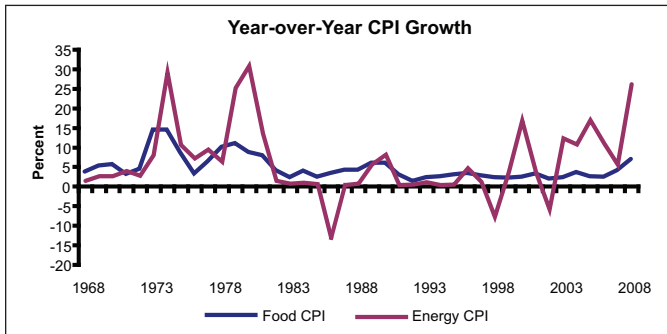


figure 61

Today, the Fed risks mistaking food and energy price increases created by excess demand for widespread inflation. Inflation on all items except food and energy remained muted at 2.6% as of August 2008. However, year-over-year energy prices (about 9.5% of the CPI consumption basket) rose through August by 27.4%, while food prices (13.8% of the CPI consumption basket) rose by 6.1% during the same period. As a result, the overall year-over-year increase in prices was 5.4%. Within the CPI food basket, price increases spanned a large range, including a 5% annual increase for meats and 40% for rice through August. Within the energy basket, fuel experienced an annual increase of 35.9%. Inflation in service prices, our preferred metric, rose 4.0% (versus a

4-year average of 3.4%), suggesting that base inflation is under control, with an upward bias. Housing costs are rising slowly for most renters, and falling for most first-time buyers.

Select food prices have soared as a result of legislation which bribes farmers to grow corn for ethanol for the green god. The reduced supply of

crops available for humans and livestock has caused food prices to spike. Subsequent stockpiling by governments around the globe has artificially created booming demand in the face of reduced supply. Nothing the Fed does in terms of interest rates will change crop acreage, which is the primary source of food price increases. Interest rate increases will only needlessly reduce liquidity in an environment where liquidity is already severely limited.

Select food prices have soared as a result of legislation which bribes farmers to grow corn for ethanol for the green god.

The source of high (though falling) energy prices is more difficult to pinpoint, as we have been baffled by oil prices relative to supply-demand fundamentals for several years. But it is clear that higher interest rates will have little impact on oil supply.

Late in the third quarter of 2008, both oil and food prices have fallen sharply and contain deflationary biases at this point. If core inflation continues at 2.6%, and food and energy prices remained flat at their current high levels, the overall rise in CPI would be just under 2.0%. And if food and energy prices were to fall by 10%, which would leave both at bone-jarringly high levels, the total change in CPI would be -0.4%. And if they fell by 20%, CPI change would be -2.7%, which would probably, once again, trigger (needless) deflationary concerns at the Fed.

Every careful study of changes in the CPI versus the change in the consumer's cost of living concludes that CPI changes overstate cost of living increases by roughly 1% annually. This overstatement is due to the inability to adjust completely for product and service quality improvements, as well as the fact that consumers adjust their consumption patterns in the face of price increases. After all, isn't your new iPod massively cheaper per song? And how can one adjust for the fact that modern hip and knee replacements are infinitely more effective? Or that new AIDS drugs allow victims to live a healthy life rather than die? No matter how hard the bean counters try to resolve such dilemmas (and they try very hard to do so), many price increases which are due to quality improvements are inappropriately attributed to inflation.

Every careful study of changes in the CPI versus the change in the consumer's cost of living concludes that CPI changes overstate cost of living increases by roughly 1% annually.

Turning to the consumer substitution bias, the recent increases in food and gasoline prices underscore this source of overstatement. When food prices rise, the CPI is calculated as if consumers ignored the increased food prices. But savvy consumers stop purchasing Cheerios and switch to lower-priced generic Cheery-Ohs. While the prices of both may have risen by 30%, by switching from name brands to generics, consumers increase their

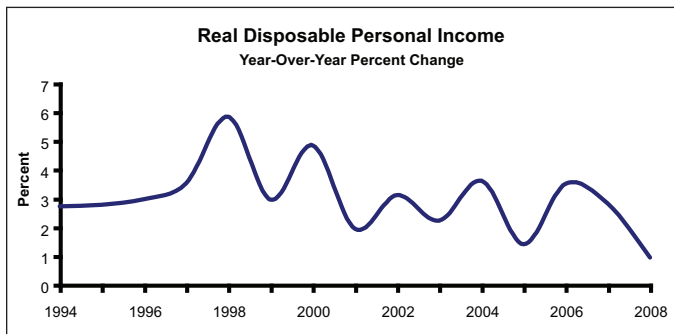


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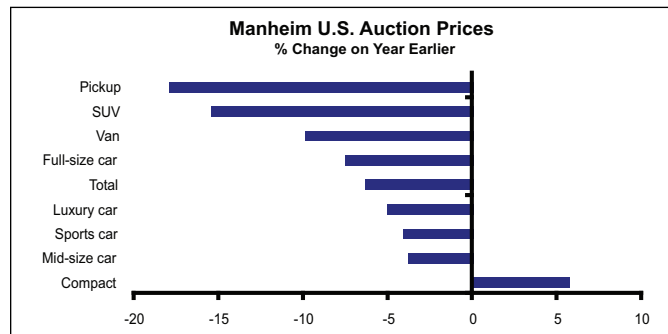


figure 63

expenditures on food by far less than 30%. And instead of buying bottled water, many consumers simply drink tap water, suffering little erosion in their living standard as a result of increases in the price of bottled water.

It is important to understand that the measured increases in food prices most accurately reflect the reduction in living standards of the world's poorest. If one's diet consists solely of subsistence amounts of corn and bread, no margin of substitution remains except starvation. The high priests of the green god have enacted legislation which takes food from the mouths of the globe's poorest residents (few of whom are U.S. residents) and diverts it to the production of "green" fuel for the world's relatively rich auto drivers. It is a disgraceful policy which subsidizes farmers (almost all of whom are well above average income) while condemning many poor children to malnutrition and death. This sacrifice is reminiscent of the way some ancient societies sacrificed children so that their gods would send them rain. Both good economics and ethics require the repeal of ethanol subsidies before more innocents are starved.

The ability of consumers to reduce the impact of rising prices is also visible in the case of soaring gasoline prices. In spite of gasoline price increases far in excess of other price increases, real personal consumption expenditures on gasoline and related products are slightly lower. How? Consider the case of a middle-class U.S. family who owns a two-year-old gas-guzzling SUV outfitted with a stereo CD player, air conditioning, satellite radio, cup holders for all, and a DVD player (so the kids can watch their favorite movie for the 300th time while wearing earphones as Mom or Dad drives). They also own a three-year-old Toyota sedan which has double the fuel efficiency of the beloved SUV, and has all of the amenities of the SUV, except rear cup holders and

the DVD player. If they use the SUV (as they have done in the past) for this year's 1,000-mile family vacation, it will cost about \$125 more than a year ago. Faced with this cost increase, some families will still take the SUV, but pack sandwiches for the trip, or eat at McDonald's rather than at Olive Garden, in order to offset the extra \$125 in fuel costs. But even more will take the Toyota instead of the SUV, requiring their kids to listen to their iPods or use their laptops to watch movies (in either case, they will not remove their earphones during the trip), and they will have to hold their cups like the pioneers of old. If they use the Toyota, fuel expenditures for the trip will be the same as in the previous year even though fuel prices have doubled. And the Toyota drivers can still dine at Olive Garden. In either case, consumer substitution allows the same vacation to be taken, at the same total cost, with far less erosion in life quality than is suggested by the increase in gasoline prices.

Another example of consumer substitution in the face of rising gasoline prices is the increase in mass transit usage. In the first quarter of 2008, 88 million more mass transit boardings occurred, including a 10% increase in light rail, and a nearly 6% increase in commuter rail. While these will level off as people

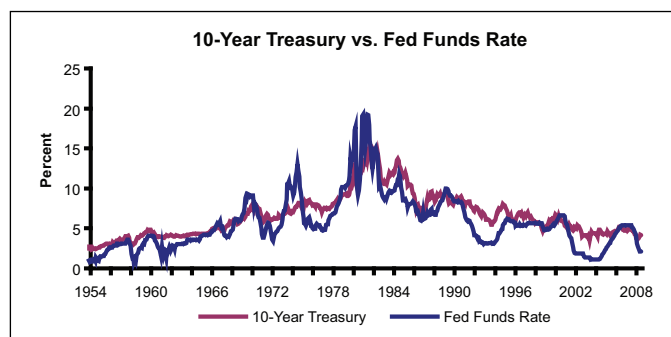


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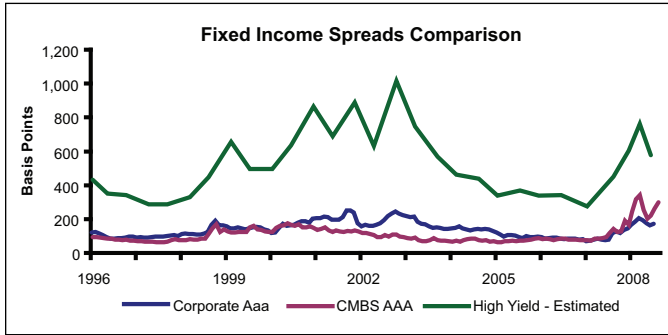


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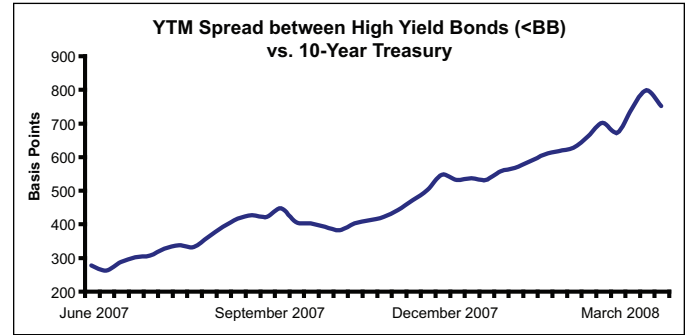


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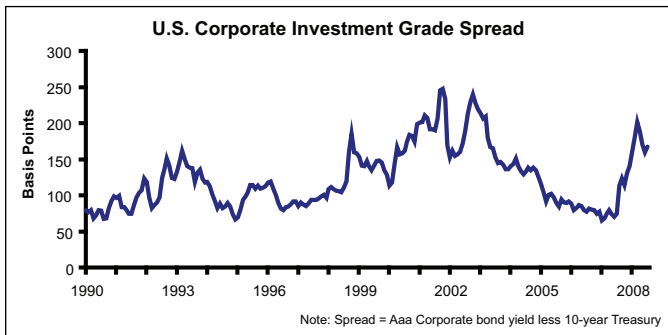


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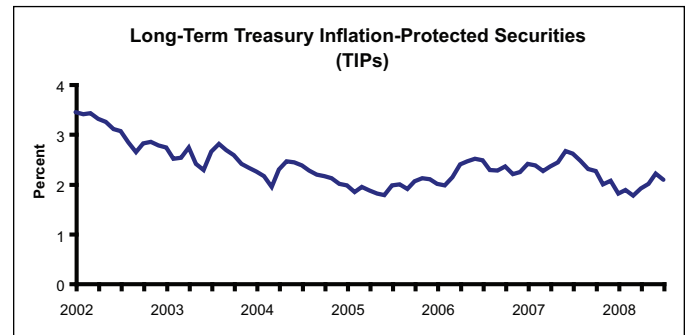


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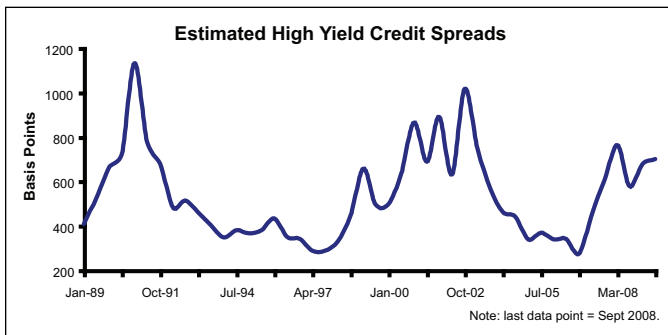


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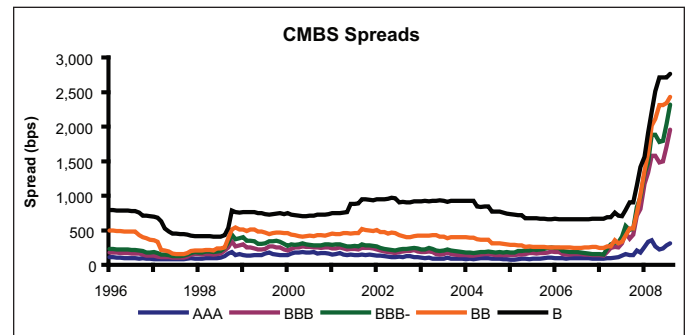


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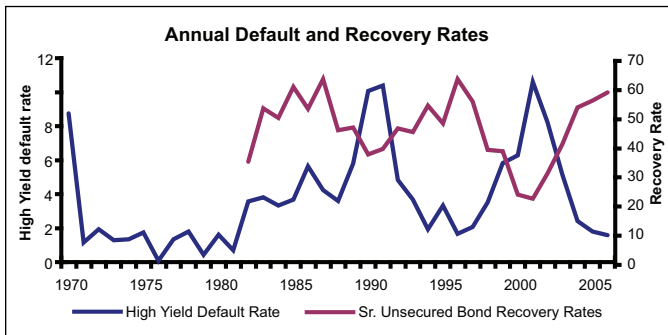


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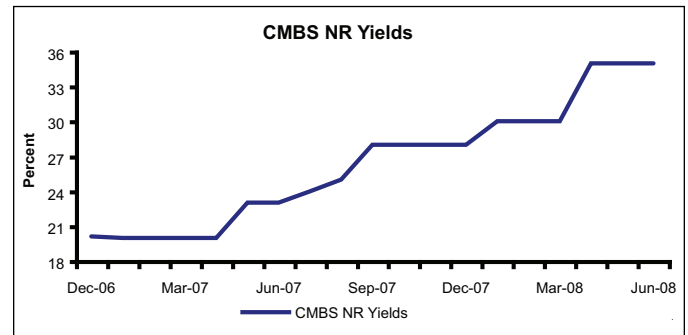


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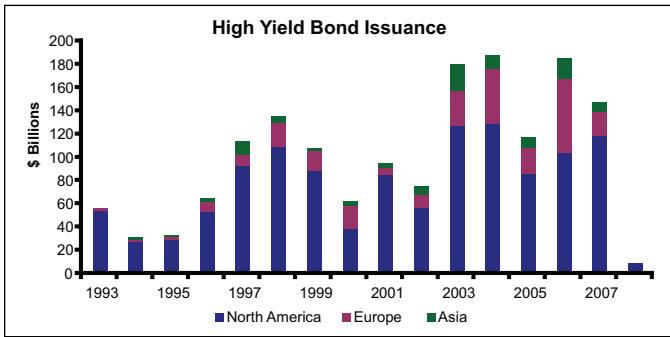


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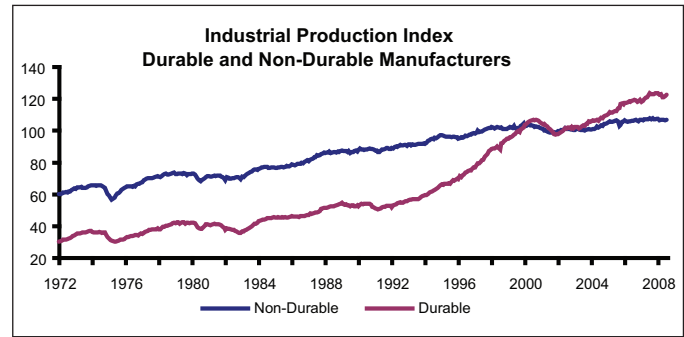


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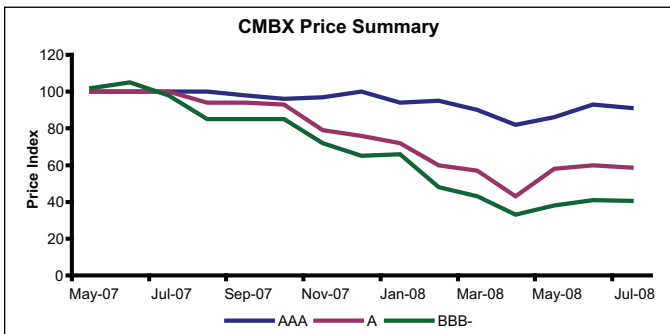


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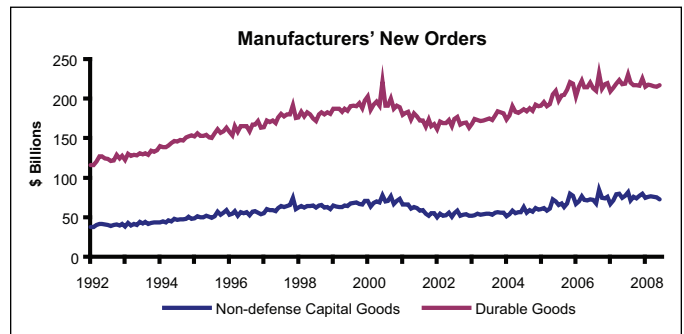


figure 76

substitute more efficient autos, they demonstrate the fact that CPI increases overstate quality of life erosion due to consumer substitution.

These examples are not intended to suggest that rising consumer prices do not erode purchasing power. Rather, they underscore why careful study of the question finds that the true erosion of consumer purchasing power is roughly 1% less per year than the measured increase in consumer prices.

It is noteworthy that businesses and governments generally substitute far less in the presence of price increases. For example, the garbage truck has to roll every day, and the police car probably should continue its patrol in spite of higher gasoline prices. And fighter pilots must get adequate air time to be prepared when duty calls. As a result, in the U.S., the increased real expenditures caused by higher fuel prices are almost entirely attributable to higher business and government expenditures. We continue to believe that the best Fed policy today would be to:

- reduce rates to 1%;
- simultaneously announce the intention to raise rates to 4% and to restore normal Fed loan collateral standards in nine months;

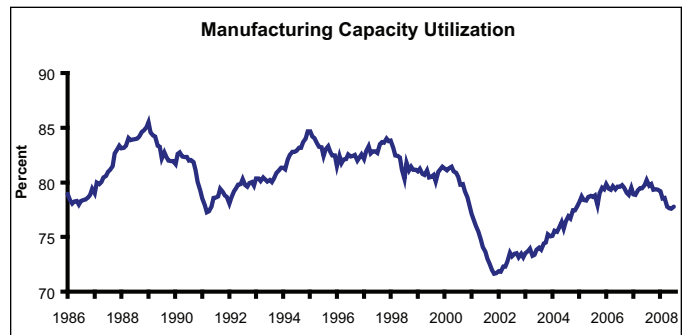


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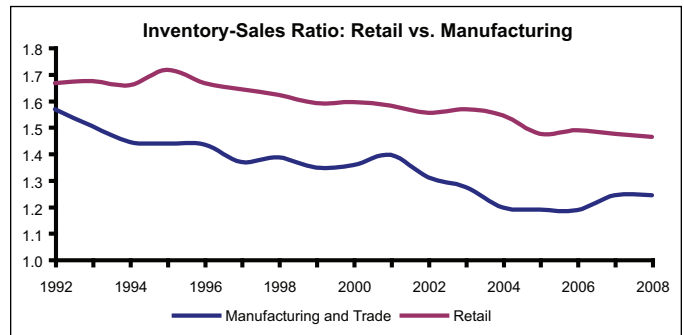


figure 78

- stop releasing Fed minutes;
- agree that no Fed member will publicly comment on monetary policy except as compelled by Congress.

This course of action would provide near-term liquidity, while telling financial institutions to expeditiously get their houses in order. It would also restore the propriety of a single policy “voice” of the Fed. Unfortunately, we suspect that the Fed will take none of these steps, and are fearful that they will raise rates to stem an accelerating economy-wide inflation which does not exist.

Interest Rates. Interest rates remain higher than appropriate in the face of controlled inflation and the illiquidity of the Great Capital Strike. Meanwhile, 10-year Treasury rates have drifted back to about 3.8%, well below the target 4.7-5.0% range. This indicates that the Great Capital Strike is not over, as investors continue to overpay substantially for the transparency of Treasuries.

This perspective is confirmed by the fact that bond spreads on high-grade corporate debt, high-yield bonds, residential mortgage securities, and CMBS are all at or near historic highs, despite the fact that underlying defaults remain low. AAA CMBS spreads, which over the previous decade were typically 30-60 basis points, were

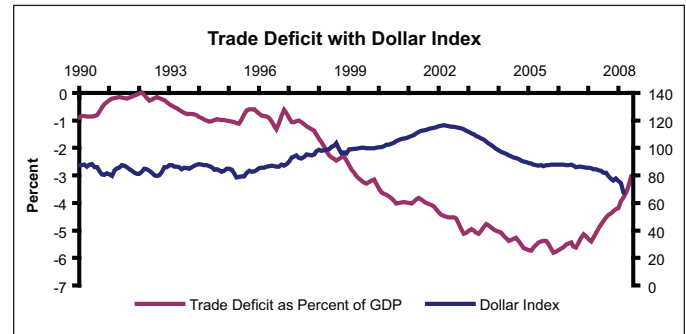


figure 81

The Linneman Letter Look-Back: U.S. Trade Deficit

In the Winter 2003 issue of *The Linneman Letter*, we discussed China’s role in contributing to the U.S. trade deficit and stated how a declining deficit would be a bad for the U.S. economy.

“The U.S. trade deficit continues at historic highs (as a percent of GDP). This reflects the increased desire of newly wealthy foreigners in developing countries, such as Russia, India, and China to diversify their investments into the U.S. in order to protect their wealth from the vagaries of their political and economic systems. To invest in the U.S., they must sell more to us than they buy from us; namely, we must run a trade deficit. China has been a large purchaser of our assets, particularly government bonds. But this is no surprise. If you were a newly wealthy Chinese entrepreneur, you too would seek to invest your wealth outside of China...”

If China is willing to subsidize the American consumers by maintaining their currency at artificially low levels in an attempt to assure their domestic political stability, we should gladly accept the subsidies...

It is disgraceful that President Bush supported steel tariffs, with only a sliver of respectability restored when he subsequently reversed his ruling. U.S. protectionism serves no economic purpose, and dampens long-term economic growth. More disturbingly, it raises the possibility of a trade war, which would be disastrous for our economic growth.”

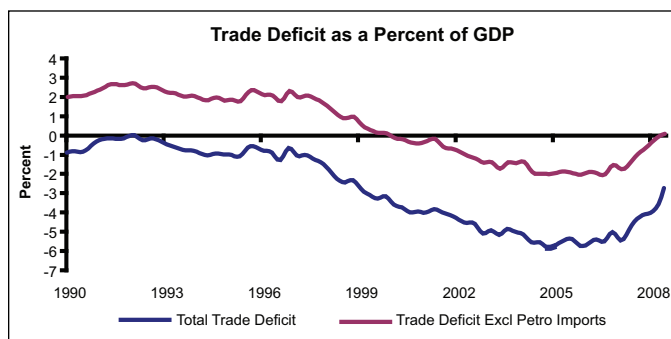


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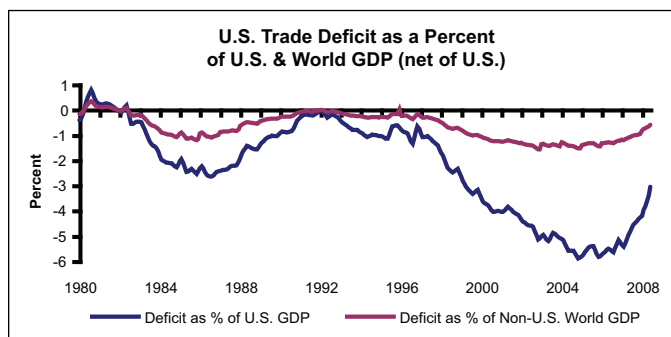


figure 80

back to 300 basis points in August, after falling to roughly 200 basis points in May. Investment-grade corporate debt spreads were 200 basis points in January, and hit 300 basis points in early March before retreating to 250 basis points. They stood at 166 basis points in July.

...a decline in the U.S. trade deficit is bad for the U.S.

U.S. industrial output has been flat over the past nine months, despite a 10% increase in exports, indicating that manufacturing activity for domestic consumption is taking a beating. Capacity utilization peaked, and subsequently declined by 100 basis points. The decline in industrial output is concentrated in durable goods, where output has fallen by 5%, with non-durables remaining flat. The durables decline is concentrated in the auto sector and related sectors. The good news is that with the exception of autos, inventory levels remain relatively low via excellent inventory management efforts.

Trade Deficit. Are you happy now that the U.S. trade deficit is falling? Our trade deficit continues to decline as a percent of U.S. GDP, and more importantly, as a percent of the rest of the world's GDP. This decline reflects the eroding confidence of foreign investors in the liquidity and transparency of U.S. capital markets. Thus, a decline in the U.S. trade deficit is bad for the U.S. In fact, after netting out oil-related imports, the U.S. basically has a zero trade deficit.

The erosion of our capital markets not only makes their asset markets appear less odious, but also increases the comparative attractiveness of other developed asset markets.

economies but immature capital markets desire the safety, depth, transparency, and legitimacy of our asset markets. This would be the case even if every good and service made in the U.S. were superior to those found in other countries, as our asset markets are even more superior, particularly to asset markets found in the rapidly growing

economies of the Middle East, Brazil, Russia, India, and China. As these economies grow, a natural investment surplus is generated in the U.S., due to our comparative asset market strength.

It is not a coincidence that as the Great Capital Strike has shown our capital markets to be less transparent, honest, efficient, and liquid than advertised, our trade deficit and exchange rates have eroded. After all, foreigners can invest in dishonest, opaque, and illiquid assets at home; so they do not need to do that in the U.S.

As these economies grow, a natural investment surplus is generated in the U.S., due to our comparative asset market strength.

We monitor our trade deficit as a percent of "their" income (world GDP excluding U.S. GDP), as it is their desire to invest in U.S. assets that drives our trade surplus. This ratio exploded after the collapse of the Soviet Empire. As communism was replaced by income growth and wealth creation that far outpaced the evolution of local capital markets, their desire to invest in the U.S. rose as a percent of their income. However, as these

The trade deficit is of little importance to the U.S. economy. Putting aside measurement errors, it simply indicates that foreigners would rather invest here than consume here. But it is hardly surprising that countries with rapidly growing

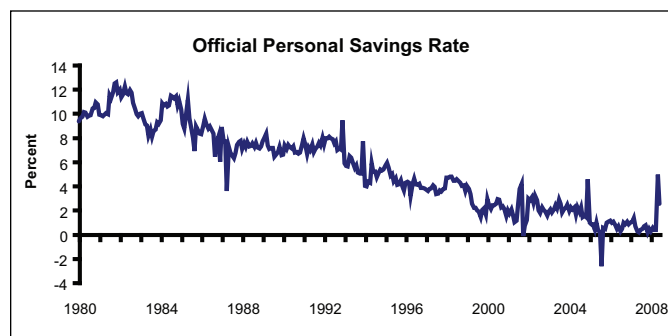


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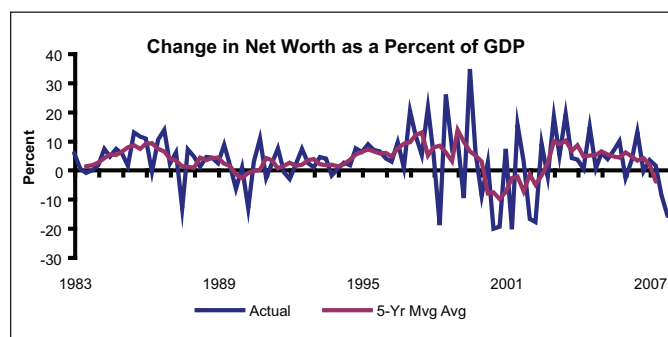


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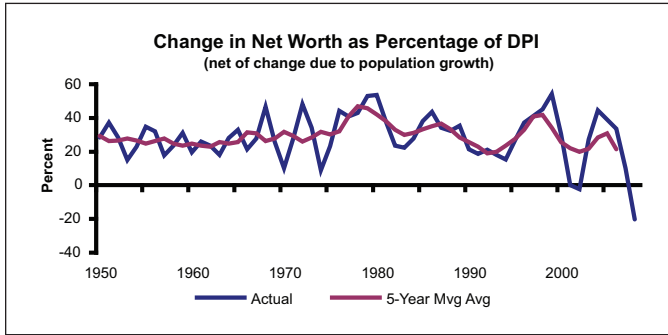


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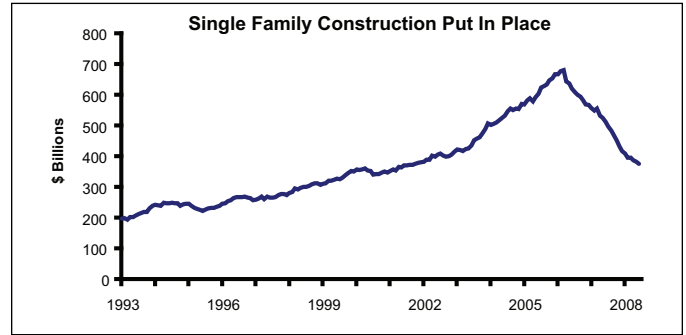


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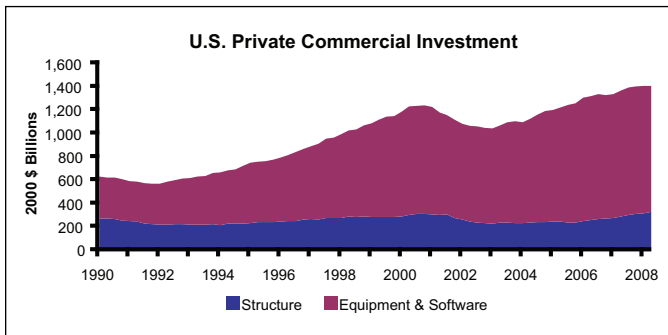


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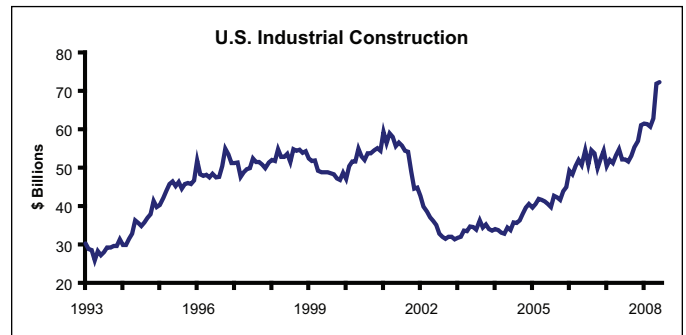


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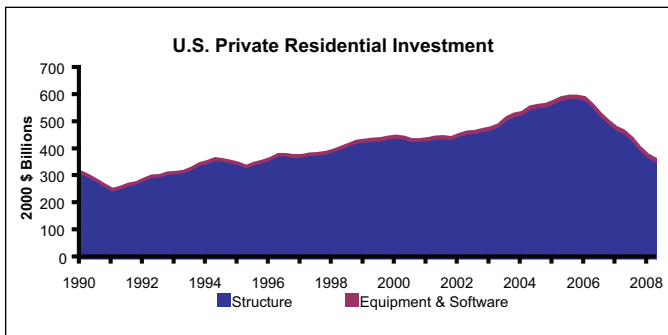


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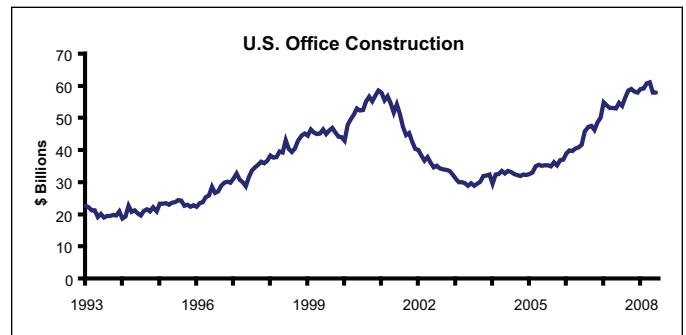


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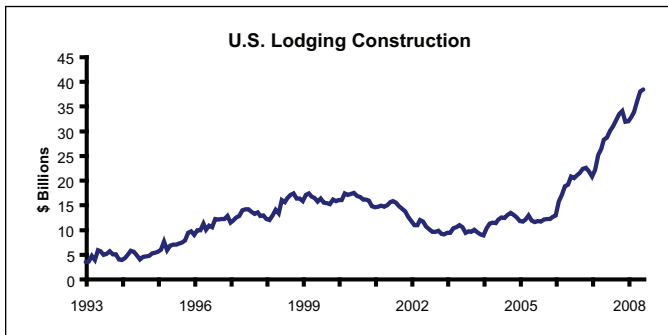


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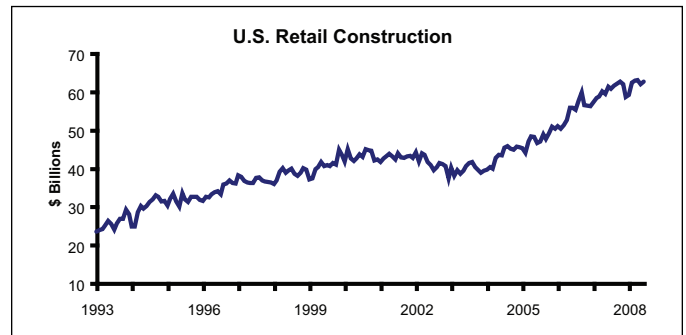


figure 91

economies have slowly added “safe” assets to their systems, primarily in the form of (seemingly) safe homeownership tenure, their demand to invest in safe U.S. assets has slowed. The ratio peaked at 1.4% in 2002, and has since fallen by 61 basis points. It has fallen by about 25 basis points since the onset of the Great Capital Strike in August 2007. This decline reflects both safer assets (mostly homes) back at home for them, as well as a realization of the limitations of our asset markets. The erosion of our capital markets not only makes their asset markets appear less odious, but also increases the comparative attractiveness of other developed asset markets. This is a loss for U.S. citizens, just as surely as if U.S. goods were shown to have widespread defects.

How exactly do we benefit from our trade deficit? Simple: in exchange for us selling them “safe” assets, they sell us cheap TVs and clothing which enhance our standard of living. In addition, their capital inflows allow us to divert our capital to higher-returning entrepreneurial investments. Thus, while we comfortably save a smaller share of our income than they do (a luxury afforded only to the world’s richest), our savings generate significantly

higher returns. Plus our entrepreneurial ventures generate jobs, income, wealth, and more assets. It is simply comparative advantage and free trade at work.

Can this process go on forever? It can as long as foreign economies continue to grow and we maintain our asset market superiority. It is no different from Germany and Japan maintaining trade surpluses as long as their autos are globally superior. However, if the superiority of our asset markets is eroded, our trade deficit and economic position will also erode. You would not be surprised if Germany and Japan experienced economic difficulties as

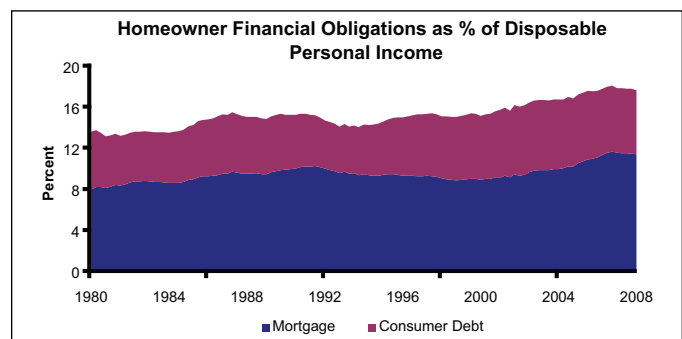


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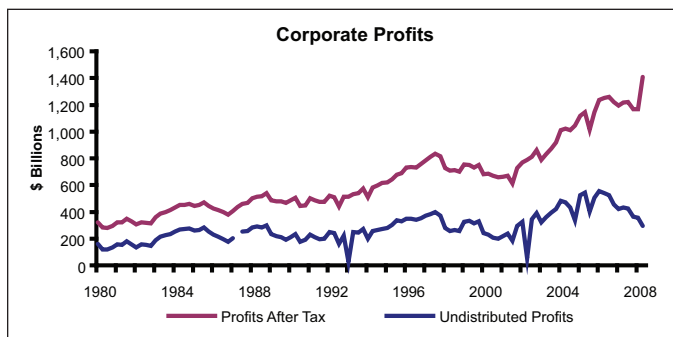


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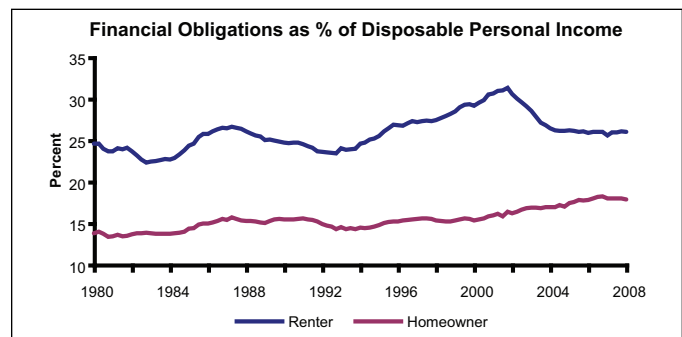


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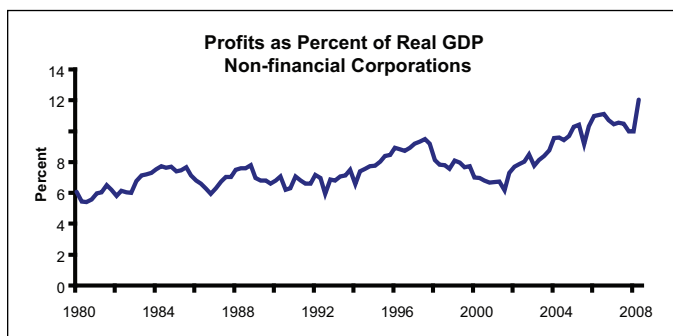


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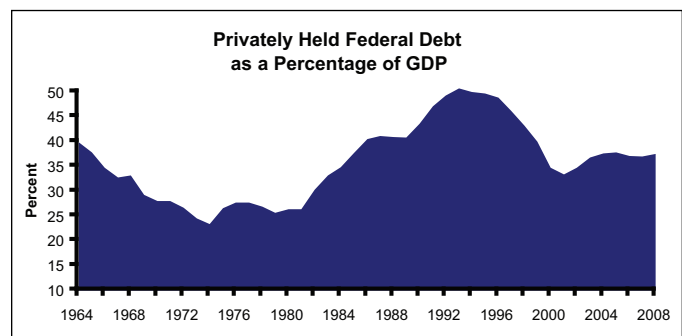


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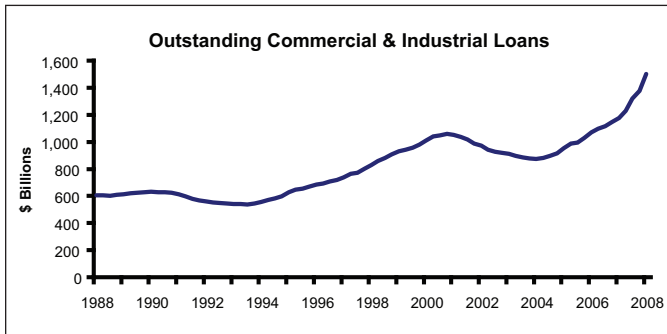


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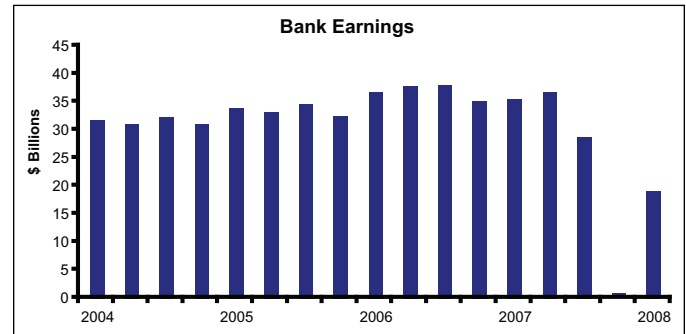


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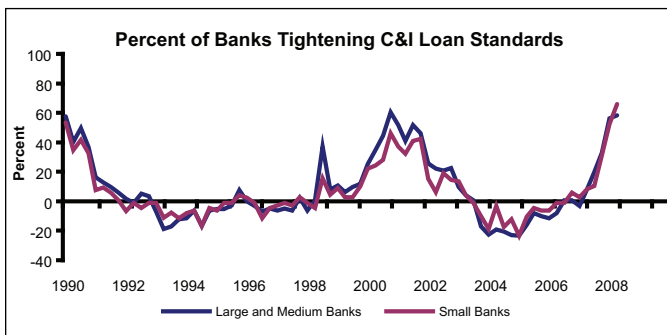


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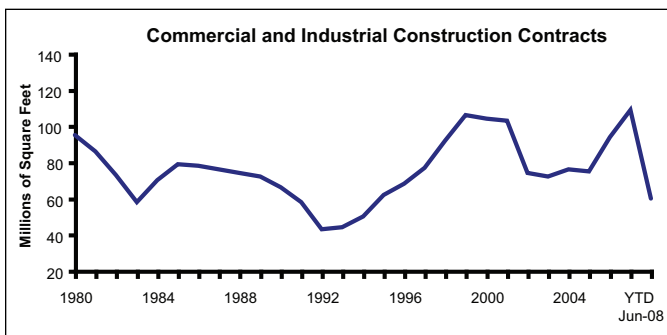


figure 99

their auto quality eroded, and it is the same with respect to our asset market superiority. These are not “imbalances”; they are comparative economic advantages.

Another way to envision how we gain from the trade deficit is to note that the items which they sell us (clothes, electronics, etc.) on net typically have 10-20% profit margins, while the dollars (literally) we sell them on net have almost infinite profit margins. That is, the cost of creating a \$1 million cipher is only a few dollars. Thus, our trade deficit is effectively profit margin arbitrage. The scale of this arbitrage underscores the stake we have in

maintaining our asset market superiority. And just as maintaining the automotive superiority of German and Japan requires a balance of engineering innovation and product safety regulation, maintaining our asset market superiority requires continuous financial innovation tempered by disclosure and reporting regulation. The key is to err on the side of innovation, as an overly burdensome regulatory framework risks throwing the baby out with the bath water.

Capital Investment. Both commercial and residential private investment activity have been dramatically impacted by the Great Capital Strike. Capital investment in residential structures declined by 22.5%, while commercial structure investments fell by 12.9% over the last year. After netting out the much needed \$140 billion decline in housing related construction, total construction activity has fallen by roughly \$60 billion over the past year, as commercial activity increases have been insufficient to offset the 30% decline in housing activity.

The only category of investment activity which is notably up is technology and information services, which does not rely primarily on debt markets for funding. Most other investment activity is on hold, in spite of corporate

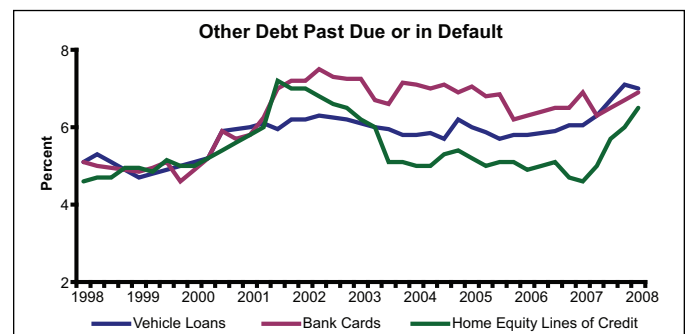


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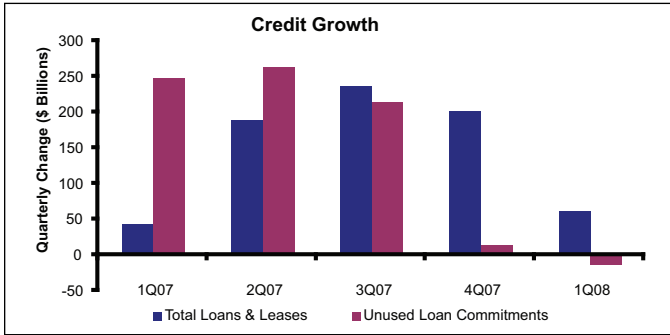


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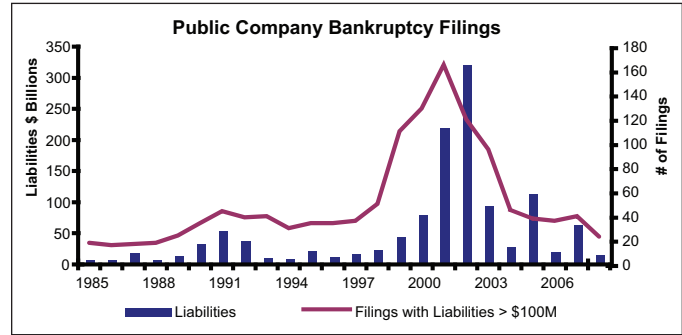


figure 105

profitability, as firms are reluctant or unable to finance in the current debt market environment. Thus, although profits at non-financial firms remain near record levels (though they have declined slightly in the past quarter), borrowing demand is low except from the already over-levered firms in the financial sector. As a result, total real investment activity is down 3.8%.

Consumer debt has fallen slightly as a percent of household income. Most consumers are not over-leveraged, as the secular increase in consumer debt as a percent of income over the past 25 years largely reflects a shift from

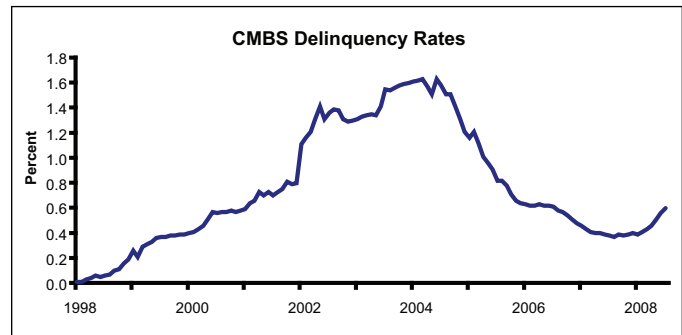


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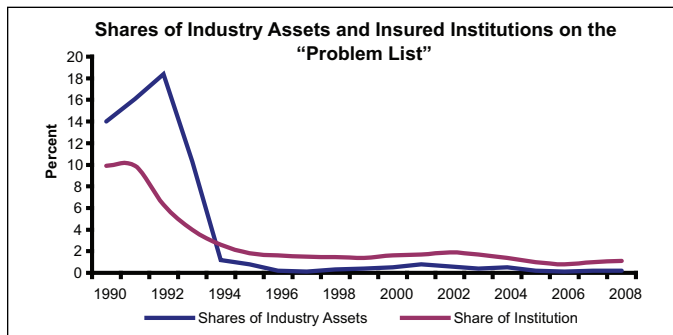


figure 103

a society in which transactions were primarily conducted via cash or check, into one which primarily (and reasonably) transacts via credit cards. This shift explains almost all of the 1,200-basis point increase in consumer debt share over the past 25 years. But since the vast majority of credit card debt is almost instantly repaid, it is not debt per se, but rather a superior liquidity instrument.

Commercial banks have reduced the value of their security holdings by some \$150 billion at the end of the second quarter, with further write-offs subsequently taking place. Nonetheless, bank profits remain positive, though NOIs are down 20% from their peaks. The main source of corporate debt remains traditional secured bank lines. These lines have risen by \$300 billion over the past year, though at spreads some 100-200 basis points wider. The only notable defaults which are being suffered by banks are on sub-prime residential loans, condo development loans, and land development loans. Cash flow loans remain available from banks and life companies on a selective basis.

At the end of the second quarter, banks on the Fed's problem list represent just 0.2% of bank assets (1.1% of all banks). This is up modestly over the past year, but pales

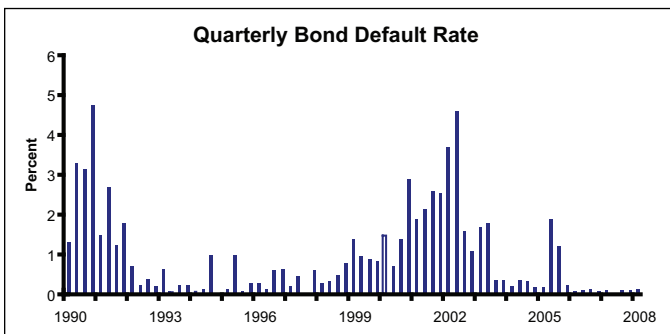


figure 104

in comparison to the 9.9% of all bank assets (18% of all banks) recorded in the early 1990s (not including S&Ls).

The wait continues for a spike in bankruptcies, commensurate with the explosion in credit spreads which has taken place over the past year. Yet corporate bond defaults remain well below 1%, while life company and CMBS mortgage delinquency rates remain very low, as do corporate bankruptcy filings. Commercial real estate delinquencies and bankruptcies remain almost exclusively concentrated in non-cash flow sectors, primarily land development, home builders, and condos. Cash flow

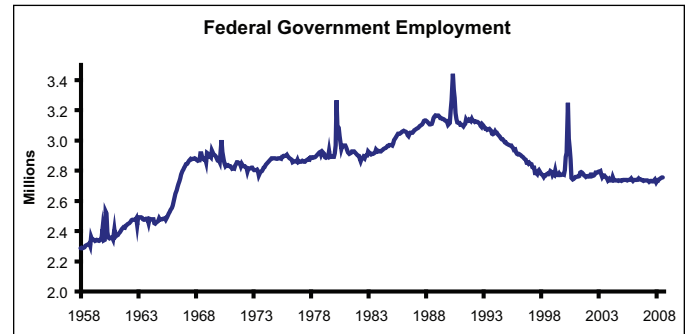


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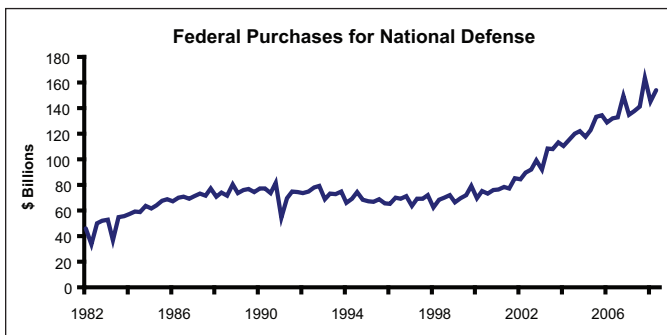


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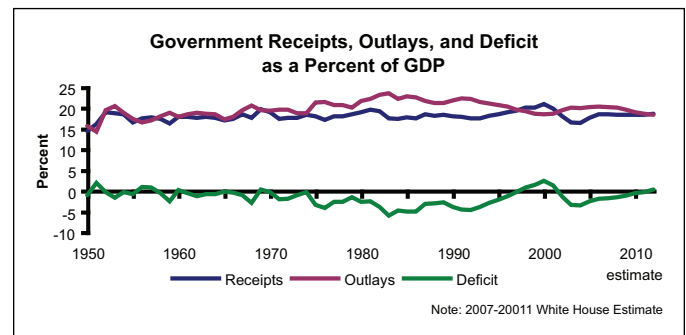


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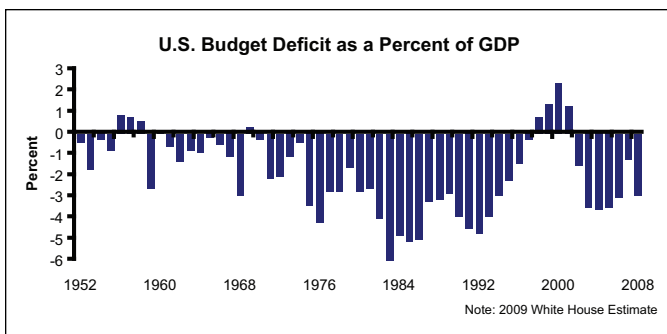


figure 108

properties will be adversely affected if the economy falls into a recession. But if the economy avoids a recession, only properties with reset loans with coverage ratios below 1.10 will face foreclosure. These are primarily properties which were financed with floating rate loans in late 2005 through mid-2007. Not surprisingly, the spreads on CMBS vintages prior to 2005 are 500-1000 basis points cheaper than 2005-2007 vintages.

Home Price Trends. Of the 40 MSAs we track, Charlotte, Austin, and Raleigh/Durham ranked the highest for the second quarter of 2008 according to the Office of Federal Housing Enterprise Oversight (OFHEO) housing

price index. On the other end of the spectrum were Las Vegas, Fort Lauderdale, and Riverside-San Bernardino. For the quarter, Raleigh/Durham and Charlotte exhibited the highest price increases of 1.2%, followed by Fort Worth (1.0%), while Las Vegas, Fort Lauderdale, and San Bernardino had quarterly decreases of -7.5%, -8.6%, and -11.1%, respectively.

Over the past year, the laggards are the same, with San Bernardino registering the largest decrease in housing prices at -23.0%. Charlotte topped the list with an increase of 5.2%, followed by Austin and Raleigh/Durham. Atlanta, Seattle, Denver, Columbus, Philadelphia, and St. Louis all experienced modest increases.

Over a 5-year period, Miami, Orlando, and Los Angeles exhibited the largest increases in housing prices at 75.4%, 63.4%, and 63.4%, respectively. Detroit is the only MSA that showed decreasing rates over a 5-year period (-11.5%). Cleveland showed the smallest price increase of 5.6%, followed by Denver with 9.7%.

Government Spending. Federal government spending continues to rise at roughly 5.5%, even as revenues have gone flat. This flat revenue growth reflects the combination of the loss of income previously generated from the capital

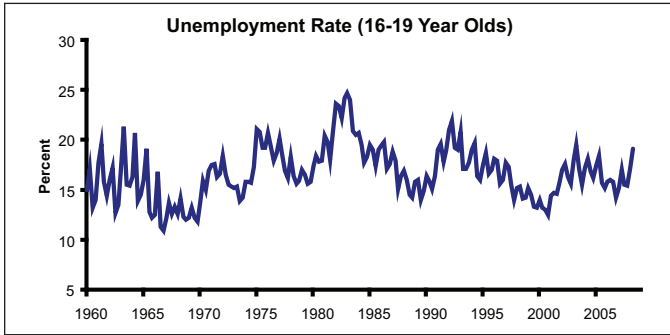


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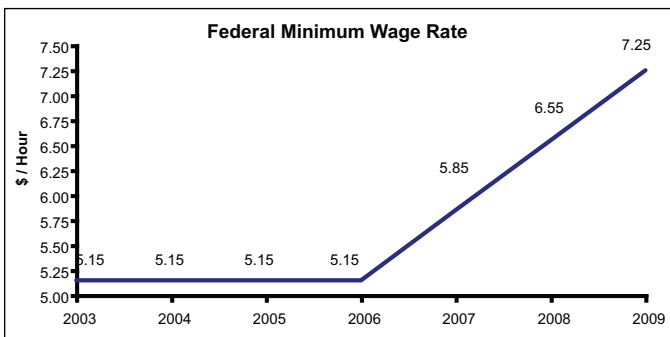


figure 112

gains tax and only modestly increasing income tax receipts. As a result of the continued lack of fiscal restraint, which is hardly surprising in an election year, the U.S. budget deficit has risen to nearly \$400 billion. Unfortunately, we fear that this is a structural problem that will only worsen post-election. Interestingly, if defense expenditures (to name but one spending category) had remained at 2000 levels, we would have a federal budget surplus. But the rush to purchase both guns and pork, along with the collapse of Tech Bubble tax revenues, swung a sizable surplus to a notable and damaging deficit.

And the Award Goes to...

The winner of the “I am from the government and I am here to help you” award for 2008 remains hotly contested. Through the first three quarters, the leading candidates are:

- Senator Charles Schumer, for publicly questioning the soundness of Indy Mac. His statement prompted a run on the bank, which then had to be taken over by the Feds. President Roosevelt once famously told depositors that there is nothing to fear but fear itself. Apparently, depositors must also fear Senator Schumer’s speculations.

- Congress, for raising the minimum wage from \$5.85 to \$6.55, and further to \$7.25 next year. This effort to “help” low-wage workers has caused unemployment rates among teens to rise substantially. The minimum wage increase to \$6.55 per hour took effect on July 24, 2008. At the end of July, the unemployment rate among 16-19-year-olds increased by 220 basis points compared to June, but then gave back all but 80 basis points of that increase in August. Do you doubt that the teens who were no longer hired are the lowest-skilled teens, as opposed to your children who want summer jobs? So the increase in the minimum wage gave your children a wage increase, while those lacking the connections to get a job lost all of their income. Nice way to help our least-skilled work force.

- Everyone in government, for coming to the rescue of Fannie and Freddie. Taking a well-worn page from the playbook of the French government, we have decided that profits (including some \$4.1 billion in annual dividends) are a private matter, but losses by the large and well-connected are a public responsibility. If Fannie and Freddie are “too big to fail,” saving them today only sets the stage for an even larger bailout in the future. These entities have long pocketed most of their interest rate

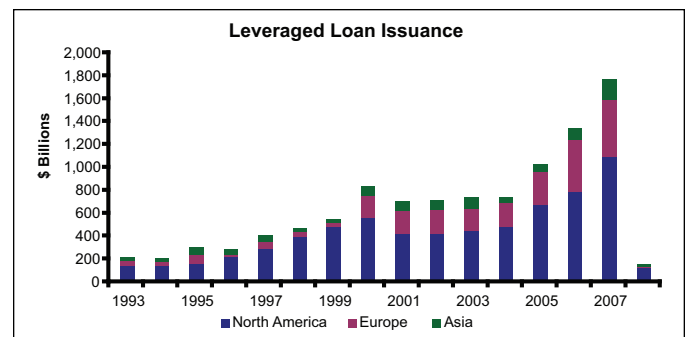


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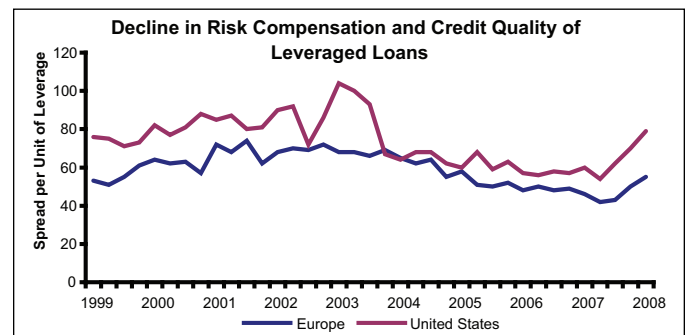


figure 114

subsidy, while eliminating private competitors (witness their impact on multifamily over the past five years), and created companies which are reminiscent of state-owned French companies (remember the bill for Soci t  Generale which was footed by French taxpayers?). “Too big to fail” should be synonymous with “too big to keep alive, much less subsidize.”

If Fannie and Freddie are “too big to fail,” saving them today only sets the stage for an even larger bailout in the future.

Stay tuned: the year is not over yet, and we may still see something dumb enough to beat out these three for the award.

Stay tuned: the year is not over yet, and we may still see something dumb enough to beat out these three for the award.

Real Estate Capital Markets

One phenomenon that has lengthened the duration of the Great Capital Strike is the fact that while everyone talks about seeking “risk-adjusted returns,” many are actually incentivized to seek high absolute returns. As a result, absolute return-focused capital has been slow to arbitrage high risk-adjusted returns with the low absolute

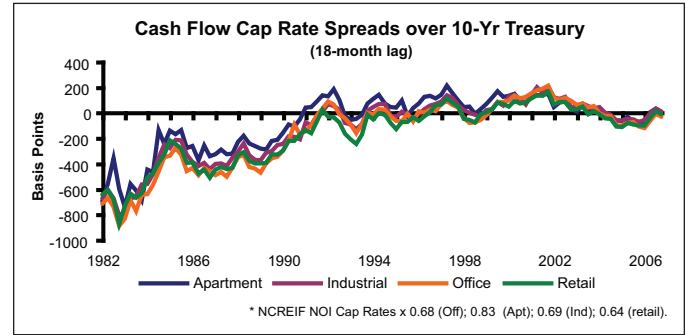


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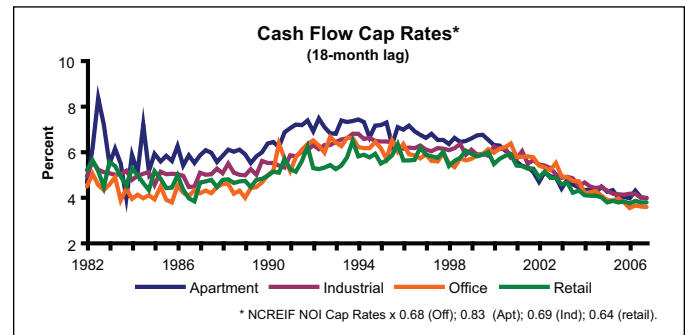


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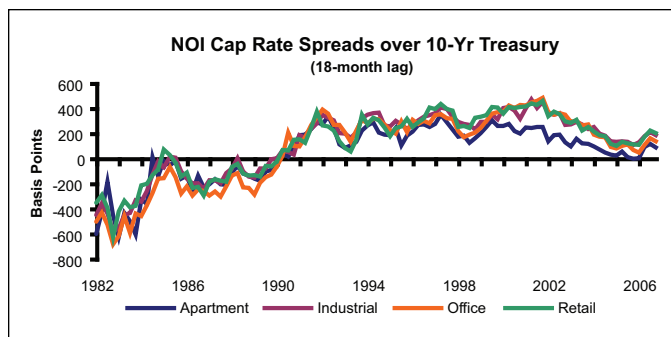


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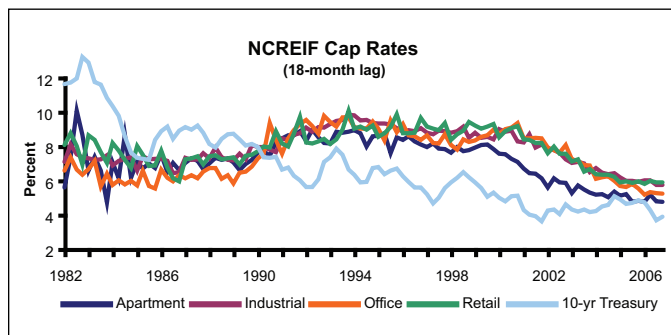


figure 116

return opportunities which exist today. The prime example is 60-65% LTV commercial mortgages with 1.3x (or better) coverage on in-place income. These loans are at spreads in excess of 300 basis points, far in excess of spreads justified by historic losses. Plus, some personal guarantees are required on many such loans. Yet capital for such loans remains scarce, as these loans only provide 6-8% returns. And absent the ability to leverage these loans, such returns are insufficient for most of the capital sitting on the sidelines. This focus on absolute returns is driven by compensation structures at institutional investors and major funds.

NCREIF return indicators will decline and yet substantially overstate investor returns for the next 12-18 months. The declines will reflect the declining cap rates seen in REIT prices almost two years ago. As discussed in our last issue, this lag is driven by the fact that appraisal-driven valuations rely on historical data, using comps from late 2006 and the first half of 2007 as indicators of sales value today. The simple truth is that the cap rates for both public and private real estate have increased 10-20% since the first half of 2007. Owners of private properties have the luxury of not facing up to this fact. But then, so do REIT owners who never look at stock prices.

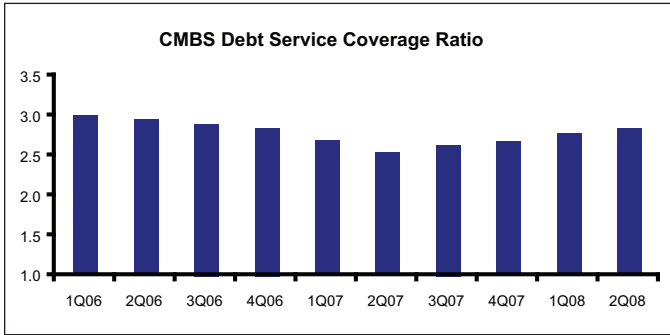


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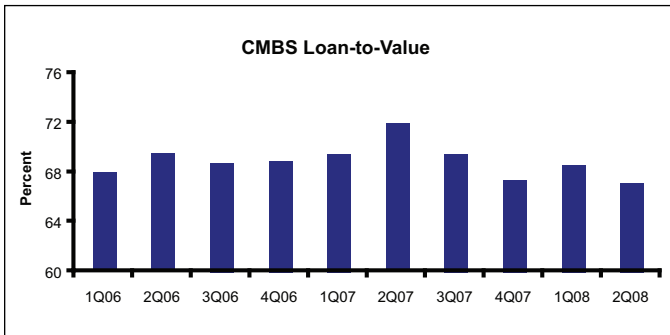


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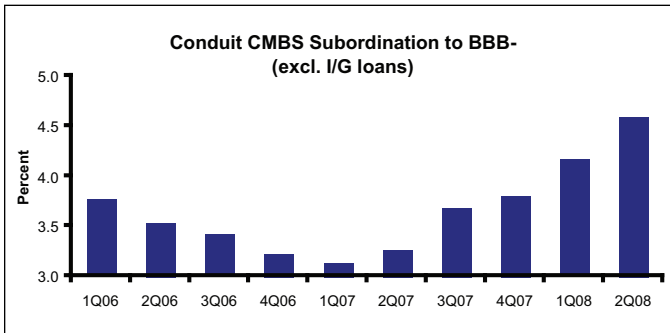


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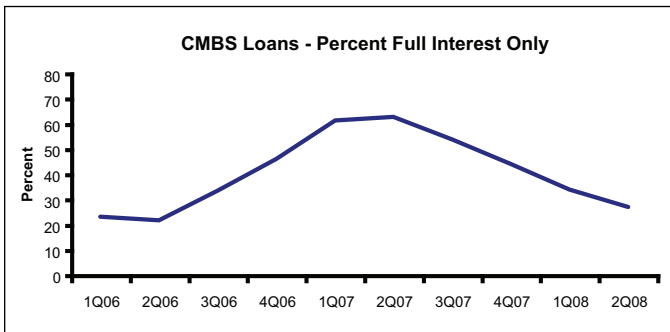


figure 122

We have an unusual risk “inversion” today. Usually, our underwriting ability for the next 6-24 months far exceeds our ability to underwrite 3-8 years from now. But today (like the mid-1970s, early 1980s, early 1990s, and early 2000s), the opposite is true. For example, when underwriting land for single family homes, one feels much more comfortable that there will be demand for an average of 100 units a year over the next seven years, than that there will be 50 sold in each of the next two years, and 600 units over the subsequent five years. This

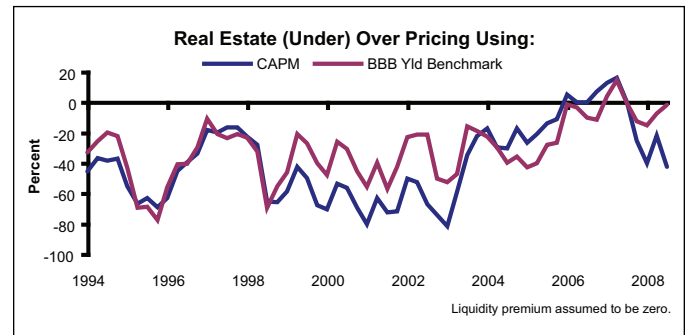


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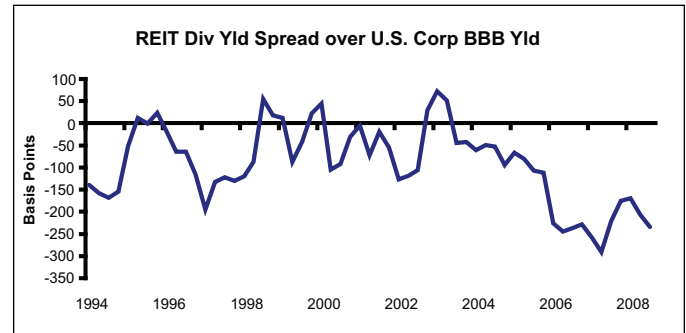


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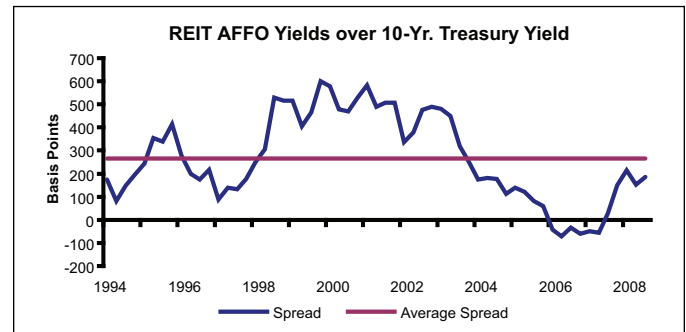


figure 125

Real Estate (Under) Pricing thru Sept 26, 2008				
BETA	Long-Term Annual Dividend Growth			
	2.0%	2.5%	3.0%	3.5%
	0.3	-65.3%	-95.6%	-139.7%
0.4	-44.9%	-67.7%	-99.0%	-144.8%
0.5	-28.9%	-46.7%	-70.2%	-102.5%
0.6	-16.2%	-30.4%	-48.6%	-72.7%

figure 126

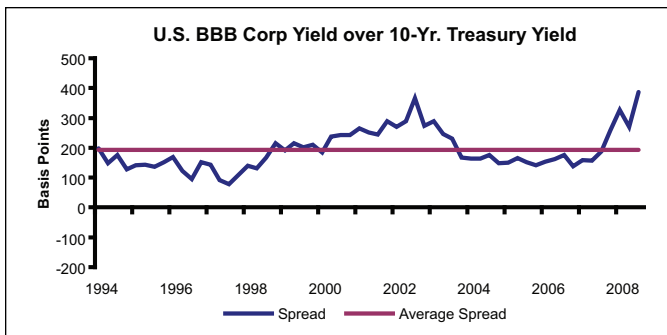


figure 127

problem is exacerbated by the reality that there is very little chance the near-term absorption will be twice as large as expected, while there is a decent chance it could be half of what is expected. This inversion makes exploiting short-lived investment opportunities difficult, as the upside is largely truncated, while missing by 6-12 months can generate very unattractive returns.

CMBS markets continue to move toward increasingly conservative underwriting standards. Debt coverage ratios reached 2.85 in the second quarter of 2008, compared to 2.55 one year earlier. Similarly, CMBS LTVs dropped to 67.2% versus 72% in the previous year, and subordination levels have been on the rise for the last five quarters, increasing by nearly 150 basis points over that period.

After a tumultuous second half of September on Wall Street, all “risk” is massively under-valued, and REITs are no more or less so relative to comparable risk. Our analysis of REIT pricing indicates that REITs were under-priced by just 2% relative to BBB bonds and by 43% based on values implied by the Capital Asset Pricing Model (CAPM), both as of September 26, 2008. The huge disparity between the two valuation proxies reflects the massive over-pricing of “safety” (Treasuries) versus “risk” (stocks in general, and not just REITs). Thus REITs are only slightly under-priced compared to comparable risk (BBB), but all such risk is massively under-valued relative to historic standards. That is, REIT pricing

is in line with expectations relative to today’s BBB bond pricing, but BBB bonds are currently under-valued also. While the CAPM analysis indicated that under-pricing moderated slightly in the second quarter, it gave back all of those gains and more in the third quarter of 2008. We still support a buy-and-hold strategy for REITs.

Now We Get Bipartisan Cooperation!

With little if any opposition, Congress and the Bush Administration effectively doubled privately held U.S. debt via the nationalization of Freddie Mac and Fannie Mae. This transpired without:

- fully wiping out shareholder equity at Fannie/Freddie;
- eliminating the ability of Fannie/Freddie to lobby Congress (lobbying efforts by government agencies and departments is explicitly prohibited);

Not only is it a poor deal for U.S. taxpayers, but no one has any real idea of the expected costs of this legislation. If ever a careful cost-benefit analysis would have hopefully been done before government action, this was the case. But the well-oiled Fannie/Freddie lobby obtained explicit federal government backing for their failures after years of dividending 100% of the rewards of

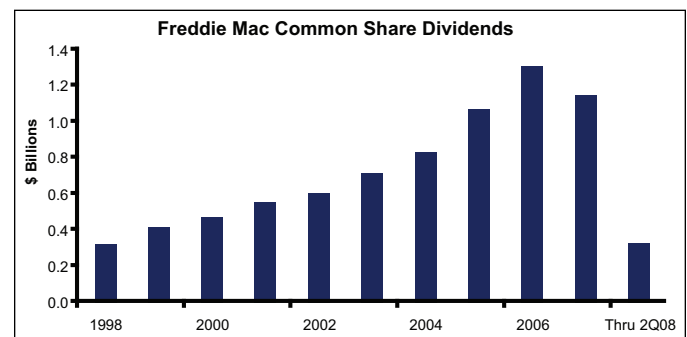


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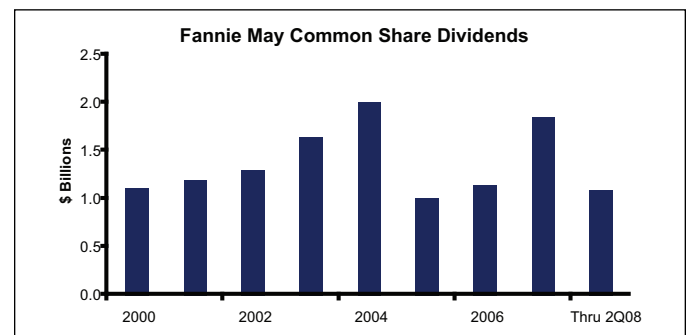


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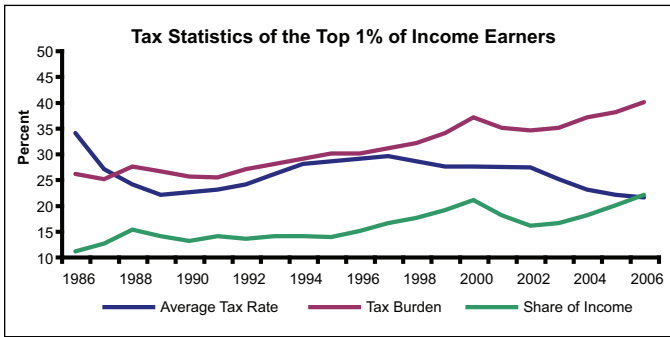


figure 130

their success. This was a hand well played by Fannie/Freddie, to the detriment of the U.S. taxpayer.

Sadly, we believe the U.S. government's action was the only course of action. This is not because "it will calm the markets" (which it failed to do), but rather because for 30 years the government had never denied Fannie/Freddie claims that their debt was backed by the U.S. government.

It is because of episodes like the Fannie/Freddie bail-out that we continually remind you who really pays taxes in the U.S....

This amounted to a wink and a nod to debt purchasers that Fannie/Freddie debt was in actuality U.S. government debt. And having de facto told investors it was our collective liability, we were honor-

bound to accept it. In fact, the credibility of the U.S. government would have been seriously compromised had we walked away from this debt. Hence an ill-conceived, bloated and recklessly overleveraged entity becomes your responsibility. It is because of episodes like the Fannie/Freddie bail-out that we continually remind you who really pays taxes in the U.S., as your taxes over the

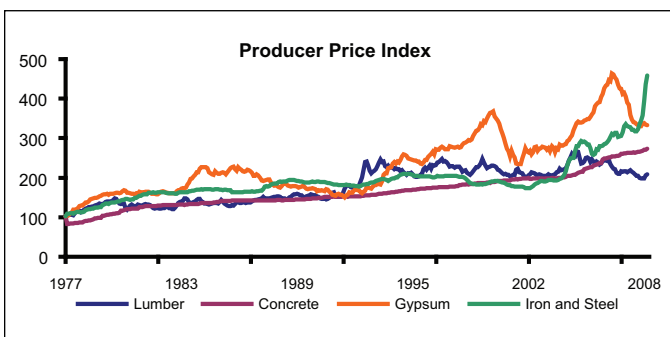


figure 131

next few years will pay for ill-conceived and politically motivated loans issued in 2004 through early 2007, long after dividends were issued to Fannie/Freddie shareholders on profits seemingly derived on those loans.

The Linneman Letter Look-Back: Income Taxes

In the Spring 2008 edition of *The Linneman Letter*, we provided data on who actually pays the majority of taxes:

We noted that, "Over 40 million of the lowest income tax filers pay no income tax, and households earning under \$30,000 (in adjusted income) actually paid negative taxes (were subsidized) due to the Earned Income Tax Credit. Noting the ever increasing tax burden on the 'rich,' we concluded that the Bush tax savings were merely allocated roughly proportionate to taxes paid. In 1981, receipts from the top 1% amounted to 19.1% of all federal income taxes. By 2005, the share borne by this richest percentile had more than doubled to 39%. Yet the top marginal tax rates in these years were 70% and 35%, respectively. That is, the richest faced half the marginal tax rate, but double the tax burden. In absolute terms, the increase is even more dramatic: the top 1% paid \$94.9 billion in 1981 (real 2005 dollars), and \$368.1 billion real dollars in 2005. Hence, those who say that the rich are not paying the same share of income taxes they once did are right – they are paying much more!"

Construction Costs

The Linneman Construction Cost Index (LCCI) is based on a hypothetical building consisting of lumber (5%), concrete (5%), gypsum (10%), iron and steel (10%), labor (50%), and land (20%). We track the costs of all of these components except land using producer price indices from the U.S. Bureau of Labor Statistics. For land, we set the 1995 base value to 100 and assume that it has increased by CPI (all goods) over time. We add up all of the nominal values of the component indices to arrive at the nominal LCCI, and then convert to a real basis using CPI.

On a real basis, the LCCI declined by 3.3% year-over-year through the second quarter of 2008, while it increased by 1.5% during the first six months of the year and declined by 0.9% over the last three years.

Change in Cost Indices Through June 2008				
	Y/Y	YTD	Over 3 Yrs	20-Yr CAGR
LCCI (Nominal)	0.6%	3.6%	10.0%	3.2%
LCCI (Real)	-3.3%	1.5%	-0.9%	0.1%
Turner Index (Nominal)	6.6%	3.1%	28.3%	4.0%
Turner Index (Real)	2.5%	1.0%	15.6%	0.9%
Lumber	-3.6%	2.2%	-15.5%	1.6%
Concrete	3.8%	2.7%	20.7%	3.3%
Gypsum	-13.8%	0.0%	-7.8%	3.2%
Iron & Steel	39.6%	42.8%	76.9%	4.7%
Labor (Benefits + Wages)	3.4%	1.3%	6.8%	3.1%
CPI (all items)	4.0%	2.1%	11.0%	3.1%

Source: Bureau of Labor Statistics, Linneman Associates, Turner Construction

figure 132

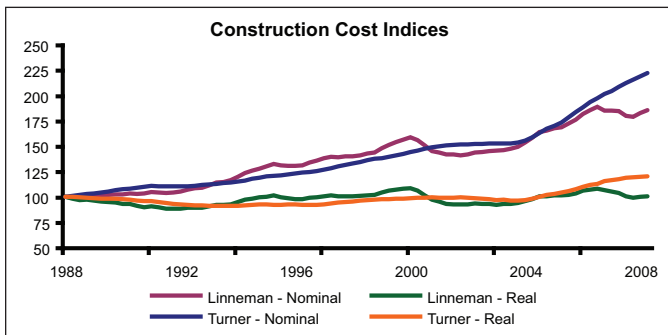


figure 133

Construction costs continue to moderate, as we have previously predicted.

Year-over-year through June 2008, the cost of lumber dropped by 3.6%, while the gypsum producer price index declined precipitously by 13.8%. Notably, over the last three years, concrete and iron and steel costs have risen by 20.7% and 76.9%, respectively, while lumber and gypsum have both declined during that period. Year-over-year and year-to-date through the second quarter of 2008, concrete has moved in line with CPI, but it has far outpaced CPI over a 3-year period.

In comparison, the Turner Building Cost Index (TBCI), published by Turner Construction, tracks the overall cost of construction on a national basis, taking into account major construction cost categories such as “material prices, labor rates, productivity, and the competitive condition of the marketplace.” As with the LCCI, we converted the TBCI to a real basis using core CPI.

The TBCI (in real 2008 dollars) increased by nearly 16% over the last three years, by 2.5% over the last year,

but by only 1% in the first half of 2008. Beginning in the third quarter of 2006, the LCCI reversed direction and began to decline, while the Turner Index continued to climb. The primary factor driving the reversal was the steep drop in the cost of gypsum. The gypsum producer price index declined by 17% from its high in July 2006 through the second quarter of 2008. It should also be noted that the TBCI takes increasing energy costs into account (specifically reflected in higher transportation and manufacturing costs), while the LCCI does not include this factor. Secondly,

the TBCI is more subjective than the LCCI, as it is based on a survey of regional contacts who provide labor rates, some measure of productivity, and material prices. But they also comment on “the competitive condition of the marketplace.” This latter factor, which essentially measures market sentiment, is difficult to measure on a consistent basis.

Interestingly, viewed over the long term since 1988, both the Turner and Linneman Construction Cost indices have risen almost exactly in line with inflation. Thus, although construction costs have extended periods where they lag or outrun economy-wide inflation, over time these costs track general inflation. We are experiencing a period when construction cost increases exceed economy-wide inflation, which comes after an extended period where they lagged behind inflation.

Construction costs today must be viewed from the perspective of history, as construction component prices are volatile both on the upside and the downside. This latter fact is all too often forgotten. As demand grows more quickly than expected, as has recently been the case in India and China, steep component price increases occur. As suppliers attempt to capitalize on the price increases by expanding capacity, overcapacity results and component prices drop. The recent increases in construction costs are not anomalies, but rather another cycle. While nominal construction costs have risen significantly over the last 20 years according to both the Linneman and the Turner Indices, the real LCCI has been flat (0.1%), and the real TBCI has grown only by about 0.9% per annum on a compounded annual basis.

Homeownership Trends

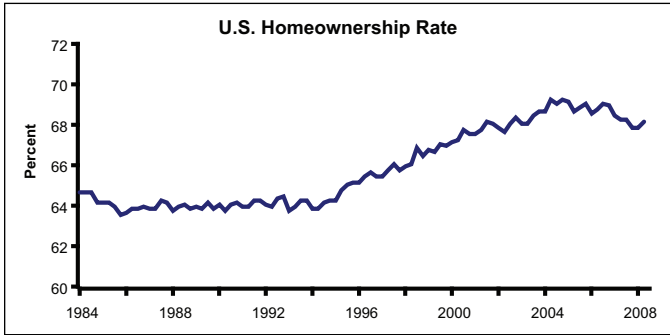


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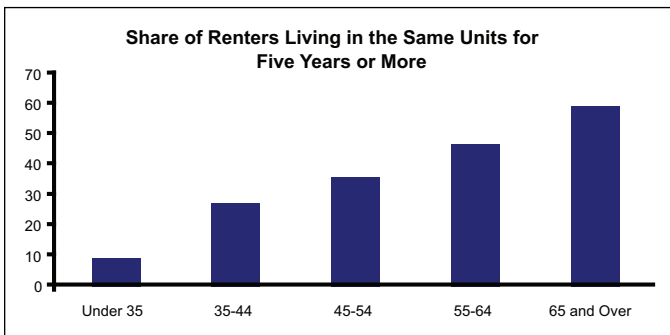


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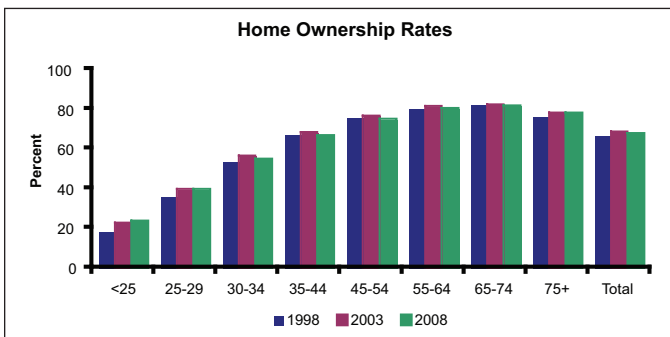


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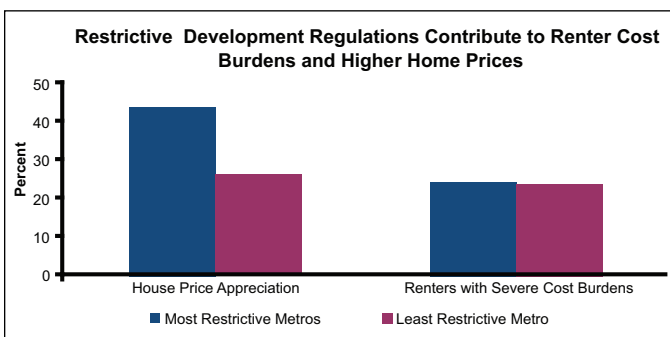


figure 137

The homeownership rate has seemingly bottomed. The 99-basis point decline in the aggregate ownership propensity since the end of 2005 reflects:

- the demise of an “it only goes up” mentality;
- the demise of a “do it before it gets more expensive” mentality;
- the “don’t catch a falling knife” mentality;
- the elimination of easy money mortgages;
- the fact that all Baby Boomers have entered the owner phase of their life cycles, while their children are entering the renter phase of their life cycles.

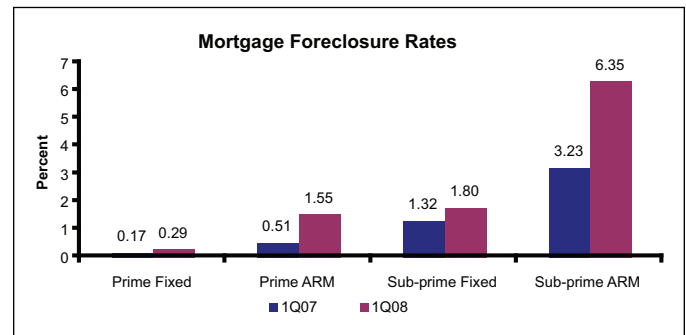


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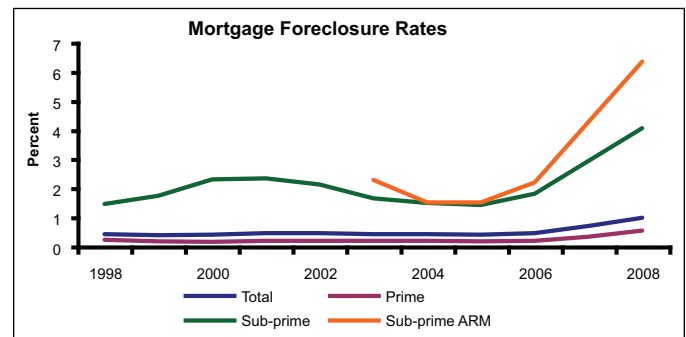


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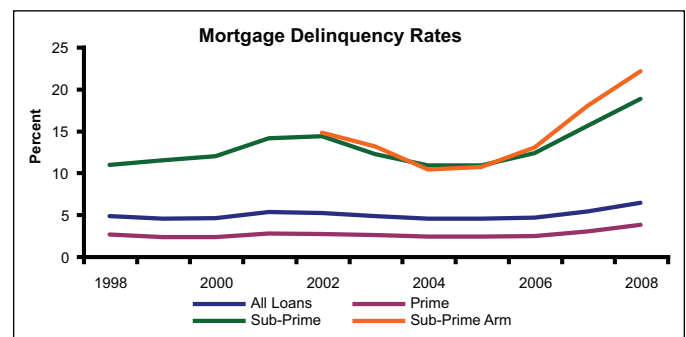


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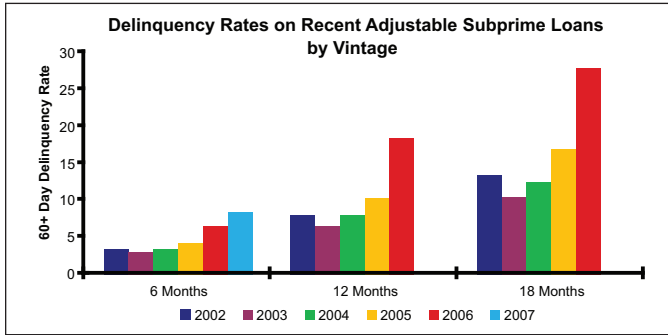


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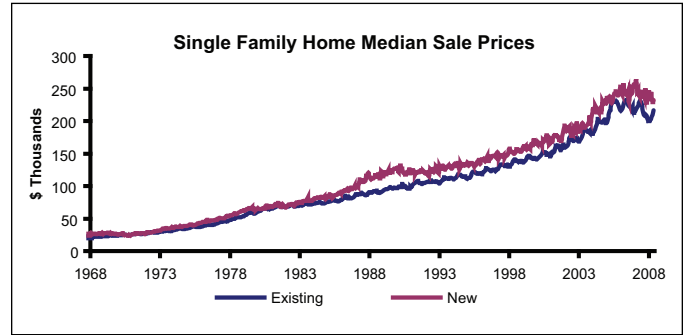


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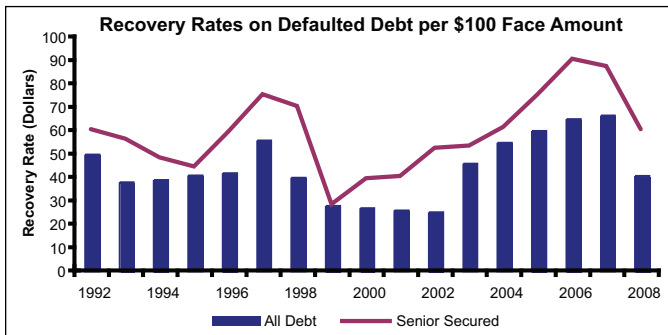


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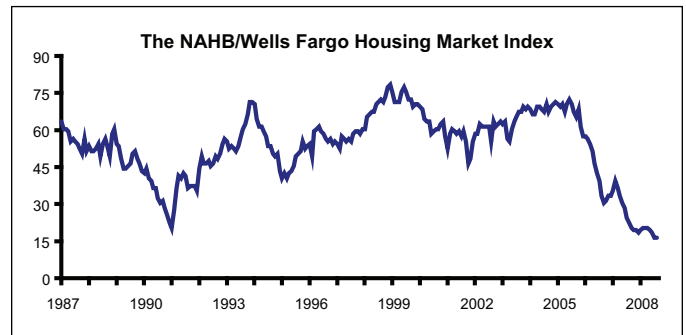


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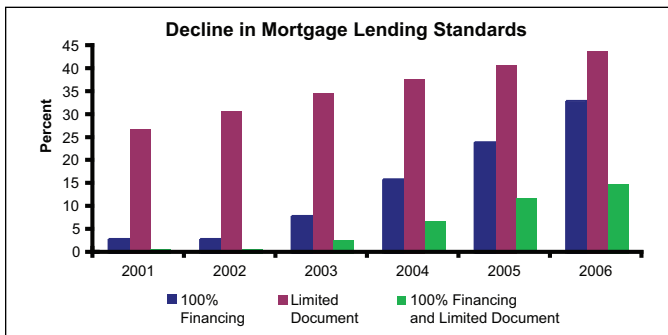


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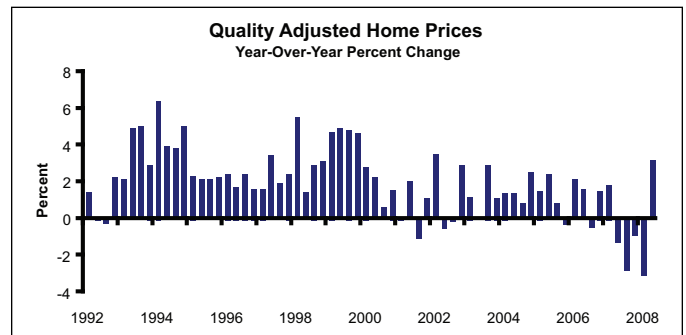


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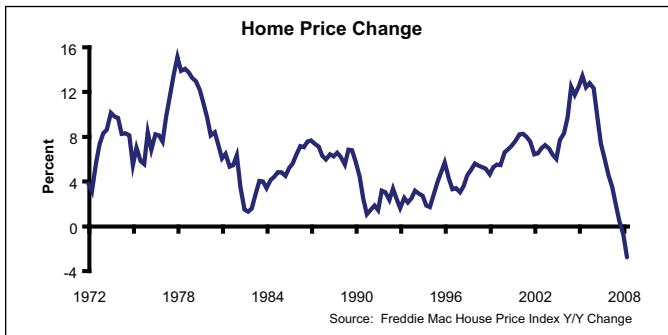


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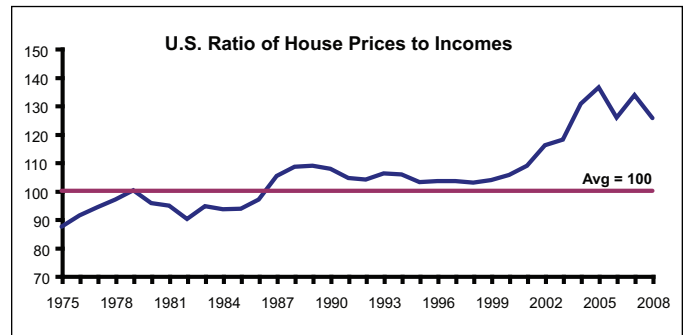


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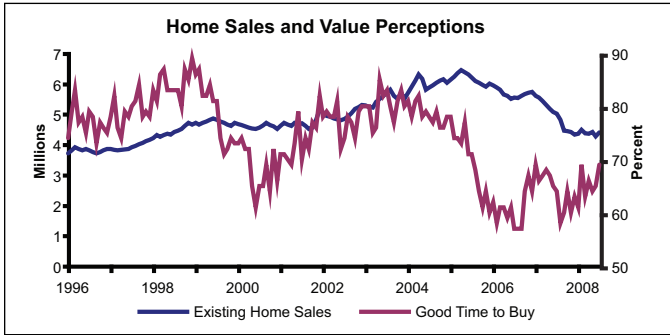


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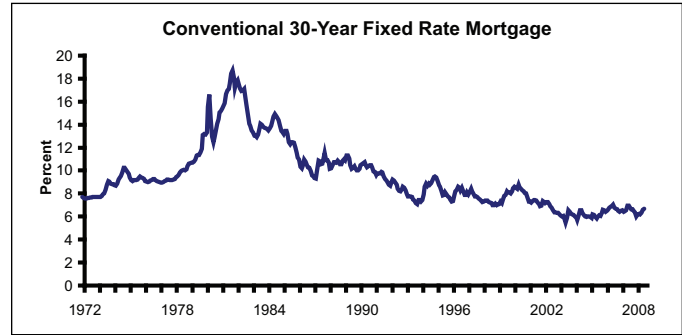


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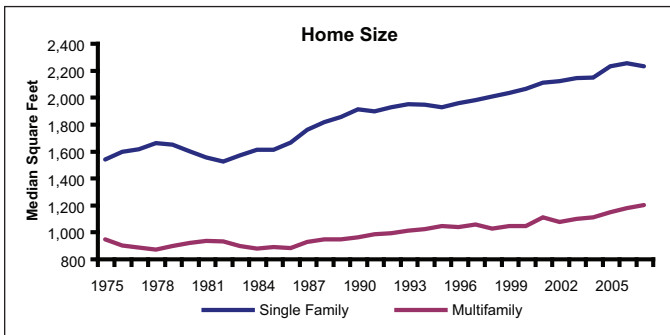


figure 150

However, this decline in ownership is transitory. The ownership rate will ultimately continue its upward drift, particularly among young households. The ratio of mortgage payments to household income, fueled by falling home prices, is at its lowest level since 1999. And as foreclosures accelerate, prospective homebuyers will find even more bargain sales to lure them back to ownership.

Similarly, homebuilders are selling their empty inventories at bargain prices. As a result, 60% of prospective homebuyers now report “attractive” home prices, up from just 10% in early 2006.

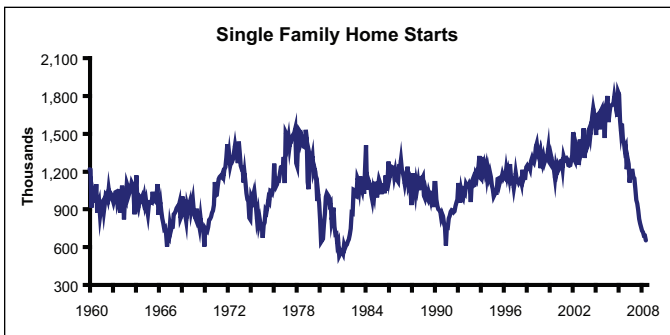


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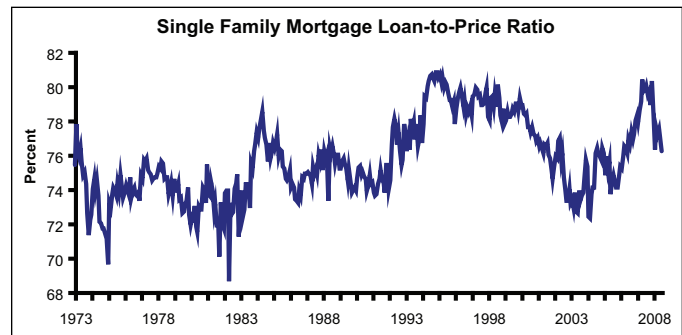


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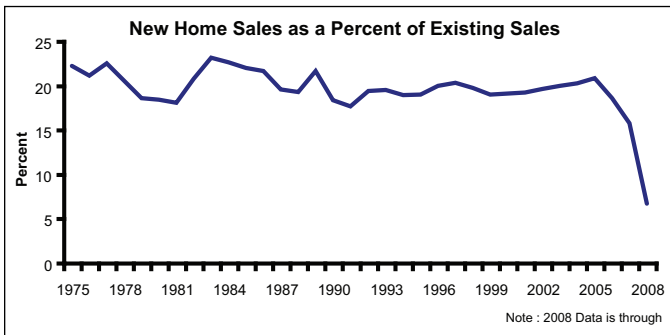


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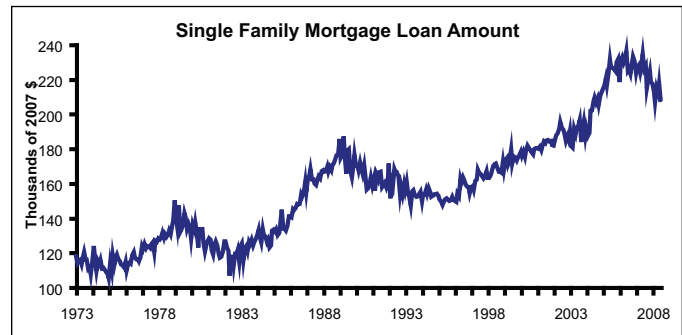


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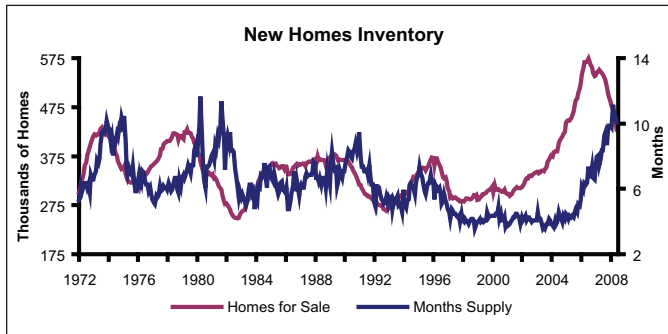


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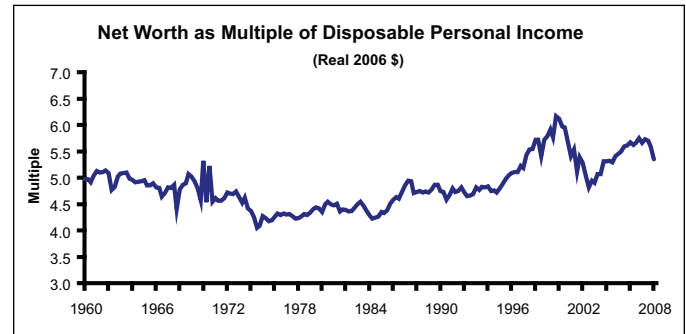


figure 157

Not surprisingly, as foreclosure and clearance builder inventory home sales dominate the market, sales by owner-residents have plummeted, as non-distressed resident homeowners refuse to sell their homes at distressed prices. Instead, they are remaining in their homes, receiving the dividend associated with rent-free owner occupancy. Resident owners will forestall sales until the competition from empty (zero dividend) homes subsides. In the meantime, they remain in their homes, experiencing the benefits of their low mortgage rates.

The relative absence of resident owner home sales and the preponderance of zero dividend empty home sales are the primary reasons for the massive divergence of the OFHEO and Case-Shiller home price indexes. The OFHEO index contains only sales of homes with Fannie/Freddie conforming mortgages. These are primarily resident owner homes, and are only being sold if the buyer meets the seller's expectation. Hence, there are far fewer transactions than is normally the case, and they are only occurring in situations where the sellers are not taking losses. Hence, the OFHEO index reveals little in the way of home price declines, changing by only 1.7% over the past year.

In sharp contrast, the Case-Shiller index is loaded with properties financed with sub-prime mortgages. Sales on such properties are primarily foreclosure and bankruptcy related sales of empty homes owned either by lenders or non-resident owners. In addition, the Case-Shiller index primarily focuses on those markets and submarkets which experienced the greatest excess

As inventories of empty homes continue to decline slowly, home prices will revert to levels closer to resident owner ask prices.

housing inventories. Sadly, the Case-Shiller index has become the media's darling, as it fits their story that the sky is falling.

Which index is correct? Both and neither. The Case-Shiller Index is an inaccurate depiction of how most homeowners – who are resident owners – view the value of their homes. Resident owners effectively value their homes at their ask prices, which are far in excess of those indicated by the distress-driven empty home sales which dominate Case-Shiller. In fact, the gap between the Case-Shiller and OFHEO indices provides a crude approximation of the 10-20% bid-ask spread between ask values of resident homeowners and the bids which win empty homes sold by distressed sellers. But it is not surprising that occupied homes are worth 10-20% more than empty homes. On the other hand, Case-Shiller more accurately reflects the price one must accept when selling in the most distressed markets and submarkets.

As inventories of empty homes continue to decline slowly, home prices will revert to levels closer to resident owner ask prices. In terms of any adverse wealth impacts associated with home price declines, the OFHEO index is far more relevant, as it reflects the valuation of the vast majority of homeowners, namely resident owners. Thus, in spite of huge declines in the Case-Shiller home price index, there has been no adverse wealth effect on the roughly 68% of the U.S. population who are resident owners.

What Will It Take To Pull Us Out?

Even though we have registered only one quarter of negative GDP growth (and two quarters of negative per capita growth), people are saying, "This time is different; I don't see anything to pull us out." But this is what they also said in:

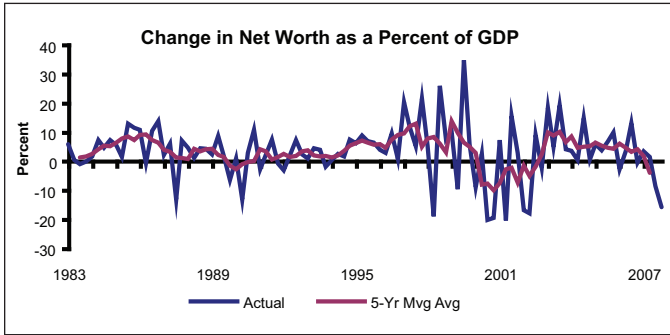


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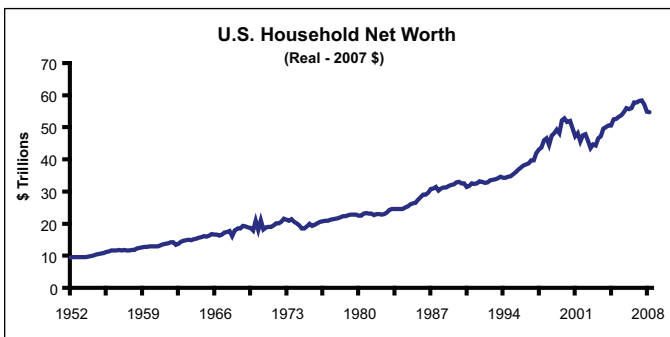


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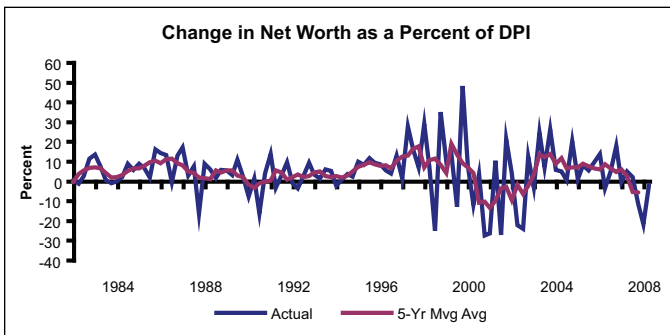


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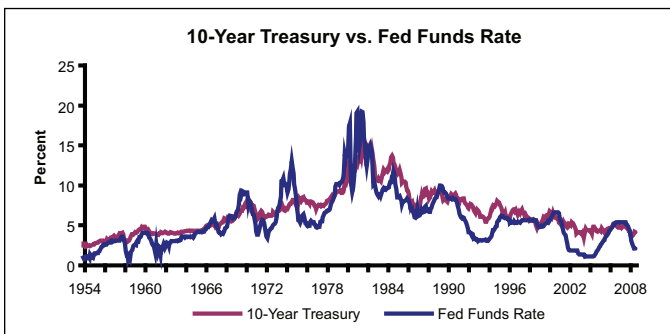


figure 161

- 1975, when runaway inflation, political failure, a collapsing manufacturing sector, and the ascent of German and Japanese manufacturers were the problems.

- 1982, when breathtaking inflation, soaring oil prices, and the perceived dominance of all things Japanese were the problems.

- 1987, when the stock market collapsed and the home mortgage system was crumbling.

- 1991, when the entire U.S. home lending system had been nationalized, banks were failing daily under the weight of empty office towers, and Japan and Germany were ordained as the global economic masters.

- 2002, as Lower Manhattan and the Pentagon were smoldering ruins, the dream of Tech's "new paradigm" had evaporated, and it seemed that all U.S. jobs would be outsourced to the new economic masters China and India (with the threats from Germany and Japan long forgotten).

But a look at real U.S. GDP and net household wealth over the past 50 years reveals the emptiness of these worries. It is a "sucker's bet" to bet against the U.S. economy. And this time is no different.

Fears about the imminent collapse of the U.S. economy and the need for government action to "save us" (like Senator Schumer "saved" Indy Mac) occur every time the economy hiccups. Inevitably, the fear-mongers fail to grasp the power of economic adjustment. It reminds us of hypochondriacs who fear their demise is at hand whenever they have a cold, much less the flu. While things today are very sloppy and unpleasant, death is not nigh.

Transparency, innovation, retrenchment, and focusing on business basics will set the stage for the next recovery, as surely as our immune system rallies to defeat our seemingly never-ending cold. And just as over-medication is a serious danger associated with a cold, regulatory over-reaction is the most serious risk associated with our long-term economic growth, as excessive doses of both Nyquil and regulatory activity can kill.

Fears about the imminent collapse of the U.S. economy and the need for government action to "save us" (like Senator Schumer "saved" Indy Mac) occur every time the economy hiccups.

So how do we get out of this mess? The way we got into it: slowly! Housing inventory excesses are slowly

being absorbed by the slowly-growing U.S. population. And those financial institutions which seriously abused

*Transparency,
innovation,
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business basics will
set the stage for
the next recovery...*

leverage and exhibited poor risk underwriting are slowly being revealed and disappearing. Surely, we want these players to disappear, as many play with federally insured money. And employees who should have never been hired to originate and package/

market dodgy sub-prime loans must be redeployed to more productive economic activities if the economy is to grow once again.

But it takes time: population grows slowly; weak lenders cling to life; a lack of transparency makes everyone seeking to refinance suspect; and no one likes to lay people off. It also takes time for equity to replace debt in over-leveraged capital stacks. But as equity replaces (badly under-priced) debt, a miraculous thing happens: systemic financial risk declines, ultimately reducing required returns for both debt and equity. The problem is that this massive debt-for-equity swap takes time to execute. But this swap is taking place daily, and slowly making the system less risky. Just as you felt safer on 9/10/01 than on 9/12/01 in spite of the fact that you were at greater risk on 9/10 (after all, 19 people who wanted to kill you were still alive and very deadly) than on 9/12, so too you are safer today than in early 2007. The difference is that 18 months ago, most of us did not realize how dangerous balance sheets were; now we do. Each discovery slowly makes the financial system a bit safer.

A year ago we said that it would be 18-24 months before capital markets approached any degree of normalcy (and remember, 2004 through early 2007 were abnormal). We believe we are 6-12 months behind that schedule. The fact that 10-year Treasury yields have settled back to 3.8-3.9% (versus a “normal” rate around 4.5-5%), from a low of 3.5% in March, and 30-day Treasury rates are 0.3% percent means that investors are only very slowly shifting out of safe havens and back into “risk.” Only when Treasury rates approach normal will capital markets be normal.

But many do not want “normal” capital markets; they want massively under-priced debt. After all, it is much easier to generate great equity returns when debt is excessively cheap and plentiful. And the last thing Orange

County landlords, mortgage brokers, sub-prime borrowers, Phoenix land developers, and south Florida condo developers want is “normal,” as their business models were based upon the continuation of “abnormal.”

While everyone likes to be positioned as an innocent victim, many benefited from capital market abnormality. Notable in this regard are the more than 75% of sub-prime borrowers who are not delinquent on their mortgages. These borrowers received loan terms they should never have received. In fact, they received transfers equal to the losses lenders are reporting today. Even many delinquent sub-prime borrowers have lost nothing, as they had no-money-down loans and own a free option if home prices rebound. The fact that there are many beneficiaries of capital market excess is a prime reason why the adjustment back to normal takes time. It is what Milton Friedman once referred to as the “tyranny of the status quo.”

We are not concerned about which sectors of the economy will lead us forward. For example, healthcare, education (especially higher education), and entertainment all possess solid fundamentals. And the equity side of our capital sector is well positioned for a good run. We also continue to innovate in garages and labs, and remain the home of entrepreneurship. No, what worries us is regulatory overkill. Daily, the Fed goes unquestioned as it extends its regulatory tentacles into uncharted areas, and Congressional and Presidential candidates float myriad regulatory “solutions.” And globally, a very dangerous drift against free trade is afoot. In fact, we worry that the recent collapse of the stock market reflects the market’s belief that the beacon of free trade is dimming, to the detriment of global economic growth.

Our politicians should strive first to do no harm. Economic and capital market disruptions are caused by human frailties (hubris, greed, and occasionally dishonesty) and incorrect policies (a negative real Fed Funds rate for over three years, and federally insured – and de facto insured – institutions being permitted to leverage by

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detriment of global
economic growth.*

as much as 80 to 1). A studied regulatory response, in combination with a great physician's humility about the efficacy of treatments, is required to address the current mess. It is not pretty, but it will pass largely on its own.

It is essential that we not declare the current economy a "recession" unless it is technically a recession. Words have meanings, and the careless usage of words has serious consequences. For example, yelling "fire" in a crowded theater that is merely very warm can be disastrous. Similarly, obsessing over the Case-Shiller home price index (which is massively over-weighted to the sale of foreclosed investor homes in the most overbuilt markets) while ignoring the OFHEO index (which is more nationally representative of resident owners) is a major danger. In both cases, the facts are not altered by words, but politicians are given carte blanche to "do something" in the face of a "recession" and double-digit national home price declines. Appropriate labeling and measurement are essential tools to rein in dangerous political discretion.

Global Warming: The Convenient Truth

We have long been skeptical of the dire claims that man-made global warming will destroy the world as we know it. Not only is the factual evidence questionable, but the logic of global warming alarmists is at times ludicrous. For example, just as ice melting in a glass can never make the water level rise, so too melting polar ice shelves (assuming this is occurring) cannot cause the flooding of low-lying land.

The conceit of global warming alarmists, who tout the predictive ability of models which do not even fit today's weather, is staggering.

And why was the temperature of 50 or 100 years ago the "right" temperature in an ever changing world? It is as if we are Amish, and believe that a "perfect" state existed when autos and electricity did not exist. Further, if economies flourish in such diverse climates as New York, Toronto, Atlanta, Singapore, and Stockholm, it is not believable that a 2-degree average temperature rise over the next 100 years (even if it occurs) will bring the global economy to its knees.

The world's economy has flourished beyond the imaginative power of a century ago, even as the average

global temperature (seemingly) rose by about two degrees. And, while it makes great movie fodder, no serious scientist believes there is evidence of a climatological "disaster tipping point," nor is there any evidence of a relationship between extreme weather (such as hurricanes) and global warming.

If 100 years ago, people had been offered the bargain of two degrees of man-made warming in exchange for today's standard of living, everyone would have gladly accepted the bargain. Can you doubt that the reduction in death and misery which has occurred as a result of economic progress over the past century massively outweighs any minor effects (if any) associated with man-made global warming? Then why should an additional degree or two (even assuming it occurs) over the next century be any different? The Convenient Truth is that it will not. We should gladly take the opportunity to raise global living standards another eightfold or tenfold over the next century, even if it means an additional 1-2 degrees of average global temperature.

The conceit of global warming alarmists, who tout the predictive ability of models which do not even fit today's weather, is staggering. To believe that they can accurately predict a degree or two change in average global temperature a century from now is breathtaking. By comparison, our financial valuation models are works of extraordinary accuracy and precision. But would you seriously use a financial model to tout property values a century from now? Of course not.

Change is the only constant in the world. Recall that 100 years ago, oil was primarily used for kerosene lamps, coal was primarily a fuel for stoves, and internal combustion vehicles were a novelty item for the super rich. Life expectancy was short. Death was often due to malnutrition and child birth, and industrial and farm deaths were common place. Medicine was still largely practiced by "doctors" with mail-order degrees, who treated every ailment with cocaine, alcohol, or codeine (or a mixture of the three). A century ago, Irish, Italian, and German immigrants were viewed with both suspicion and disgust by "proper" Americans, while Afro-Americans were treated as sub-human in much of the U.S. (as were

By comparison, our financial valuation models are works of extraordinary accuracy and precision.

Jews in many countries), and as barely human in the rest. And nearly half of the mostly male work force worked on farms.

In spite of horrific losses of human and physical capital through a series of terrible wars over the past century, no model of 100 years ago could ever have predicted today's standard of living. So why should we pay an iota of attention to the 100-year forecasts generated by today's "sophisticated" computer models?

The global warming orthodoxy reminds us of the mystifying practices of ancient religions. Are today's sacrifices to the great "green god" less ridiculous than sacrificing virgins to obtain a good harvest? Perhaps the decline of virgins has made this historic practice too difficult, causing the entertainers and politicians who act as the high priests of the green god to invent new rituals.

If someone from 100 years ago went by jet to visit the countries around the world, what do you think she would find most amazing (after getting over the shock of jet travel): the massive improvement in health, comfort, and life expectancy, and the reduction (though hardly elimination) of human misery; or that the average global temperature is a degree or two higher? If we allow entrepreneurship, global trade, and innovation to continue, the same will be true a century from now.

The true threats to the human condition are war, tyranny, statism, despots, malaria, and poor water quality. This was the case a century ago, and holds equally true as we look to the next century. Global misery over the next century will be massively reduced if we are not visited by the likes of Hitler, Stalin, Mao, and Pol Pot, but will be unaffected by a degree or two change in average global temperature. This is the Convenient Truth. It is sad that while efforts to reduce malaria and improve global water quality receive scant political, educational, or media attention, kneeling to the green god is de rigueur. Nigel Lawson appropriately named his recent book "An Appeal To Reason: A Cool Look At Global Warming." Let us know if after reading this book you still believe that global warming is a serious threat to our way of life. We are confident that our phones will remain silent.

The Linneman Letter Look-Back: **Japan & Germany**

In the Summer 2003 issue of *The Linneman Letter*, we compared the Japanese and German economies to the U.S. economy. We concluded that due to the lack of possible reforms and flexibility in both Japan and Germany, both economies would face major future problems.

"The U.S. economy is the most powerful, diverse, dynamic economy in the history of mankind... We continue to encourage innovation and to admire entrepreneurial success. This is in notable contrast to most developed countries, where success and entrepreneurship are discouraged, and only half of the economy is in the private sector.

In contrast to the U.S., there are good reasons to bet against the Japanese economy, which has essentially not grown for the past 13 years, although it is the world's second largest economy... The Japanese are locked in a death dance about who is ultimately going to bear the burden for the collapse of their bubble, which occurred 13 years ago. Japan's population is aging and declining. The government accounts for almost 50% of the economy directly, and very little of importance occurs without the heavy hand of bureaucrats. Japan continues to bail out bubble mistakes, making it difficult for entrepreneurial entrants. While Japan offers some investment opportunities, it is a risky place to invest because it lacks fundamental growth drivers.

One can also make a case for betting against the German economy over the next several years, as the world's third largest economy faces severe structural problems... Germany has high-cost and inflexible labor and product markets, with their economy modeled on our public school system... Firms cannot move within Germany to avoid union and labor problems. Not least among Germany's problems is its aging population. Absent immigration, Germany will experience substantial negative population growth. And unlike in the U.S., where immigration is generally valued, immigration is a highly contentious political issue in Germany. Absent significant population growth, and in the presence of a government that comprises almost half of the economy, with high taxes, an over-valued currency, rigid markets, and a weak financial system, the outlook is not good for the German economy..."

The Great Capital Strike: Impact on Europe and Asia

Exactly five years ago, in the Summer 2003 issue of The Linneman Letter, we compared the Japanese and German economies to that of the U.S. We concluded that due to the lack of reforms and inflexibility, both Japan and Germany would face major economic problems,

Recent data for both Japan and Germany are very weak. This is in large part because they failed to implement structural reforms during “good times,” and now are suffering much more than the U.S. due to their continued economic rigidity.

particularly during a large-scale economic downturn. On Germany (the world’s third largest economy), we wrote: “In the presence of a government that comprises almost half of the economy, with high taxes, an over-valued currency, rigid markets, and a weak financial system, the outlook is not good for the German economy....” On Japan (the world’s second largest economy), we wrote: “The government accounts for almost 50% of the economy directly.... Japan continues to bail out bubble mistakes (from 13 years ago), making it difficult

for entrepreneurial entrants. While Japan offers some investment opportunities, it is a risky place to invest because it lacks fundamental growth drivers.”

Unfortunately, in the face of the Great Capital Strike, our prescience has played out. Recent data for both Japan and Germany are very weak. This is in large part because they failed to implement structural reforms during “good times,” and now are suffering much more than the U.S. due to their continued economic rigidity.

Europe

Negative repercussions from the Great Capital Strike in the U.S. have spread across the Atlantic. Second quarter 2008 GDP growth rates in major E.U. nations, including Italy, France, and Germany were negative. The U.K. eked out positive second quarter growth of a mere 0.037% (0.15% annually). In addition, the E.U.-15, the E.U., and the Euro Area all experienced negative quarter-over-quarter growth in the second quarter of 2008, in the face of substantial losses taken by financial institutions.

Inflation in Europe is on the rise, driven by abnormal increases in food and energy prices. Annual inflation (all goods) for European countries tracked by the Organisation for Economic Co-Operation and Development (OECD) was 4.1% in the second quarter of 2008. However, core inflation, which excludes food and energy prices, was 2.1% for the same period. The same phenomenon also holds for France, Germany, Italy, and the U.K. Yet the European Central Bank remains fearful of inflation, and maintains its deposit facility rate at 3.25%.

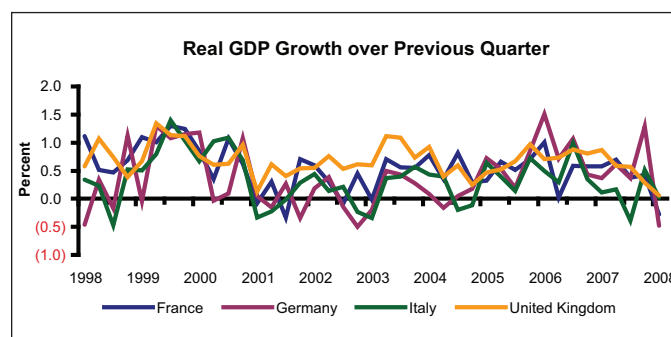


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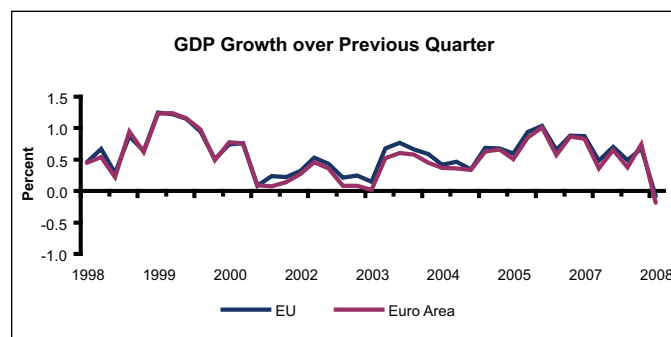


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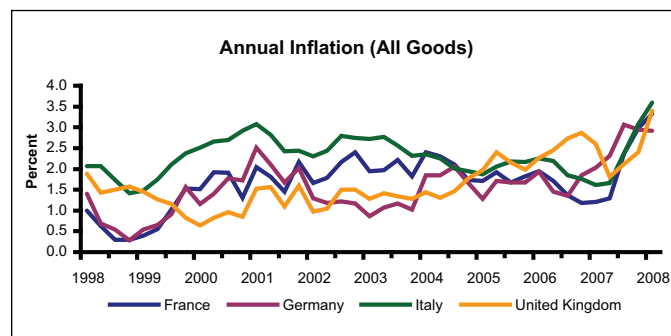


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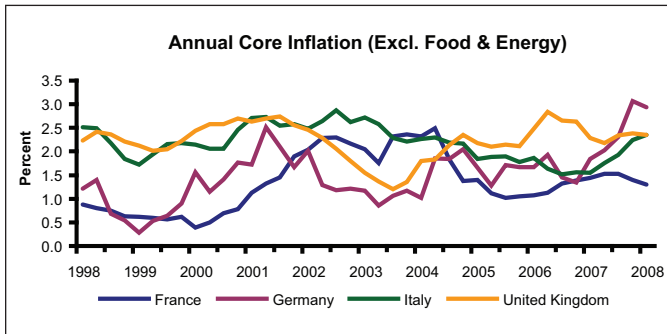


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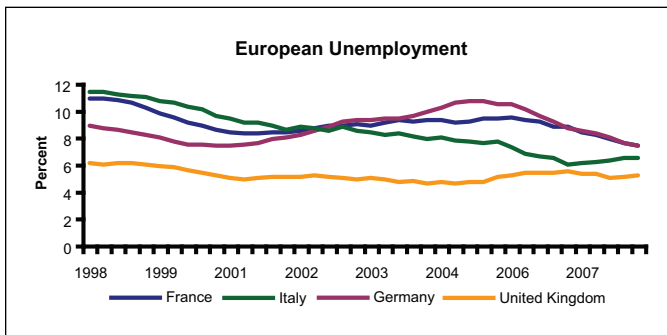


figure 166

United Kingdom. The Great Capital Strike, burgeoning government spending, and inflation are rapidly eroding the U.K. economy. Real annual GDP growth rates in the U.K. had not fallen below 2% since the first quarter of 2006. However, the streak was broken in the second quarter of 2008, with 1.4% annual GDP growth. In the first quarter of 2008, U.K. inflation hit 2.4% (1.2% core), rising to 3.4% (1.5% core) in the second quarter. The pound remains 35-40% over-valued on a purchasing power parity basis against the U.S. dollar. Unemployment rose in the second quarter of 2008 by 10 basis points to 5.2%, but remains 40 basis points lower than in early 2007.

U.K. banks are victims of the Great Capital Strike, with LIBOR spreads over central bank rates at roughly 78 basis points in September 2008 (versus an average of 69 basis points in the preceding 12 months, and 11 basis points in the previous year). The household bank debt burden in the U.K. is greater than in the U.S., and the U.K. mortgage-backed securities market is on life support.

European non-residential construction permits remain flat, while residential permits continue their 4-year 10% annual decline. With banks tightening credit and weak housing fundamentals, residential construction will not rise until 2010.

U.K. housing prices have declined for nine straight months through July 2008, with prices falling another 1.7% in July. Meanwhile, downward pressure on asking rents and escalating leasing concessions and TIs are the norm, and development projects are being shelved due to the lack of financing. The retail sector has also been affected by the economic slowdown and rapidly declining consumer confidence.

Germany. Germany's economy is struggling. Real quarter-over-quarter GDP grew by only 1.3% in the first quarter, and experienced negative growth of 0.5% in the second quarter. Inflation for all goods has been roughly 3% over the last three quarters through June 2008. Core inflation was 1.9% in the fourth quarter of 2007, and dropped to 1.1% in the second quarter of 2008. Unemployment stands at 7.5%, down 10 basis points from the first quarter, and 103 basis points over the past year. Yet domestic consumption declined by 0.8% in the fourth quarter of 2007, and has only grown by 0.7% through the first two quarters of 2008.

Since 2000, net exports have grown dramatically, hitting a high of 8% of total GDP in 2007. But through the first two quarters of 2008, Germany's net exports declined by 0.4%, due to lower global growth and an over-valued euro. The commercial real estate market in Germany remains in limbo, with vacancy rates declining in all major markets except Frankfurt, which is up 20 basis points. Loan pricing has been stable, but very selective, as the Pfandbrief has allowed German banks to maintain some liquidity. Transaction volume is small for CMBS, at less than \$1 billion. The failure to reform labor and product markets during the global boom haunts Germany, as it lacks the flexibility necessary to survive weak demand.

France. Another economy which failed to reform during the global boom is France, where second quarter real GDP growth was 1% year-over-year, but registered a 0.3% decline in the first quarter of 2008. Inflation in France jumped to 3.3% in the second quarter, up from 2.9% in the previous quarter, and from 1.2% one year earlier. Core inflation was 1.3% in the second quarter of 2008, flat from the previous quarter, but down from 1.4% the previous year.

Second quarter unemployment stands at 7.5%, down 97 basis points over the past year. But an economic slowdown is underway, with output falling to its lowest

point since 2003, low consumer confidence, weak domestic demand, and an over-valued euro that is strangling non-EU exports.

Asia

The Great Capital Strike has had only a very limited impact on China and India. Instead, these economies face domestic challenges and accelerating inflation. In contrast, Japan has seen a collapse of real estate values in spite of interest rates below 1%.

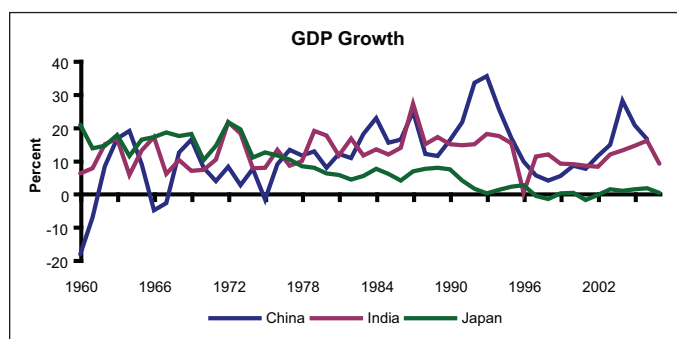


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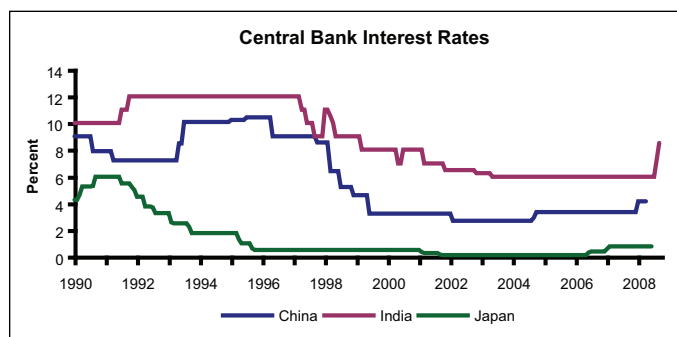


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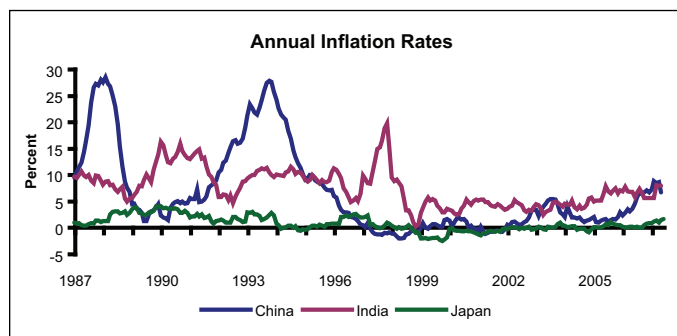


figure 169

China's inflation rate remains a serious concern, hovering in the 6-8.5% range. Recent rate increases by the People's Bank of China are an attempt to reduce inflation. However, the lack of a typical monetary mechanism makes these efforts unlikely to succeed. While official unemployment remains in the 4% range, it is widely believed that unemployment is far higher, particularly in rural areas. Real GDP growth declined from 11.9% in 2007 to 9.5% in 2008, even as net exports decreased due to an over-valued currency and weakening Western demand. The current account surplus stands at 9.3%.

Commercial real estate demand remained positive, with office vacancy rates edging downwards, and rental rates generally increasing. Hong Kong, still China's financial capital, remains surprisingly unaffected by the Great Capital Strike, with most major financial institutions reporting only small write-offs.

Hong Kong Class A office rental rates increased by 4.9% to \$119 per square foot per year. Rates in the CBD pushed up to \$190 per square foot, causing some tenants to look outside of the CBD. Beijing saw a slight slow-down in construction, due to a government-imposed restriction on fit-out certificates prior to the recent Olympics. And while the earthquake in Chengdu inflicted only limited damage on major office properties, a survey by Colliers International reveals that 85% of investors are rethinking their strategies in that market.

China's inflation rate remains a serious concern, hovering in the 6-8.5% range.

India has been largely unaffected by the Great Capital Strike, but its economy is slowing due to weakening domestic demand. However, as Western companies suffer flattening profits, an increasing number are exploring India's lower-cost opportunities. High interest rates and accelerating inflation have taken a toll on domestic demand, and real GDP growth is forecasted to be "only" 7.7% in 2008, down from 9% in 2007. Inflation remains a major concern, reaching a 13-year high in July of 11.1%. This is a dramatic jump from the 8.8% inflation recorded in May. As a result, the Reserve Bank of India is tightening monetary policy, raising key lending rates to 8.5% (by 75 basis points) since the start of June. However, the lack of a strong monetary system makes it unlikely that this policy will be effective.

India's real estate industry has taken a turn for the worse, as high interest rates have made capital expensive. Construction costs are rising, and as a result, investors are adopting a "wait-and-see" attitude. A further hindrance has been the poor performance of recent real estate IPOs.

In the longer term, developers are looking to secondary cities for expansion, and utilizing more environmentally friendly plans. In the residential market, luxury homes remain the catalyst of growth.

Key interest rates in Japan have now been below 1% for 13 years, and real rates are effectively zero.

Mumbai saw the addition of 2.6 million square feet of Class A office space through April of 2008, with most built in the outer submarkets. The CBD vacancy rate remains below 2%, while suburban vacancy jumped due to new supply. Rental rates remain flat.

New Delhi is similar, adding 2 million square feet of office space, primarily in the outer areas, while maintaining low vacancy rates. Rental rates in New Delhi average about \$108 per square foot. Bangalore faces a potential over-supply, as 2 million square feet of Class A office space came online in the first half of 2008. Vacancy rates remain below 4%, but are softening.

Finally, political uncertainty remains a bane, with Prime Minister Singh barely surviving a no-confidence vote in late July. This political situation will remain tenuous at least until the May 2009 general election.

Japan's economy was stronger than expected in the first half of 2008, but only because our expectations were so low. Real GDP is expected to grow by less than 1% in 2008 and 2009. The Bank of Japan maintains a loose monetary policy, with its overnight call rate at 0.5%. Key interest rates in Japan have now been below 1% for 13 years, and real rates are effectively zero. The yen has been depreciating against the U.S. dollar since the middle of March, and unemployment stands at 4% in June.

The ruling LDP is expected to avoid early elections, and Prime Minister Fukuda, who escaped a censure motion by the House of Councillors has recently resigned, causing a typical Japanese political vacuum.

Some good news is that industrial land values in Tokyo, Osaka, and Nagoya increased in late 2007 for the first time since 1991. The gain for commercial land in Tokyo's 23 wards was 15.9% in 2007. Rents in Tokyo have increased 60-70% in the past three years, while cap rates are 3-5%.

Market Close-up: Boston Office

Overview and Economy. The Boston office market witnessed a significant demand slow-down during the second quarter of 2008. The region experienced negative net absorption of nearly 500,000 square feet in the second quarter, wholly in suburban markets. The vacancy rate increased by 20 basis points to 11.3% (6.4% in Downtown Boston, and 14.2% in the suburbs), from 11.1% in the first quarter of 2008. Average rents were about \$56 per square foot for Downtown Boston, and just under \$22 per square foot in the suburbs, decreases of 0.3% and 1.6%, respectively compared to the first quarter of 2008. Developers continue to bet on strong growth in the Boston MSA, with a 3-year construction pipeline at 7.1 million square feet, comprising about 4% of total stock.

With education and health services fueling Boston's job base, the MSA experienced employment growth over the last year. During the first half of 2008, 8,600 jobs were added, bringing total employment to 2.42 million at the end of the second quarter, a 0.36% increase over the second quarter of 2007. Over the last four years, the Boston metro area has experienced slow but relatively

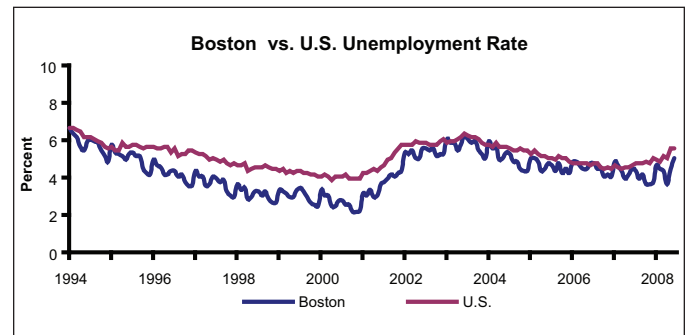


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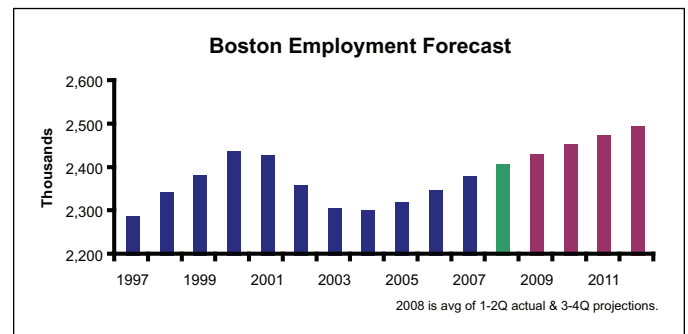


figure 171

steady job growth, adding 109,000 jobs for 1.6% growth per year. MSA employment peaked in the fourth quarter of 2000, at 2.5 million, and dropped to 2.26 million in early 2004. With 2.42 million current jobs, the MSA has gained 163,000 from the 2004 low, but has not yet achieved the high reached in 2000. Educational services (the largest employment sector) and health services posted the largest employment gains, while manufacturing posted the largest decline.

Metro area unemployment currently stood at 5% in July, a 60-basis point increase over January 2008. The region continues to outperform both state and national unemployment levels (5.3% and 5.7%, respectively at that time).

Absorption and Vacancy. In the second quarter, the metro area registered 491,000 square feet of negative net absorption, of which -533,000 square feet were in the suburbs, slightly offset by +42,000 square feet downtown. Downtown Boston saw its fifteenth consecutive quarter of positive absorption, led by the Boston CBD, Seaport, South Station, and Fenway/Kenmore Square submarkets. The Boston CBD and Seaport submarkets posted the largest net absorptions, at 259,000 and 125,000 square feet, respectively. Back Bay and Midtown saw the greatest negative net absorptions, at 155,000 and 136,000 square feet, respectively.

Two of the largest leases of the quarter were signed by State Street and J.P. Morgan. This financial sector expansion is in sharp contrast to office space trends occurring in other major markets. Suburban submarkets experienced their first negative net absorption level since the first quarter of 2007. Metro West witnessed 230,000 square feet of negative net absorption, headlined by IBM's headquarters consolidation. Following a strong first quarter with 852,000 square feet of positive absorption, suburban Boston still has 300,000 square feet of positive absorption year-to-date.

The MSA had an overall vacancy rate of 11.3% at the end of June, comprised of 14.2% in suburban Boston and 6.4% Downtown. The CBD vacancy rate is one of the lowest in the country. The suburban vacancy rate held steady in the second quarter, and vacancy rates in most submarkets remain lower than in the second quarter of 2007. Metro North has the highest vacancy rate at 17.8%. Fenway/Kenmore Square has the lowest vacancy rate at 2.3%, and Seaport has the lowest Class A vacancy at

2.0%. Vacancy rates in the CBD were 6.1% for Class A, and 9.9% for Class B/C, in the second quarter of 2008.

Rents. Rents fell overall during the second quarter of 2008, to \$35.62 per square foot, with suburban rents declining since the end of 2007. Downtown rents declined for the first time since the first quarter of 2005. But Class B rents Downtown grew for the thirteenth consecutive quarter, to \$38.06. Class A rents Downtown were down \$1.41, to \$68.08. Rents in the Seaport District grew by \$3.47 per square foot in the second quarter (7%), and rents in Midtown increased by \$5.97 per square foot (18.4%), as peripheral office space became a cheaper alternative to the CBD. Metro West has the highest asking lease rates in the suburbs, at \$24.47 per square foot. But it also saw the largest drop in rents since the end of the first quarter, down 4% from \$25.50.

Major leases in the quarter were signed by: Wellington Management (450,000 square feet) at Atlantic Wharf in the CBD; Bank of America (196,000 square feet) at 225 Franklin Street in the CBD; and State Street (170,000 square feet) at 100 Summer Street, also in the CBD. Other significant leases during the quarter include: the renewal by Arbella Mutual Insurance (132,000 square feet) at 1100 Crown Colony Drive in the Metro South Area; J.P. Morgan (103,000 square feet) at 451 D Street in the Seaport District; and Astra Tech (84,000 square feet) at 590 Lincoln Street in the Metro North District.

Development/Construction Pipeline. At the end of the second quarter, the MSA office pipeline consisted of 7.1 million square feet, or 4% of total inventory. With completion dates ranging from the end of 2008 through 2011, projects are spread evenly between Downtown (3 million square feet) and suburban markets (4.1 million square feet).

Notable Downtown completions and developments in the second quarter of 2008 included: the completion of a tower at Atlantic Wharf (517,000 square feet); the completion of two buildings comprising 355,000 square feet at the Christian Science Center; and nearing of a deal at the Postal Service to sell a 16-acre parcel next to Fort Point Channel.

Notable suburban completions and development opportunities included: the completion of a lab facility by Microbia at 301 Binney Street; plans by Alexandria Real Estate Equities to develop 1.5 million square feet of lab space near Kendall Square; and plans for Lane and

Associates' Rivers Edge to complete 115,000 square feet of Class A office space in Preotle by early 2009.

Investment and Sales. The Great Capital Strike has created financing challenges for both sellers and developers of large properties. Total transaction value in the second quarter of 2008 was \$489 million, of which only 14 transactions were valued at more than \$5 million. This represents a remarkable decline from the \$2 billion in average quarterly transaction volume in 2007. The most notable transaction was the Downtown purchase by Ponte Gadea of 50 Milk Street for \$170 million, or \$619 per square foot.

Suburban investors targeted deals under \$100 million, because of the tough financing environment. Still, Colony Realty Partners bought an \$82 million portfolio of four Framingham properties from Maric, Inc. New Boston Fund purchased 350 Granite Street in Braintree from the Campanelli Companies for \$27 million (\$162 per square foot), and MIT purchased a Cambridge portfolio for \$90.5 million.

Developers are struggling to find both financing and tenants, in a chicken and egg scenario. However, Fan Pier and 2 Financial Center continued to make construction progress. The 108,000 square foot Overlook Center in Waltham is under construction.

Average cap rates are still lower than the national average of 7.4%. Specifically, Downtown properties traded at 6%, while suburban transactions are reported at around 6.5%. These cap rates should trend slightly higher, but remain below the national average.

Submarket Review

▪ **Boston CBD.** The CBD is the metro's largest submarket, with over 35 million square feet of space, of which over 25 million square feet are Class A. This market posted the strongest second quarter, with almost 259,000 square feet of positive absorption, entirely driven by Class A space (348,000 square feet of positive absorption), while Class B absorption was negative. Vacancy increased to 7.2% in the second quarter of 2008, composed of 6.1% vacancy for Class A and 9.9% for Class B.

Overall, the CBD recorded a slight decrease in rents, finishing the second quarter of 2008 at \$68.29 per square foot for Class A, and \$40.38 for Class B/C.

▪ **Seaport.** The Seaport district witnessed the largest

increase in rental rate growth. Seaport Class A average rents per square foot were the highest in the metro, at \$74.33. Class B average rents are about half this level. Seaport is only the third largest submarket in Downtown Boston, but has performed well over the last few years. The submarket had a solid second quarter, with almost 125,000 square feet of net absorption. It maintained one of the lowest vacancy rates in the MSA, at 4.2%. Class A vacancy in Seaport currently stands at 2.0%, while Class B is 5.2%.

▪ **Back Bay.** The Back Bay had the weakest second quarter of the Downtown submarkets, posting over 155,000 square feet of negative absorption on an inventory of 13.5 million square feet. A quarter ago, it was the strongest of the three major Downtown Boston submarkets. The submarket's vacancy rate increased 150 basis points during the second quarter, to 6.5%. Demand for Class A space was especially weak, with vacancy rates increasing 210 basis points to 6.2%.

Rents averaged \$71.17 per square foot for Class A, and \$41.48 for Class B. At the end of the first quarter, the Back Bay submarket was the most expensive office district in the MSA. Following a flight to lower rents, Back Bay average asking lease rents have moved downward.

▪ **Metro West.** Metro West is the largest submarket, at over 48 million square feet. With almost 231,000 square feet of negative absorption in the second quarter, the submarket's vacancy rate decreased 10 basis points to 13% (7% for Class A), making it the lowest in suburban Boston. The second quarter finished with Metro West office buildings commanding \$24.47 per square foot. This ranged from the area along Route 2, with the lowest average rents at \$16.47 per square foot, to nearly \$30 per square foot along Route 128.

▪ **Metro North.** Metro North is the second largest submarket, with a total inventory of over 38 million square feet. The submarket posted 230,000 square feet of negative net absorption in the second quarter. However, the vacancy rate decreased by 30 basis points to 17.8%. The Route 495 Northeast area had the highest vacancy rate at 28.4%, while the close-in suburbs registered a vacancy rate of 7.3%. Second quarter Metro North rents averaged \$20.46 per square foot, flat from the first quarter of 2008.

Opportunities and Challenges. The Boston MSA office market is hardly recession-proof. The education

and health services industries provide a solid base, but most other sectors are very cyclical. With a downturn, Class B and outside-CBD properties should lose the most, as tenants exploit rising vacancy to upgrade their space.

Sublease space experienced substantial expansion, totaling almost 4.4 million square feet. Downtown registered above-average tenant improvements, at \$35 per completed square foot in the second quarter. Upward pressure on TIs will continue as new projects are completed and landlords strive to keep vacancy rates down.

Outlook

We expect economic growth to continue in the Boston MSA, albeit at a slower pace. Our forecast is for 95,000 jobs to be added through 2011, a compounded annual increase of 1.1% per year. However, we believe that the combination of the construction pipeline and flat to declining absorption levels will edge the vacancy rate up from 11.3% today to 12.1% by year-end 2010. Then, as the U.S. economy strengthens, we expect the Boston office market vacancy rate to decline to 10-10.5% by the end of 2013. Rent growth will slow as the market absorbs the current development pipeline.

In previous issues (Spring 2007, Summer 2008) we have discussed a covariance analysis that appeared in full in the Spring 2007 *Wharton Real Estate Review*. In that analysis, we examined how various economic indicators behave in individual metropolitan areas, based on national economic changes. For each MSA, we calculated a “beta,” which summarizes how a 100-basis point change at the national variable affects the local indicator. The beta for the U.S. as a whole is defined as 1. Thus, an MSA with a beta of 1 registers (on average) an increase of 100 basis points in employment growth (around its trend) when national employment rises by 100 basis points. A beta that is less than 1 indicates that the MSA does not boom (or bust) to as great an extent as the national economy, while a beta of greater than 1 indicates that such an MSA will experience swings of much greater magnitude (compared to the local trend) than the changes at the national level.

With an employment trend beta of 1.5, Boston’s employment base responds 50% more (around its mean) than the movement at the national level. In other words, Boston is very vulnerable to declining U.S. employment.

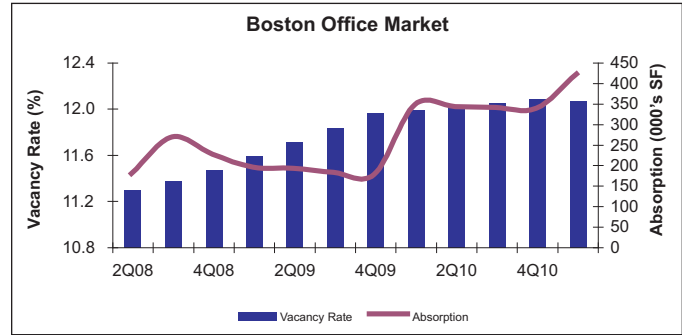


figure 172

Market Close-up: Houston Industrial

Overview and Economy. The Houston industrial market has been one of the fastest growing markets in the U.S. in 2008, but higher availability rates signal growing imbalance. With 430 million square feet of industrial inventory, Houston is the seventh largest of the markets we cover in *The Linneman Letter*. Houston is currently one of the strongest economies in the U.S., due to booming oil prices.

It is one of the only markets with a growing manufacturing sector. The oil industry’s boom has made the Port of Houston one of the busiest in the U.S. Plans to increase the width of the Panama Canal by 2014 would generate increased demand from Asian markets. The area is also a major railway distribution hub. All of these factors contribute to Houston’s strong position as an industrial hub. In the second quarter of 2008, Houston experienced positive absorption, but saw an increase in vacancy rates.

MSA employment peaked in the fourth quarter of 2000, at 2.06 million, dropping to a low of 2.02 million in mid-2003. Metro area employment currently stands at 2.33 million, an increase of nearly 2% over the 12 months through the second quarter of 2008. Notably, Houston’s manufacturing employment base increased 1.3% over the last year, highlighted by a 3.9% jump in manufacturing jobs specifically related to the oil industry.

Nonetheless, the metro area unemployment rate has increased by 60 basis points since the end of the first quarter, to 4.7% in June 2008. Yet unemployment was below both state and national levels of 4.8% and 5.7%, respectively.

Absorption. Absorption for the second quarter of 2008 was 1.36 million square feet, bringing year-to-date absorption to 2.35 million square feet. Almost all of the positive absorption was in the warehouse/distribution

sector, with the flex and R&D sectors absorbing only about 55,000 net square feet. The majority of absorption took place in the Southeast (717,000 square feet) and Southwest (330,000 square feet). While the Northeast (-350,000 square feet) experienced negative net absorption for the quarter, it lacks large blocks of contiguous available space. Thus, vacancy rates are expected to fall in Northeast Houston.

Vacancy Rates. The second quarter availability rate was 8.6%, an 80 basis point increase from the first quarter, and a 110 basis point increase over the second quarter of 2007. About 32.7 million square feet were available, out of a total of 430 million square feet, with 6 million square feet representing sublease space. The direct vacancy rate of 7.0% represents a 62 basis point increase from the first quarter of 2008, and 2.9 million square feet of additional vacant industrial space.

Construction outpaced demand for the third consecutive quarter. The lowest vacancy rates were found in the CBD, South, and Northeast Houston at 3.0%, 3.9%, and 4.9%, respectively.

Rental Rates and Leasing. Metro area rents increased 2.2% from the first quarter of 2008, or by

\$0.12, to \$5.57 per square foot. Effective rents increased by 3.2%, to \$5.45 per square foot. After the dramatic 27% rent increase in 2006, rental growth has slowed, but remains positive. However, Houston remains one of the most affordable major industrial markets in the nation. In the second quarter, warehouse rents increased the most at 12.7% (\$0.67 per square foot), to \$5.93 per square foot. R&D/flex rents increased 5.7% (\$0.42 per square foot) to \$7.73, while distribution/warehouse rents fell slightly, down \$0.03 to \$4.90 per square foot.

Industrial space in the Southeast (near the Houston Seaport) and the North (near Houston International Airport) are experiencing upward pressure on rents, as higher transportation costs make these locations more attractive. Rents at newly completed properties are also on the rise.

Recent major leasing transactions included: Home Depot (535,000 square feet) at 8103 Fallbrook Drive in Northwest Houston; Fairfield Industries (266,000 square feet) at 1140 Gillingham Lane in Southwest Houston; and Frontier Leasing Co (247,240 square feet) at 1701 Powell Road in Southeast Houston. Mid-size transactions included: Lone Star Fashion (221,900 square feet) in 8919 Market Street in Southeast Houston; Schenker Logistics (147,000 square feet) at 6911 Fairbanks N Houston Road in Northwest Houston; and Georgia Gulf Corp (141,533 square feet) at 9033 Spikewood Drive in Northeast Houston.

Construction. About 4.1 million square feet, in 41 buildings, were delivered to the market during the second quarter of 2008, a 95% increase over the first quarter. The construction pipeline through 2011 stands at about 14 million square feet. But of that, only 6.4 million are under construction with expected completion by the end of 2008. Another 7.6 million square feet remain in the planning stages. In total, 12.5 million square feet will be delivered by year-end 2008, an increase over the 9.5 million square feet added in 2007. Most of the current construction activity is taking place in the North, Southeast, and Northwest (totaling 5.2 million square feet). All of these submarkets experienced positive absorption in the second quarter.

Submarket Review

▪ **Houston CBD.** At 54.6 million square feet, the CBD is Houston's third largest industrial district. The area has

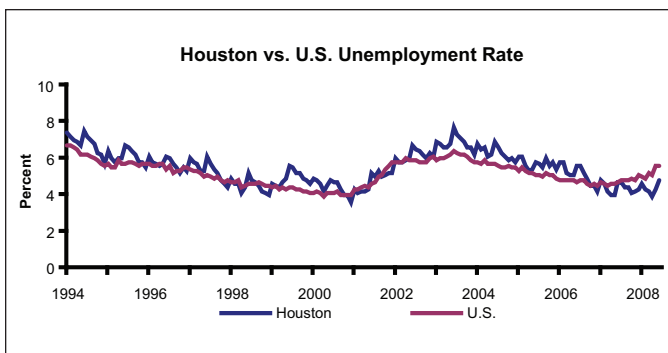


figure 173

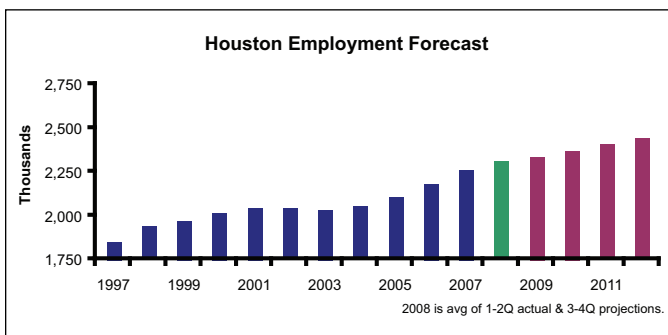


figure 174

the lowest vacancy rate in the metro area, at just under 3%, which is down 53 basis points from the first quarter of 2008. The CBD had negligible absorption at 17,000 square feet in the second quarter, and no construction pipeline.

▪ **Southeast Houston.** At 60.2 million square feet, the submarket is the second largest in the Houston metro area, and had the highest absorption level at about 715,000 square feet in the second quarter, compared to about 385,000 square feet of negative net absorption in the first quarter of 2008. Yet the vacancy rate increased by 182 basis points in the second quarter, and remains the highest in the Houston metro area, at 11.6%. Construction activity stands at 1.6 million square feet, second among all submarkets.

▪ **North Houston.** With 51.5 million square feet, the submarket is currently the fourth largest in the metro area. Absorption was nearly 120,000 square feet in the second quarter, following about 580,000 square feet in the first quarter of 2008. The vacancy rate of 9.9% represents a 200 basis point increase over first quarter, the greatest of any submarket. The submarket also has the largest current construction pipeline, at 2.2 million square feet. Expect vacancy rates to rise in the submarket as construction is completed.

▪ **Northwest Houston.** At 105.4 million square feet of inventory, Northwest Houston is the largest submarket in the Houston metro area. Absorption was 350,000 square feet in the second quarter, bringing year-to-date absorption to more than 840,000 square feet, the most in the MSA. The vacancy rate of 6.5% is a 20 basis point increase over the first quarter. The construction pipeline is 1.4 million square feet, the third highest in the metro area. With its prime location, the construction pipeline should be relatively easily absorbed. Look for vacancy rates to fall and high rents to be maintained.

▪ **Northeast Houston.** With only about 27.4 million square feet, Northeast Houston is the smallest submarket in the metro area. Yet it experienced the largest negative net absorption in the second quarter, at -156,000 square feet. This follows 125,000 square feet of positive absorption in the first quarter. The submarket has a low vacancy rate (4.9%), but saw a 22-basis point increase during the first quarter. The construction pipeline is 84,000 square feet.

Sales and Investments. Investment opportunities in the Houston industrial market have become more selective

due to the Great Capital Strike. Yet the market has seen a few major (and tightly underwritten) transactions in the second quarter. The oil and gas industries continue to drive the economy and create investment opportunities. Through the first half of 2008, institutions invested close to \$328 million in 27 transactions. Average sale prices were \$62 per square foot, with average cap rates at 8.6%, well above the national average of 7%. Sales included: the Nelson Duffie Portfolio (21 buildings totaling 512,500 square feet) to Jaymar Estate for \$23 million; Glazer Foods' sale-leaseback of its headquarters and distribution center (286,000 square feet) to GSL Welcome Group LLC for \$30 million, or \$105 per square foot; and 6300 West by Northwest Blvd (150,013 square feet) to Carson Companies for an undisclosed price. Interra Properties bought 9303 West Sam Houston Parkway (80,266 square feet), and Jefferson Triangle bought 4263 Decoma (76,615 square feet).

Market Opportunities and Challenges. The Houston industrial market has a promising outlook even though there are challenges ahead. The strong oil and gas industry is fueling the economy in Houston and creating steady demand. But construction activity outpaced the demand for space in the near term, increasing availability rates. An excess supply of space will hamper near-term rental growth.

Outlook

The economic outlook in Houston looks relatively strong for the near future, as long as oil prices remain above \$60 per barrel. We forecast that the market will add 21,000 jobs in the second half of 2008, with an additional 32,000 new jobs in 2009. From 2010 through 2012, we estimate that the Houston region will add approximately 106,000 new jobs in total.

The Houston industrial construction pipeline indicates that as much as 14 million square feet of new space will be added to the market through 2011. Despite this, we project that absorption will remain steady and vacancy rates will decline to 7.2% by 2010, and to 6.6% by 2011.

With an employment trend beta (see the discussion at the end of the Boston Office Market Close-up in this issue) of 0.8, Houston's employment base responds 20% less (around its mean) than any change in employment at the national level. Unlike Boston, Houston's economy and job growth trends provide a partial buffer to large swings (in either direction) in U.S. employment.



figure 175

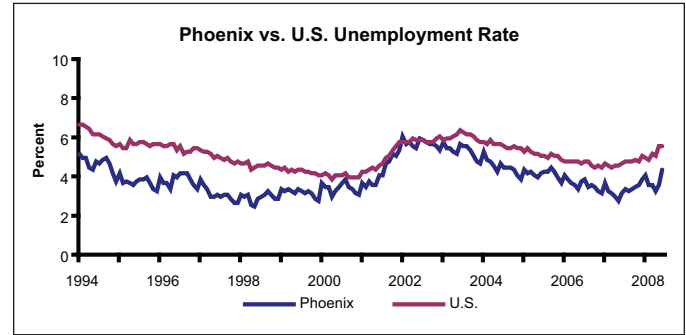


figure 176

Market Close-up: Phoenix Multifamily

Overview and Economy. At just over 1.76 million jobs, the Phoenix MSA is the thirteenth largest in the U.S. and has experienced dramatic growth over the past decade. The MSA is home to six Fortune 500 companies. Top employment sectors in the region include trade and transportation, professional and business services, educational and health services, and government.

Employment growth in the region has averaged 2.5% per annum for the past eight years, with the lowest growth in 2001, at only 0.04%. Unlike other MSAs, the Phoenix employment base did not have a pronounced peak during the tech boom. MSA employment reached 1.5 million in 2000, dropped to 1.43 million in mid-2001, but then moved back up to 1.48 by year-end 2001. The employment base reached 1.77 million at the end of 2007, but has since retreated to 1.72 million as of June 2008 (-2.8% over six months). The recent downward trend is primarily due to a 10.4% year-over-year reduction in construction, particularly in the residential sector. However, this was partially offset by employment increases in the healthcare and government sectors. The overall unemployment rate for the metro area climbed to 4.3%, well below July's national rate of 5.7%.

Although it has been one of the hardest hit real estate markets during the Great Capital Strike, the multifamily segment in Phoenix has been fairly resilient. The impact of the conversion of single family homes and condominiums to rentals has been partially mitigated by a much needed slow-down in new construction. Demand for apartments will remain relatively healthy as the ownership market in Phoenix suffers. Median single family home prices fell 18.8% to \$217,000 in the first quarter of 2008.

Vacancy Rates and Absorption. Vacancy rates in the greater Phoenix MSA stood at 8.7% at the end of the first

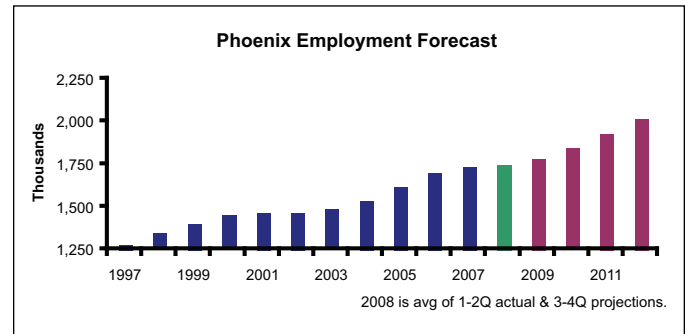


figure 177

quarter of 2008 (latest available), up 60 basis points from year-end 2007. Due to an increased number of condo-conversions into apartments, the Class A vacancy rate climbed to 7.9% (up 60 basis points year-over-year), while lower-tier properties have seen even more dramatic increases to 8.7% (up 130 basis points year-over-year). In the first quarter of 2008, only 700 new units were brought online, 50% fewer than a year earlier.

Rents. Due to the relatively healthy demand for apartments in the Phoenix MSA and the drastically reduced new supply coming online, rents in the metro have held in 2008. Asking rents stood at \$779 per month at the end of the first quarter, a 3% year-over-year increase. Meanwhile, effective rents increased 2.1% over the previous year to \$715 per month. The outlook for rent growth for the remainder of 2008 is fairly weak, due to the increased supply of homes and condos for rent. While year-end asking rents may rise modestly, effective rents are likely to decline.

Construction. Construction of new properties has slowed significantly, as more condominiums are being converted into rentals and construction financing has become difficult to obtain. The multifamily inventory in

Phoenix stands at approximately 223,000 units. Since the first quarter of 2007, a total of 4,900 units have been brought online, representing a 2.2% increase. However, only 700 units were delivered in the first quarter of 2008, a 50% drop over the same period a year earlier. The pipeline indicates that 3,800 units will be completed in 2008, a 31% decrease from 2007. Similarly, building permits awarded have dropped dramatically, from 9,800 units in 575 properties in 2007, to just over 3,500 units year-to-date.

Submarket Review

▪ **Central Phoenix.** The Mountain View Apartment Complex in Central Phoenix was recently sold for \$10.5 million (\$70,000 per unit), in line with the market average. This submarket has one of the lowest rental rates of the MSA, at \$666 per month, but has the highest area vacancy rate at 8.4%, a 130-basis point increase over a year prior.

▪ **Mesa.** Unimodal Inc. has proposed a six-mile SkyTran transportation system that would ease movement between the Phoenix-Mesa Gateway Airport and Downtown Mesa, increasing the appeal of this submarket. The average first quarter rental rates in East and West Mesa were \$714 and \$611 per month, respectively. Vacancy rates have held steady at 7.7% and 8.4%, respectively.

▪ **Scottsdale.** The South Scottsdale multifamily vacancy rate was 5.2% in the first quarter of 2008. Landlords continue to drive that rate downward at the expense of effective rents. South Scottsdale rents averaged \$810 per month, while North Scottsdale rents averaged \$957 per month. The North Scottsdale vacancy rate stood at 7.5%, up 270 basis points year-over-year.

▪ **Tempe.** The Tempe submarket could see an increase in demand this fall, in response to an increase in on-campus living expenses enacted by Arizona State University. South Tempe, where the ASU Tempe campus is located, had an average effective rent of \$810 per month and a vacancy rate of 8.4%. Tempe's northern region average rent was \$737 per month, with a 7.2% vacancy rate.

Market Opportunities and Challenges. The hottest growth areas in the MSA over the next five years are expected to be the Central Phoenix submarket, as well as Downtown and Southern Mesa. More than \$3 billion in public and private redevelopment efforts are underway in Downtown Phoenix, with the most immediate growth expected in the city's bioscience community and along

the new light rail system. The 20-mile light rail system, scheduled to open in December 2008, will run from Northwest Phoenix through Southeast Mesa. This project is viewed by many residents as long overdue, and should encourage growth in the regions surrounding the light rail modes. In addition, by 2010, a new campus of Mesa Community College in Downtown Mesa will improve rental demand in the region.

Significant challenges to this growth in the short term are largely a result of the Great Capital Strike. As a result of more stringent loan terms and a general lack of institutional capital, sales and new construction loans have slowed to a trickle. Further job losses in the real estate and construction industry will continue to put upward near-term pressure on vacancy rates.

Outlook

The multifamily housing market in Phoenix will remain soft through year-end 2008. We forecast that the market will add about 25,000 jobs in the second half of 2008, with an additional 45,000 new jobs in 2009. From 2010 through 2012, we estimate that the Phoenix region will add approximately 250,000 new jobs in total.

Job losses focused in real estate and construction will continue to put upward pressure on vacancy rates in the Phoenix metro area. Growth will be concentrated in the Central Phoenix and Mesa submarkets, due to the new light rail system and a thriving bioscience sector. In the long-term, we expect Phoenix to continue with above average employment growth, but for the remainder of 2008, employment growth will be weak.

As Phoenix multifamily supply and demand fundamentals come back into balance, we expect vacancy rates to rise initially, by 40 basis points by year-end 2008, but then to decline for the remainder of our projection. Our projections indicate that the market vacancy rate could be 5.8% by 2010 and 2.3% by 2011 if there are no changes to the current construction pipeline.

With an employment trend beta (see the discussion at the end of the Boston Office Market Close-up in this issue) of 1.3, Phoenix's employment base responds 30% more (around its mean) than any change in employment at the national level. While Phoenix's employment moves in the same direction as that of the U.S. job base, it does so with 30% greater magnitude as compared to Phoenix's historical employment trend.

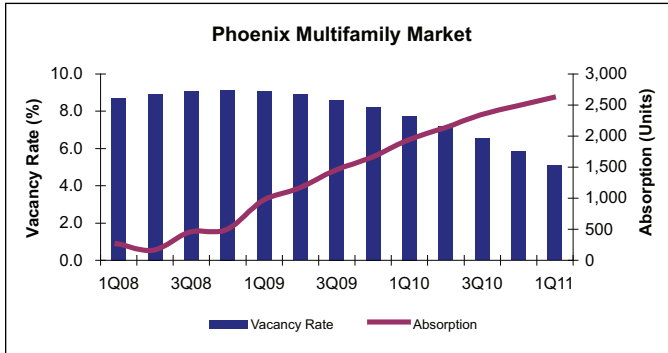


figure 178

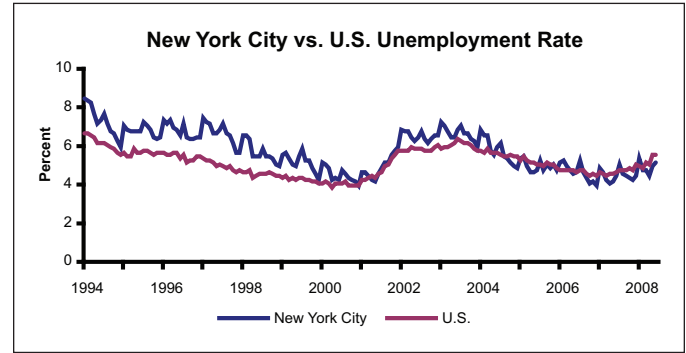


figure 179

Market Close-up: New York Hotel

Overview and Economy. The New York metropolitan area is the largest MSA in the U.S., and one of the world's major centers of commerce and finance. The city also exerts global influence in media, education, entertainment, arts, fashion, and advertising. Its role as home to the United Nations makes it a focal point for international affairs. With both economic and demographic diversification, New York City remains a desirable location for global businesses. New York houses the most Fortune 500 company headquarters of any MSA in the country. It is also home to Broadway, the center of the theater industry, as well as numerous tourist attractions.

With an employment beta (see the discussion at the end of the Boston Office Market Close-up in this issue) of 0.7, New York City's employment base responds 30% less (around its mean) than any change in employment at the national level. Even more so than that of Houston (beta of 0.8), New York City's diversified economy provides a partial buffer to large swings (in either direction) in U.S. employment. Of course, given that NYC is at the heart of the current extreme financial market turmoil, this buffer is less applicable than in general macroeconomic downturns.

Employment. At the end of 2000, employment in New York City peaked at 3.66 million jobs. Over the next four years, employment declined before reaching a low of 3.49 million at the end of 2004. The economy then enjoyed three years of growth, surpassing the previous high in 2007. As of the second quarter of 2008, NYC's employment base stood at 3.65 million jobs.

As the U.S. economy has slowed in the face of the Great Capital Strike, New York's unemployment rate has been trending higher. The city's unemployment rate

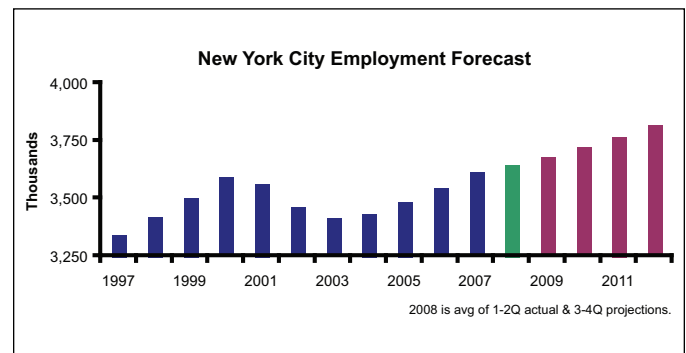


figure 180

climbed to 5.3% in June 2008, from 4.8% in May and 5.0% a year earlier. However, even as the unemployment rate has risen, New York City still ranked below the overall U.S. unemployment rate of 5.7% as of July 2008.

Hotel Market Statistics. New York's hotel performance has strengthened slightly over the past year. According to Smith Travel Research (STR), year-over-year occupancy rates increased by 70 basis points, rising from 82.9% in June of 2007 to 83.6% in June of 2008. Of the 27 cities surveyed here, New York City retains the highest occupancy rate.

STR reports that average room rates in New York City rose by an amazing 10% over the past year through June 2008, to \$278. New York City ranks the highest in terms of average room rate and percent change year-over-year, with Hawaii a distant second (with average room rates of \$172 per night, a 6.1% year-over-year increase) and Miami third (with average rates at \$161 per night, a 4.8% year-over-year increase).

RevPAR increased from \$210 to \$233 over the last 12 months. New York boasts the nation's highest RevPAR, followed by Hawaii at \$132 and San Francisco at \$117.

From a year-over-year growth perspective, New York City ranks second, with a 10.9% increase, between San Francisco (an 11.7% increase) and Boston (a 10.1% increase).

Visitor Trends. 2007 was a record-breaking year for tourism in New York City. Due in large part to the weak dollar, international travelers are flocking to the U.S., with New York a primary beneficiary. According to NYC & Company, the city's tourism and marketing bureau, the travel volume was over 46 million visitors in 2007, 37.8 million of whom were domestic visitors, and 8.5 million of whom were international visitors. Visitor spending totaled an estimated \$28 billion in 2007 (latest available), a 13% increase from 2006. While international travelers made up only 18% of total visitors, they accounted for half of all visitor spending. The largest share (23%) of visitor dollars was spent on food and beverage, while 22% was spent on lodging. Entertainment and culture accounted for 20%, as did shopping. Transportation made up 15% of visitor spending.

Investment and Sales. The hotel investment market was relatively active in the first half of 2007, but has ground to a halt during the Great Capital Strike. The absence of hotel sales is expected to continue into early 2009.

Despite the slowing economy and the Great Capital Strike, hotel room demand remains high in New York City. It is the sixth largest hotel market in the U.S., with more than 82,000 hotel rooms in the metro area in more than 350 hotels. New York City was included in the list of top ten cities cited by hotel investors as an attractive investment site.

Projects in various stages of construction and planning include: the five-star Shangri-La Hotel; the Hyatt Andaz; the "1" Hotel; and a 56-story development at 400 Fifth Ave. Hotel proposals include a building at the corner of 521 Fifth Avenue and the Hotusa Hotels. A bid has also been submitted for the purchase of Helmsley's Park Lane Hotel and a possible Central Park South property. Another property which is on the market is the 100-room Buckingham Hotel.

Construction Pipeline. As a result of a very weak dollar, foreign business and leisure travel has strengthened, and the demand for hotel rooms remains robust. According to Lodging Econometrics, there are 62 hotels (a total of 10,783 rooms) currently under construction. Nine hotels opened in the first two quarters of 2008, with

18 scheduled for completion in the latter half of 2008. In total, 2008 will have seen 27 new hotels, containing a total of 3,592 rooms. In addition, 47 new projects are expected to start in the next 12 months, while 56 are in the early planning stages. However, few of these projects will move forward, due to a lack of construction financing. Projects in the planning pipeline stand at 165, representing over 27,000 rooms at the end of the second quarter 2008.

According to NYC & Company, New York City will add 20,000 newly built and renovated hotel rooms by the end of 2010, with most of that occurring Downtown and in the outer boroughs of Brooklyn and Queens. However, we believe that the number will fall 50-75% short of their forecast, as a result of the Great Capital Strike. 2008 projects include the Downtown Hotel, Cooper Square Hotel, Thompson Smith Tribeca, Hotel Indigo, the VU Hotel, and the Smith Hotel. Other notable 2008 scheduled openings are the Sheraton, Aloft, and the W Downtown Wall Street.

Opportunities and Challenges. 2007 was a record-breaking year for visitors to New York City (46 million), and 2008 is off to an even stronger start. The city is attracting hoards of overseas visitors with money to burn. The city is also capitalizing on the limited additions to the supply of full-scale, high-end hotels. As a result, internationally branded hotels continue to show solid performance. But challenges will face the New York hotel industry if the economy continues to weaken, the dollar strengthens, and too many boutique hotels come online.

Outlook

The New York City employment forecast through 2010 will be characterized by two steps forward and one step back. By the first quarter of 2009, the NYC market is expected to lose another 10,000 jobs from the current level of 3.65 million. However, we expect that NYC will gradually rebound, ending 2010 with 3.78 million jobs. Going forward, we expect the New York metro area's employment base to experience 1.2% compounded annual growth, reaching about 3.9 million jobs by 2013. This would represent an increase of 282,000 jobs from the second quarter of 2008. If U.S. employment declined by 1%, then we would expect NYC's employment base to decline by just 0.7% of its historical trend.

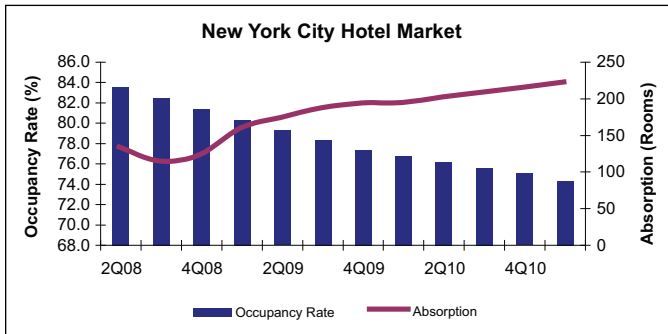


figure 181

Office Market Outlook

For 2008, 32 of the 40 U.S. office markets we cover are projected to see increasing vacancy rates, three are expected to see decreasing rates, and five are projected to remain flat. Increases are not expected to exceed 150 basis points, and any improvements will be minimal. By year-end, we expect Miami and Nashville to see the greatest vacancy increases (150 basis points each), while Fort Worth will experience the largest decrease. Fort Worth, Fairfield County, and Dallas are projected to show the greatest improvements by the end of 2008, while Detroit and Dallas will see the highest vacancy rates.

By 2011, we foresee 22 markets improving. The best markets are expected to be Orlando, Portland, Fort Worth, and New York City, while the worst markets will be Detroit, Austin, and Cincinnati. Using a benchmark of 10% vacancy to proxy a relatively balanced market, only five markets were in balance as of the end of 2007. By the end of 2008, only two markets are projected to remain in balance, New York City and San Francisco. By 2011, Orlando, Fort Worth, Raleigh-Durham, and Fort Lauderdale are projected to exhibit the biggest decreases in vacancy rates, while Nashville, Cincinnati, Miami,

Austin, and Charlotte are projected to show the biggest increases. By year-end 2011, we anticipate that a total of eight markets will have achieved balance. The combination of restrained supply and economic growth will slowly bring office markets back into balance.

The Linneman Real Estate Index (LREI), which compares the fundamental demand for space with the supply of real estate capital, continues to climb. For our new subscribers, the supply of real estate capital (the numerator) is proxied by the aggregate flow of commercial real estate debt, while the demand for space (the denominator) is proxied by nominal GDP. Excluding the net real estate equity flows from the numerator slightly understates an oversupplied market and overstates an undersupplied market. That is, this index tends to understate capital oversupply situations. An index of 100 (base year=1982) indicates that the supply of real estate capital is roughly justified by the current demand for commercial space.

In the second quarter of 2008, the Linneman Real Estate Index (LREI) rose to 169, from 167 in the first quarter and 159 one year earlier. The current LREI level indicates that the balance of commercial mortgage debt in the market exceeds demand for the space financed by that debt by 69%. That is, as we have said, property markets are over-leveraged on a national level. The index has been increasing steadily since the fourth quarter of 1996, when it stood at 91. At that time, the market had a capital shortage, and vacancies were declining steadily.

The second quarter 2008 national office vacancy rate rose to 13.6%, up 40 basis points from the previous quarter and 100 basis points from the same time last year, according to CB Richard Ellis. After declining for two years from the last high of 16.8% in 2004, vacancy rates

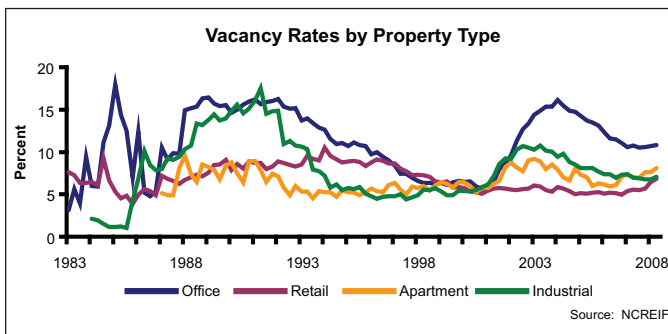


figure 182

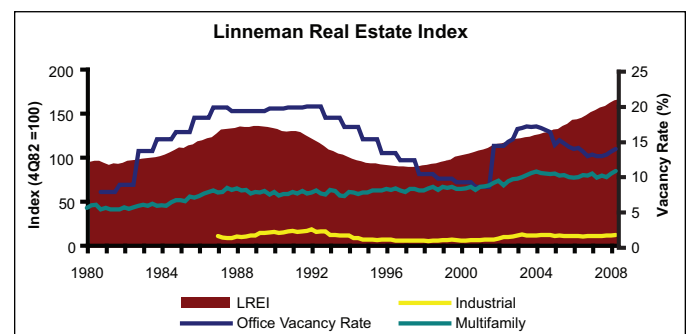


figure 183

Office Vacancy Rates					
Market	2Q08 Act.	YE 2008 Est.	YE 2009 Est.	YE 2010 Est.	YE 2011 Est.
Atlanta	18.7%	19.3%	20.1%	19.7%	18.5%
Austin	15.7%	17.1%	19.8%	21.1%	21.3%
Baltimore	12.4%	12.7%	13.1%	12.8%	12.0%
Boston	11.3%	11.5%	12.0%	12.1%	12.0%
Charlotte	12.1%	13.3%	15.4%	16.6%	17.3%
Chicago	15.4%	15.9%	16.8%	17.1%	17.0%
Cincinnati	18.7%	20.0%	22.2%	23.7%	24.7%
Cleveland	17.7%	17.7%	17.5%	16.8%	15.9%
Columbus	17.7%	18.0%	18.5%	18.0%	17.2%
Dallas	22.3%	22.2%	22.0%	21.3%	20.3%
Denver	14.4%	14.7%	15.0%	14.5%	13.4%
Detroit	24.5%	24.9%	25.6%	25.8%	25.5%
Fairfield County	12.9%	12.8%	12.5%	11.7%	10.3%
Fort Lauderdale	12.6%	13.0%	12.4%	10.8%	8.7%
Fort Worth	12.8%	12.5%	11.7%	9.6%	7.0%
Houston	11.6%	12.0%	12.6%	12.4%	12.0%
Indianapolis	17.0%	17.1%	17.0%	15.7%	13.8%
Inland Empire*	15.1%	16.0%	17.3%	17.8%	15.8%
Long Island	11.9%	11.9%	11.8%	11.0%	9.8%
Los Angeles	9.7%	10.2%	11.2%	11.7%	12.1%
Miami	9.2%	10.7%	13.2%	15.0%	16.4%
Minneapolis	15.2%	15.5%	16.1%	16.2%	15.9%
Nashville	11.0%	12.5%	15.2%	16.7%	17.6%
New York City	5.8%	6.3%	7.2%	7.4%	7.2%
North & Central NJ	17.7%	17.7%	17.8%	17.6%	17.2%
Orange County	15.8%	16.4%	17.2%	17.3%	16.9%
Orlando	12.0%	12.0%	11.5%	9.9%	7.6%
Philadelphia	12.1%	12.2%	12.2%	11.8%	11.0%
Phoenix	18.7%	19.5%	20.3%	18.9%	16.0%
Portland	10.5%	10.9%	11.2%	10.4%	9.1%
Raleigh-Durham	14.6%	14.7%	14.8%	13.3%	9.5%
St. Louis	15.0%	15.7%	16.9%	18.1%	19.2%
San Diego	15.6%	16.1%	16.9%	16.4%	15.5%
San Francisco	9.6%	9.9%	10.6%	11.0%	11.3%
San Jose	13.4%	13.9%	14.6%	14.6%	14.2%
Seattle	11.0%	11.4%	12.2%	11.4%	9.7%
Tampa Bay	15.0%	15.1%	14.8%	13.9%	12.3%
Washington, D.C.	11.3%	11.9%	12.7%	12.3%	11.4%
Westchester County	14.7%	14.7%	14.6%	14.6%	14.3%
West Palm Beach	18.1%	18.8%	19.8%	19.6%	18.8%

Highlighted entries indicate market at supply-demand balance, or better.
 * Inland Empire = Riverside/San Bernardino Metropolitan Area

Note on Negative Vacancy: In order to calculate estimated vacancy rates, we adjust beginning inventory for new construction completions and compare that to net absorption (including sublease space). If we show negative vacancy rates, it simply means that given the scheduled supply and growth in expected demand, sufficient demand pressure exists to more than absorb all available space. Of course, negative vacancies cannot occur, as in the face of such demand pressure additional development will occur and rents will increase in order to dampen demand. Therefore, forecasts of negative vacancy should be viewed as a strong excess demand indicator.

figure 184

went sideways in 2007, between 12.6 and 12.8%. The first quarter of 2008 marked the first time the office vacancy rate surpassed 13% since the third quarter of 2006. We anticipate that the Great Capital Strike will

significantly rein in debt, which in turn should cause a reversal in the Index. As high loan-to-value debt matures, more equity will be required in the capital structure.

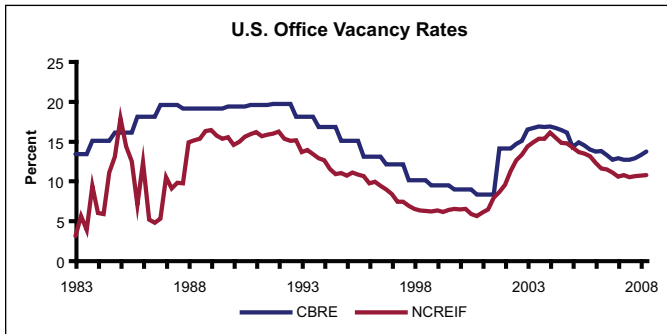


figure 185

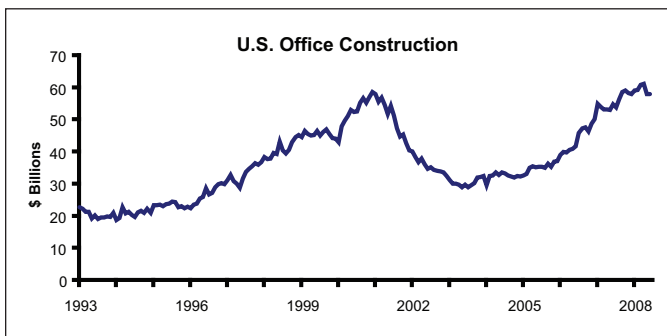


figure 186

Industrial Market Outlook

According to CBRE, the second quarter 2008 industrial vacancy rate was up slightly, from 10.5% in the previous quarter to 11.0%. The national industrial vacancy rate has been increasing for the last six quarters, and had not broken the 10% threshold since 2005. It had previously peaked in the second quarter of 2004, at 11.3%. The U.S. industrial vacancy rate as reported by NCREIF (for institutional quality properties) was 6.9% in the second quarter, slightly higher than the first quarter level 6.7%, but still lower than the high of 10.6% in the first quarter of 2004. The two data series moved in lockstep from 1987 to 2004. Since then, the NCREIF series has trended downward more sharply. This divergence indicates that the institutional-grade properties in the NCREIF survey are enjoying greater demand than the overall market.

For 2008, we foresee 11 markets improving, 16 declining and seven remaining flat. By the end of 2008, the biggest improvements are expected in Westchester County, Seattle, and Dallas/Fort Worth. Las Vegas' vacancy will be the highest, with an increase of 1.5%. Over the next three years, 27 of the 34 markets we cover

are projected to improve. Seattle, Charlotte, and Washington D.C. are expected to show the greatest improvements, while Las Vegas is expected to experience the largest increase in vacancy rates at approximately 11.0%, followed by San Francisco at roughly 4.0%, and then St. Louis at 3.0%.

Using a 6% benchmark vacancy rate to proxy supply-demand balance for industrial markets, only two markets were in balance at year-end 2007, and none are expected to be in balance by the end of this year. By the end of 2011, five of the 34 markets are projected to achieve balance. The list includes Charlotte, Seattle, Fort Lauderdale, Long Island, and Cincinnati. Fairfield Country, Austin, St. Louis, and Las Vegas are projected to have the highest vacancy levels in 2011, while Fort Lauderdale, Charlotte, Seattle, and Long Island are projected to have the lowest.

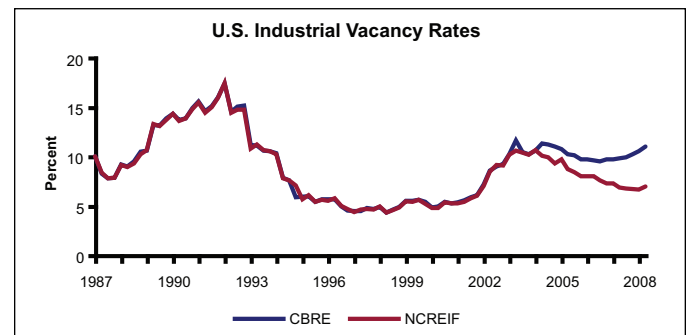


figure 187

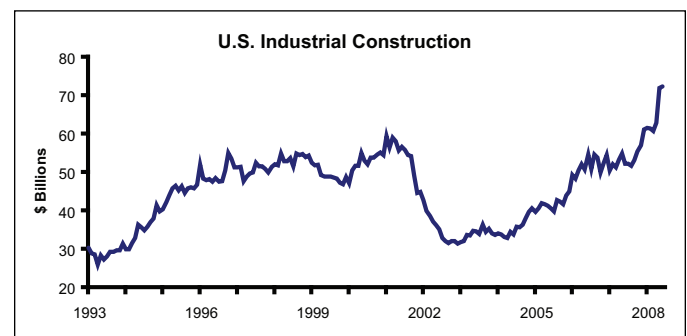


figure 188

Industrial Vacancy Rates					
Market	2Q08 Act.	YE 2008 Est.	YE 2009 Est.	YE 2010 Est.	YE 2011 Est.
Atlanta	14.9%	14.9%	14.1%	12.7%	11.1%
Austin	22.2%	22.7%	23.5%	23.8%	23.7%
Baltimore	15.5%	15.5%	15.1%	14.4%	13.5%
Charlotte	9.9%	9.2%	7.7%	6.1%	4.6%
Chicago	11.3%	11.4%	11.3%	10.9%	10.3%
Cincinnati	7.3%	7.5%	7.2%	6.6%	5.9%
Cleveland	8.6%	8.6%	8.2%	7.4%	6.6%
Columbus	14.5%	14.2%	13.3%	12.2%	11.2%
Dallas-Fort Worth	11.6%	10.9%	9.7%	8.6%	7.7%
Denver	10.2%	10.1%	9.5%	8.7%	7.7%
Detroit	12.8%	13.5%	14.2%	14.3%	13.8%
Fairfield County	18.9%	18.4%	17.4%	16.3%	15.3%
Fort Lauderdale	6.7%	6.8%	6.0%	4.3%	2.5%
Houston	8.6%	8.4%	7.9%	7.2%	6.5%
Indianapolis	12.3%	12.7%	12.9%	12.9%	12.8%
Inland Empire*	12.8%	13.1%	13.1%	13.1%	13.0%
Las Vegas	8.0%	10.5%	13.9%	16.5%	18.8%
Long Island	7.5%	7.5%	7.0%	6.3%	5.5%
Los Angeles	9.8%	9.6%	9.2%	8.9%	8.6%
Miami	8.8%	8.8%	8.3%	7.7%	6.9%
Minneapolis	9.5%	9.2%	8.4%	7.5%	6.5%
Nashville	10.2%	10.9%	11.8%	12.3%	12.7%
North & Central NJ	10.0%	10.1%	10.0%	10.0%	9.9%
Orlando	10.5%	10.5%	9.8%	9.1%	8.2%
Philadelphia	9.6%	9.5%	9.2%	8.8%	8.2%
Phoenix	16.6%	17.1%	16.8%	15.2%	13.0%
Portland	8.4%	8.7%	8.5%	8.0%	7.4%
St. Louis	13.3%	13.8%	14.7%	15.4%	16.0%
San Diego	12.0%	12.2%	11.8%	11.2%	10.6%
San Francisco	10.8%	10.8%	11.0%	11.1%	11.2%
Seattle	12.3%	11.6%	10.0%	8.0%	5.7%
Tampa Bay	8.3%	8.6%	8.2%	8.1%	7.7%
Washington, D.C.	15.4%	14.9%	13.4%	11.7%	9.8%
Westchester County	8.8%	8.1%	8.0%	8.0%	7.7%

Highlighted entries indicate market at supply-demand balance, or better.

** Inland Empire = Riverside/San Bernardino Metropolitan Area*

Note on Negative Vacancy: In order to calculate estimated vacancy rates, we adjust beginning inventory for new construction completions and compare that to net absorption (including sublease space). If we show negative vacancy rates, it simply means that given the scheduled supply and growth in expected demand, sufficient demand pressure exists to more than absorb all available space. Of course, negative vacancies cannot occur, as in the face of such demand pressure additional development will occur and rents will increase in order to dampen demand. Therefore, forecasts of negative vacancy should be viewed as a strong excess demand indicator.

figure 189

Multifamily Market Outlook

The Census Bureau's quarterly Housing Vacancy Survey indicates that the U.S. multifamily vacancy rate reversed course, jumping 40 basis points to 10.5% in the second quarter of 2008, from 10.1% in the previous quarter. This series has generally been hovering around 10% since late 2003. For NCREIF's institutional properties, the vacancy rate rose slightly during the second quarter to 8.0%, up from the first quarter at 7.5%, and up roughly 100 basis points from the same time last year. This discrepancy in vacancy rates is due to the fact that the NCREIF properties are of higher quality than the Census properties, which include Class C and D product. Thus, NCREIF's lower rate indicates that the best-quality properties are exhibiting the strongest market fundamentals. Over the last nine quarters, the Census vacancy rate has been relatively flat, but the NCREIF series has exhibited a sharp increase, as unsold high-end condos are converted to rental units.

By year-end 2008, 15 of the 31 multifamily markets we cover are projected to improve with respect to vacancy rates. Thirteen will experience increased vacancy rates, while three, Cleveland, Minneapolis, and San Jose, will remain flat. Austin, Phoenix, and Charlotte are projected to experience the highest vacancy rates, while Seattle, San Jose, and New York City are expected to see the lowest rates. Our projections indicate that the most improved cities will include Fort Worth, New York City, and Seattle, while Austin, Charlotte, and St. Louis are expected to experience the greatest increases in vacancy rates.

By 2011, the laggards are expected to be Charlotte, Austin, and Tampa Bay, while Seattle, New York City, and Fort Worth will boast the lowest vacancy levels. Using a 5% vacancy rate proxy for supply-demand balance, only 12 of our markets were in balance at year-end 2007. By the end of 2008, Fort Worth will be added to that list, and Portland will be removed. By the end of 2011, three markets will be added to the list and one will be removed, for a total of 15 of 31 markets projected to achieve balance.

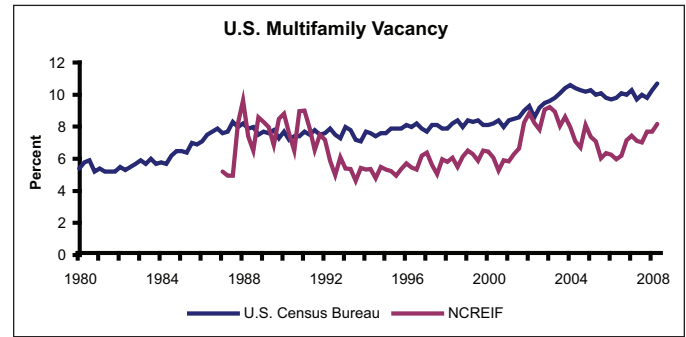


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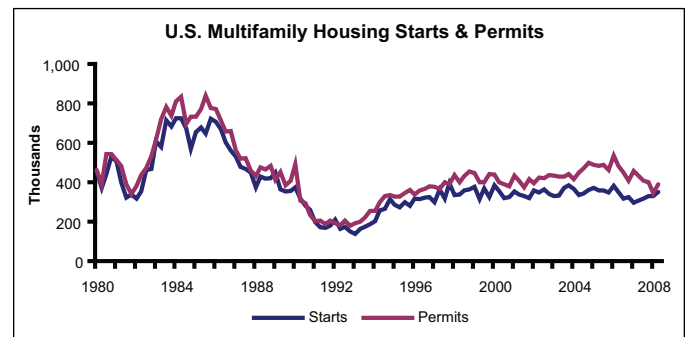


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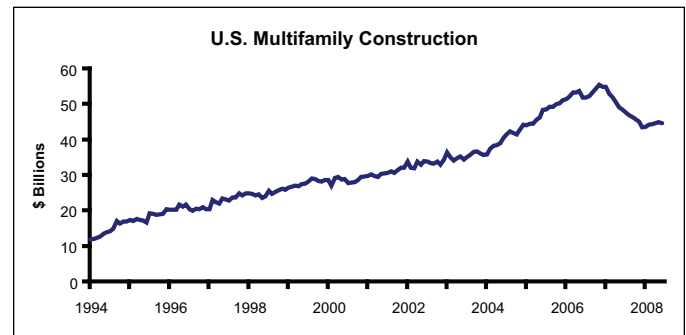


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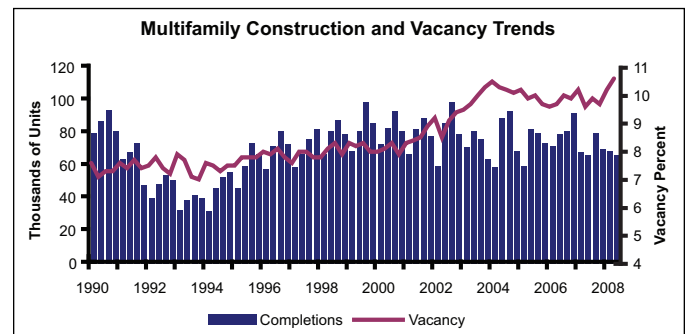


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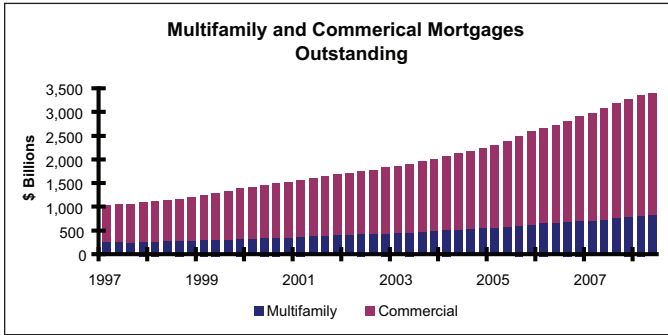


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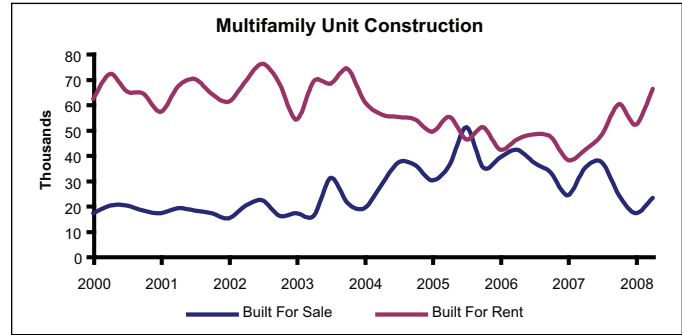


figure 195

Multifamily Vacancy Rates					
Market	2Q08 Act.	YE 2008 Est.	YE 2009 Est.	YE 2010 Est.	YE 2011 Est.
Atlanta	8.4%	8.3%	7.3%	5.7%	5.7%
Austin	6.8%	10.4%	14.5%	17.8%	17.8%
Boston	5.1%	5.9%	6.6%	6.9%	6.9%
Baltimore	6.1%	5.8%	5.6%	5.5%	5.5%
Charlotte	6.3%	9.2%	12.4%	15.4%	15.4%
Chicago	4.5%	4.8%	4.7%	4.2%	4.2%
Cincinnati	7.1%	7.2%	6.6%	5.7%	5.7%
Cleveland	5.4%	5.4%	4.9%	4.1%	4.1%
Columbus	6.8%	6.5%	5.5%	4.4%	4.4%
Dallas	6.3%	6.1%	6.0%	5.9%	5.9%
Denver	7.0%	6.7%	6.1%	5.3%	5.3%
Detroit	6.4%	7.8%	8.8%	9.0%	9.0%
Fort Worth	9.1%	4.4%	2.5%	0.4%	0.4%
Houston	9.3%	9.1%	8.8%	8.3%	8.3%
Indianapolis	8.1%	7.9%	6.8%	5.3%	5.3%
Los Angeles	3.8%	3.7%	3.4%	3.1%	3.1%
Miami	4.3%	4.2%	3.4%	2.4%	2.4%
Minneapolis	4.2%	4.2%	4.0%	3.8%	3.8%
Nashville	5.2%	6.4%	5.5%	4.4%	4.4%
New York City	2.3%	1.9%	1.1%	0.2%	0.2%
Orlando	7.8%	7.7%	6.9%	5.8%	5.8%
Philadelphia	4.3%	4.8%	5.3%	5.5%	5.5%
Phoenix	8.7%	9.2%	8.2%	5.8%	5.8%
Portland	4.6%	5.2%	5.0%	4.3%	4.3%
St. Louis	6.9%	9.1%	9.6%	10.0%	10.0%
San Diego	3.9%	3.8%	2.7%	1.4%	1.4%
San Francisco	4.1%	4.2%	4.5%	4.8%	4.8%
San Jose	3.3%	3.3%	2.6%	2.0%	2.0%
Seattle	4.5%	3.5%	1.7%	-0.4%	-0.4%
Tampa Bay	7.1%	8.6%	9.6%	10.7%	10.7%
Washington, D.C.	4.1%	3.9%	3.1%	1.9%	1.9%

Highlighted entries indicate market at supply-demand balance, or better.

Note on Negative Vacancy: In order to calculate estimated vacancy rates, we adjust beginning inventory for new construction completions and compare that to net absorption (including sublease space). If we show negative vacancy rates, it simply means that given the scheduled supply and growth in expected demand, sufficient demand pressure exists to more than absorb all available space. Of course, negative vacancies cannot occur; in the face of such demand pressure additional development will occur and rents will increase in order to dampen demand. Therefore, forecasts of negative vacancy should be viewed as a strong excess demand indicator.

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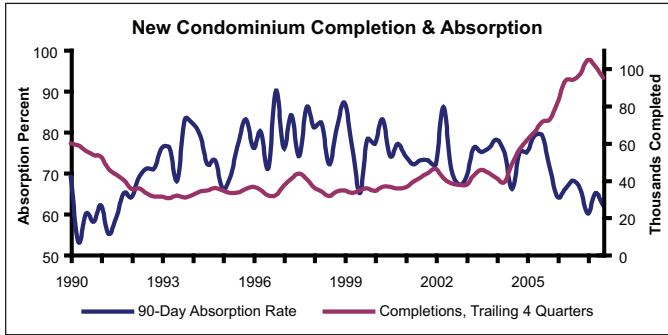


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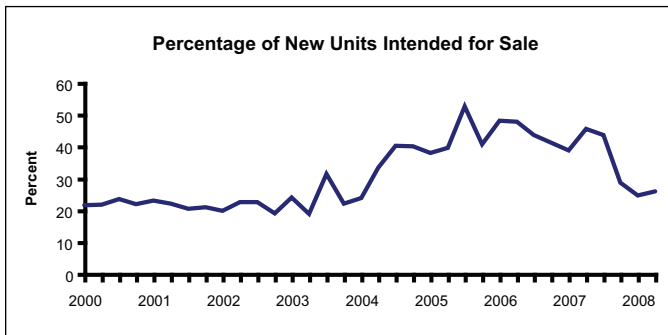


figure 198

Retail Market Outlook

NCREIF reported that the national retail vacancy rate edged up to 6.7%, after breaking the 6% barrier in the first quarter of 2008 for the first time since 1999. In comparison, it was 5.42% one year earlier and 5.6% at year-end 2007. The University of Michigan consumer confidence index has dropped sharply, and has not been this low since 1982. On a monthly annualized basis, retail construction has been inching back up and is now around \$62 billion, after declining for several months from its October 2007 high of \$62.5 billion.

For 2008, we predict that eight of our covered retail markets will improve, 21 will decline, and Fort Worth will remain flat. The biggest improvements will come from New York, Houston, and Denver, while Charlotte, Nashville, and Austin are projected to show the biggest rises in vacancy. By the end of 2011, 18 of our 30 markets are projected to register decreasing vacancy rates, with San Diego, San Jose, and New York City exhibiting the lowest rates. No market will remain flat, while 12 will show rising vacancy rates. Leading that list will be Austin at 25.0%, followed by Nashville at 21.0%, and Charlotte at approximately 18.0%.

Using 8.5% vacancy as a benchmark for a balanced market, approximately 21 of our 30 markets were in balance by year-end 2007. Only 15 are expected to be in balance by the end of this year, removing from the list Charlotte, Chicago, Phoenix, Cleveland, Nashville, and Detroit. Also by the end of 2008, Columbus, Houston, and Austin are projected to have the highest vacancy levels, while New York City, San Diego, and San Jose are projected to show the lowest vacancy levels. By 2011, Atlanta will be added to the list to total 16 markets in balance.

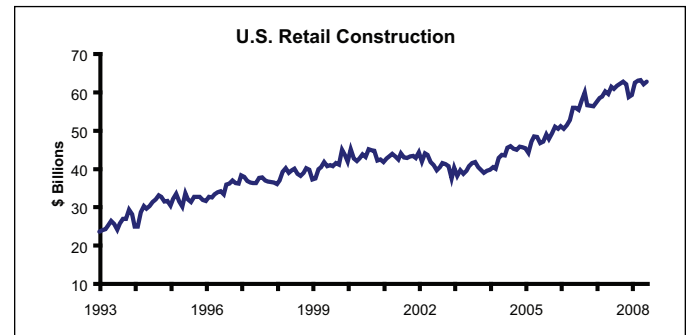


figure 199

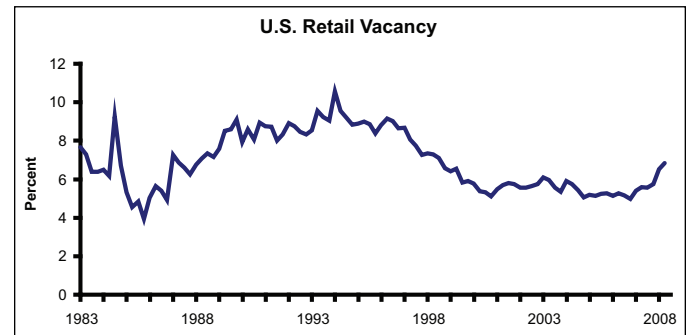


figure 200

Hotel Market Outlook

According to Smith Travel Research, the 12-month rolling average U.S. hotel occupancy rate has been on a slight decline year-to-date through June 2008, when it stood at 62.3%. It has not dropped below 62% since 2005. The 12-month rolling average revenue per available room (RevPAR) continues its 5-year ascent, though growth has been leveling off in 2008. As of June 2008, RevPAR stood at just \$66, according to STR. STR also reported that the change in the nation's supply of rooms slightly outpaced the change in demand for those rooms on a 12-

Retail Vacancy Rates					
Market	YE 2007 Act.	YE 2008 Est.	YE 2009 Est.	YE 2010 Est.	YE 2011 Est.
Atlanta	9.0%	9.5%	9.1%	8.1%	6.9%
Austin	8.7%	14.2%	18.8%	22.4%	25.2%
Boston	5.9%	6.1%	6.4%	6.8%	7.2%
Charlotte	5.0%	8.9%	12.3%	15.2%	17.9%
Chicago	7.6%	8.7%	9.3%	9.7%	9.9%
Cincinnati	10.5%	11.5%	11.9%	11.9%	11.9%
Cleveland	8.1%	9.6%	10.5%	11.0%	11.5%
Columbus	15.0%	15.2%	14.8%	14.3%	13.8%
Dallas	10.5%	10.3%	10.2%	10.2%	10.2%
Denver	5.0%	4.3%	3.3%	2.1%	0.8%
Detroit	8.3%	10.5%	11.7%	12.1%	12.0%
Fort Worth	9.2%	9.2%	8.6%	7.8%	7.1%
Houston	14.8%	14.1%	13.6%	12.9%	12.3%
Indianapolis	10.3%	11.0%	10.6%	9.9%	9.1%
Los Angeles	2.8%	3.7%	4.2%	4.7%	5.3%
Miami	5.0%	6.6%	7.8%	8.7%	9.6%
Minneapolis	6.2%	5.9%	5.6%	5.1%	4.5%
Nashville	4.2%	9.9%	14.5%	18.2%	21.3%
New York City	3.2%	2.1%	1.1%	0.0%	-1.3%
Orlando	5.4%	5.9%	5.4%	4.8%	4.0%
Philadelphia	6.4%	6.8%	6.8%	6.7%	6.5%
Phoenix	7.9%	10.4%	11.2%	10.5%	9.1%
Portland	5.0%	5.4%	5.0%	4.1%	3.2%
St. Louis	10.1%	11.7%	13.2%	14.4%	15.6%
San Diego	2.9%	2.3%	0.9%	-0.9%	-2.7%
San Francisco	3.9%	3.6%	3.8%	4.0%	4.2%
San Jose	2.6%	2.0%	0.7%	-0.6%	-1.9%
Seattle	4.3%	4.8%	4.8%	4.5%	3.8%
Tampa Bay	6.6%	7.3%	6.5%	6.0%	5.3%
Washington, D.C.	3.2%	3.3%	2.8%	1.9%	0.9%

Highlighted entries indicate market at supply-demand balance, or better.

Note on Negative Vacancy: In order to calculate estimated vacancy rates, we adjust beginning inventory for new construction completions and compare that to net absorption (including sublease space). If we show negative vacancy rates, it simply means that given the scheduled supply and growth in expected demand, sufficient demand pressure exists to more than absorb all available space. Of course, negative vacancies cannot occur, as in the face of such demand pressure additional development will occur and rents will increase in order to dampen demand. Therefore, forecasts of negative vacancy should be viewed as a strong excess demand indicator.

figure 201

month rolling average basis. U.S. hotel markets weakened in the second quarter of 2008, due to escalating supply.

By the end of the 2008, three markets are predicted to improve, with Las Vegas leading the pack with a 0.3% increase in occupancy rates. Also by year-end, San Francisco, New York, and Los Angeles are expected to have the highest occupancy rates, while Dallas, Detroit, and St. Louis will have the lowest. By 2011, every city we cover is projected to decrease in occupancy. New York will be leading the group, with an 11.5% decrease in occupancy rates relative to today, followed by Houston with an 8.0% decrease, and Philadelphia with a 7.5% decrease. This is due to construction pipelines.

Using a 70% occupancy rate to proxy market balance, only seven markets were in balance at the end of 2007, with those seven remaining in balance for the second quarter of 2008. Seattle is expected to be removed from the list by the end of the year. By the end of 2011, the list is projected to shorten, with only three markets expected to be in balance: Los Angeles, New York City, and San Francisco. San Francisco will show the highest occupancy rate of approximately 76.0%, while Detroit is projected to be the worst performing market by 2011, with an occupancy rate of approximately 53.0%.

Hotel Occupancy Rates					
Market	2Q08 Act.	YE 2008 Est.	YE 2009 Est.	YE 2010 Est.	YE 2011 Est.
Atlanta	61.5%	61.3%	59.8%	59.8%	59.5%
Austin	67.9%	67.7%	64.2%	62.7%	61.6%
Boston	68.6%	68.3%	68.2%	68.1%	66.6%
Chicago	66.2%	65.7%	64.7%	62.7%	61.2%
Dallas	59.2%	58.9%	57.6%	56.2%	56.0%
Denver	64.8%	64.4%	62.6%	60.9%	60.5%
Detroit	57.6%	56.5%	53.8%	52.6%	52.6%
Houston	65.2%	63.7%	61.5%	58.4%	57.1%
Las Vegas**	70.6%	70.9%	71.4%	70.2%	69.4%
Los Angeles	74.1%	73.7%	73.1%	72.4%	72.1%
Miami	72.4%	71.4%	68.7%	66.5%	65.1%
Minneapolis	64.9%	64.1%	63.6%	63.4%	63.3%
Nashville	63.8%	63.4%	61.3%	60.7%	60.4%
New York City	83.6%	81.4%	77.4%	75.1%	72.1%
Orlando	67.6%	67.8%	68.1%	66.8%	66.5%
Philadelphia	67.1%	66.6%	64.7%	61.2%	59.6%
Phoenix	63.7%	61.2%	59.3%	57.1%	57.0%
St. Louis	59.1%	58.0%	57.0%	55.1%	53.7%
San Diego	72.5%	72.7%	71.2%	71.9%	69.8%
San Francisco	76.0%	75.9%	75.8%	75.9%	75.8%
Seattle	70.6%	69.5%	68.8%	69.2%	69.7%
Tampa Bay	59.8%	59.4%	58.8%	58.0%	58.5%
Washington, D.C.	67.9%	67.6%	66.0%	64.4%	63.0%

Highlighted entries indicate market at supply-demand balance, or better.
 * June 2008 trailing 12-month average; Source: Smith Travel Research.
 ** LV sample accounts for less than 15% of LV market.

figure 202

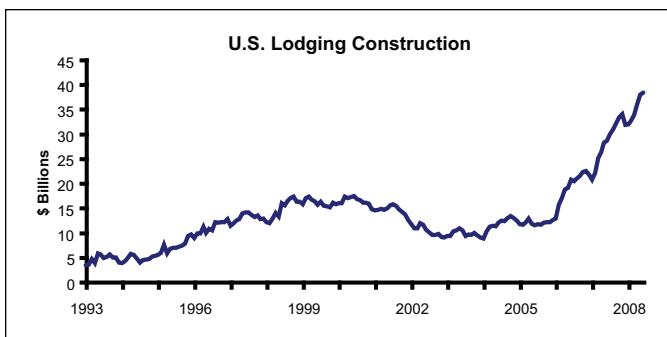


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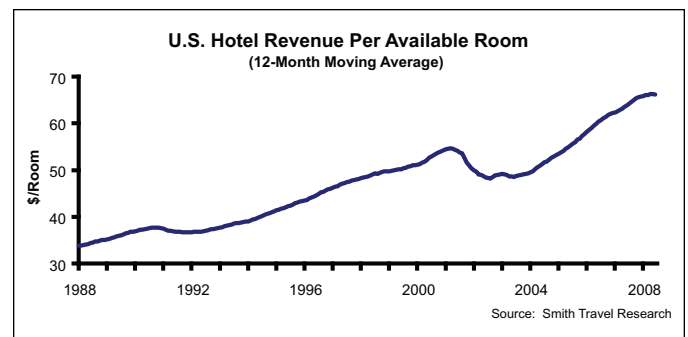


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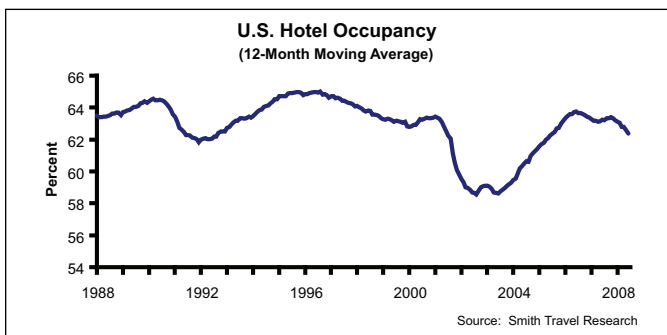


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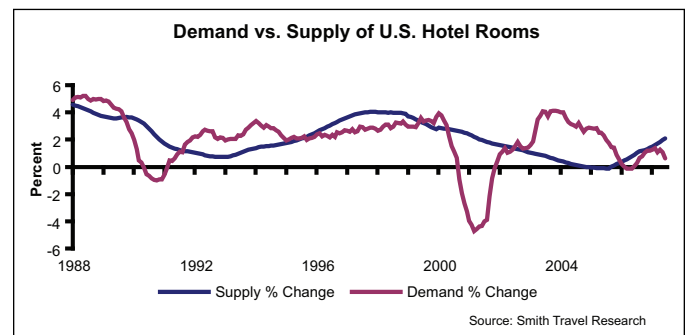
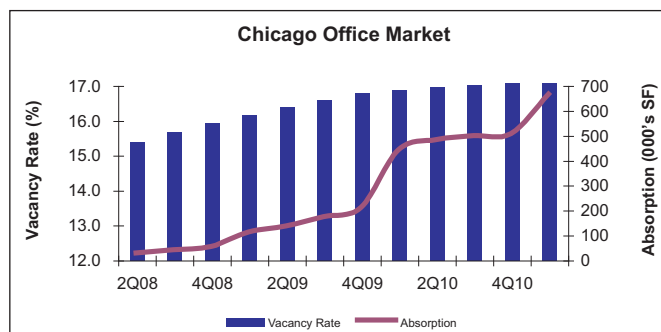
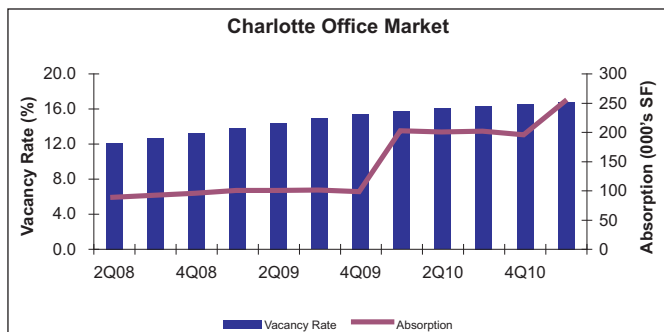
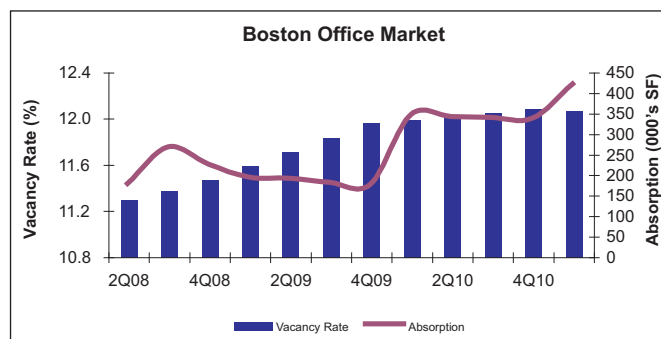
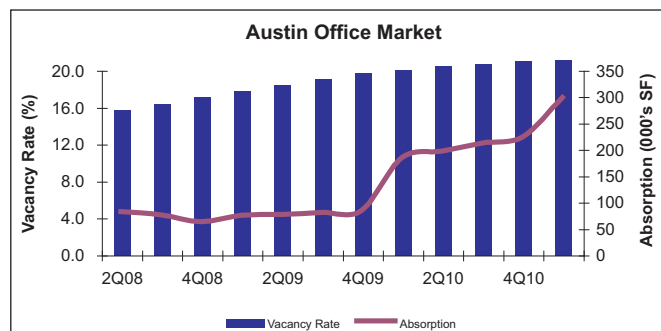
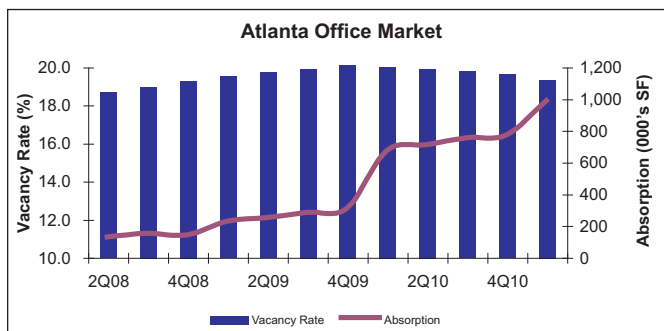


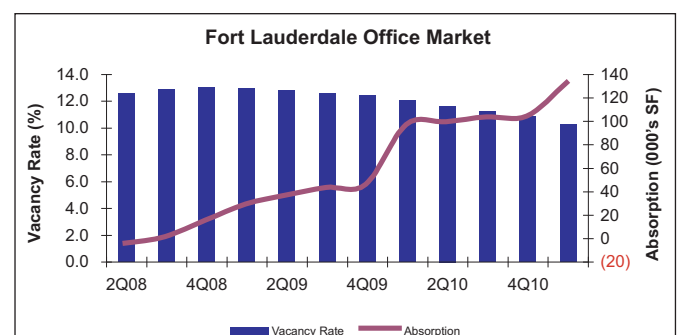
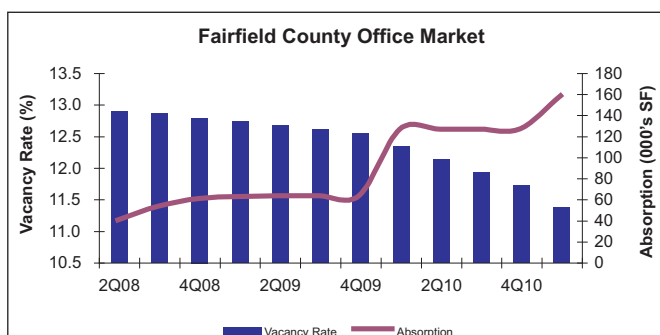
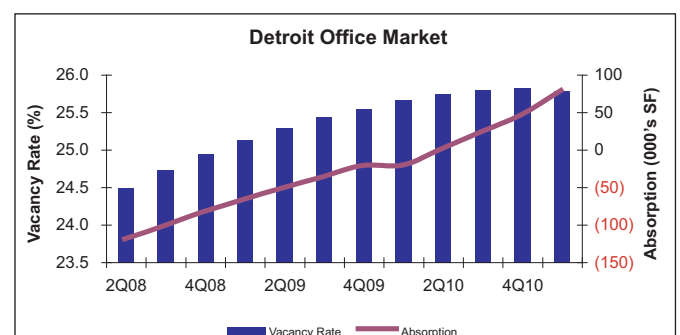
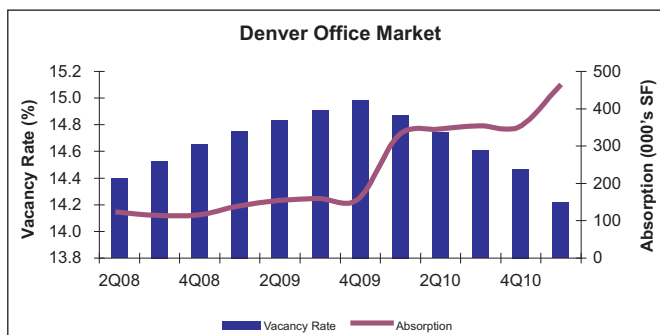
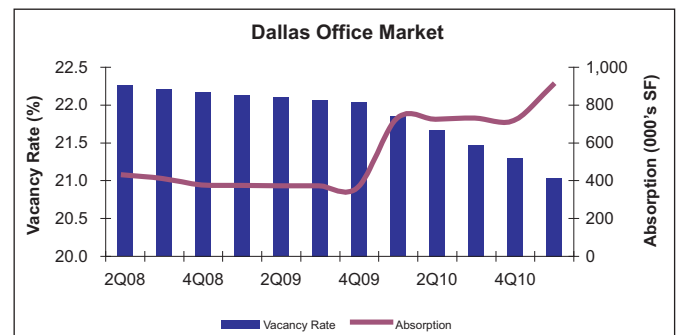
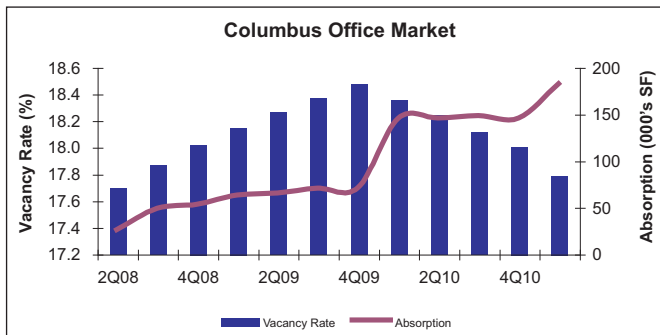
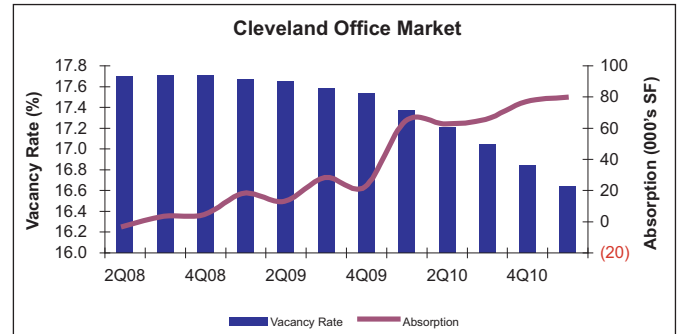
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Office Market Vacancy and Absorption Projections

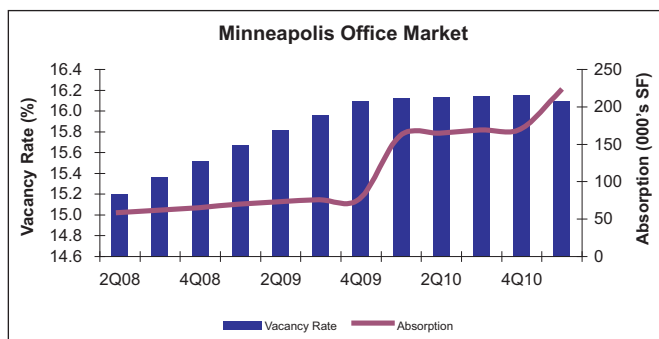
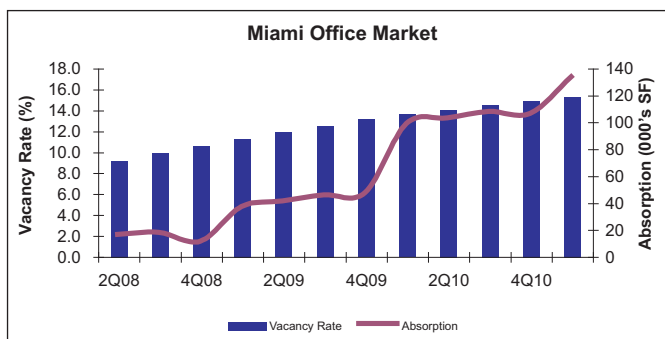
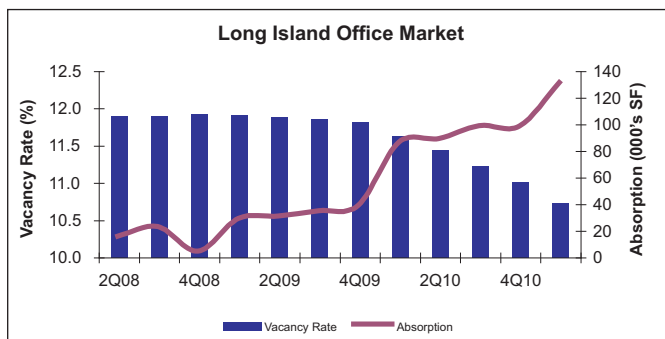
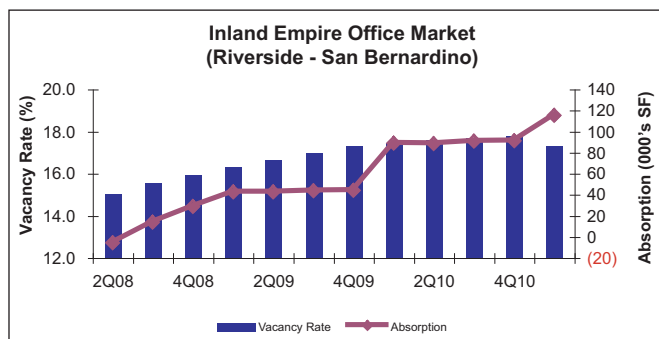
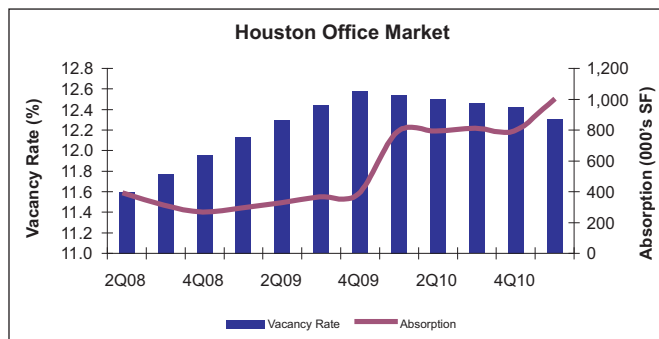
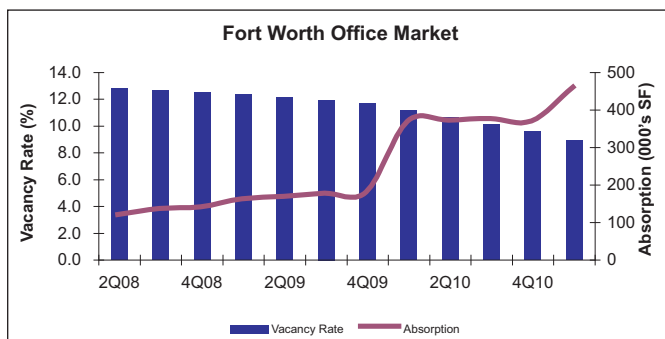
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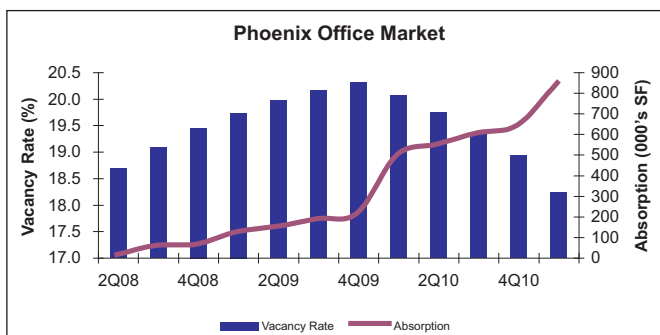
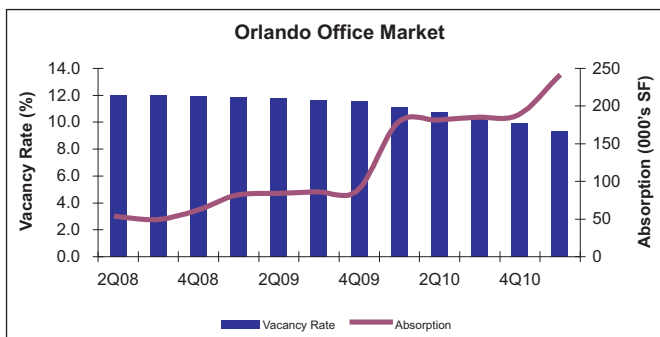
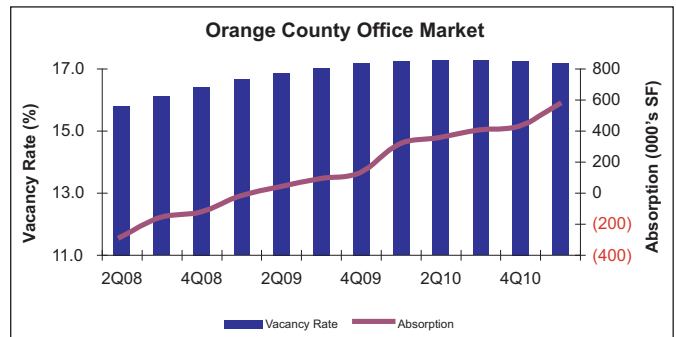
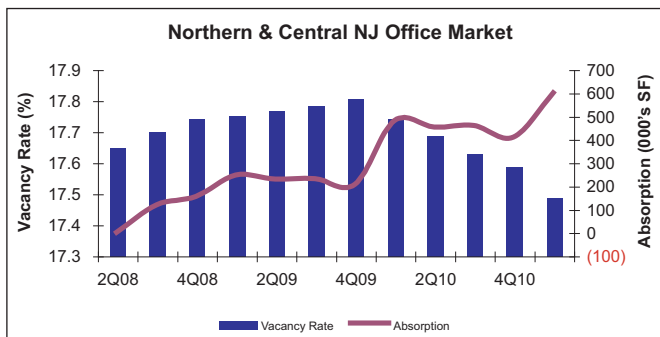
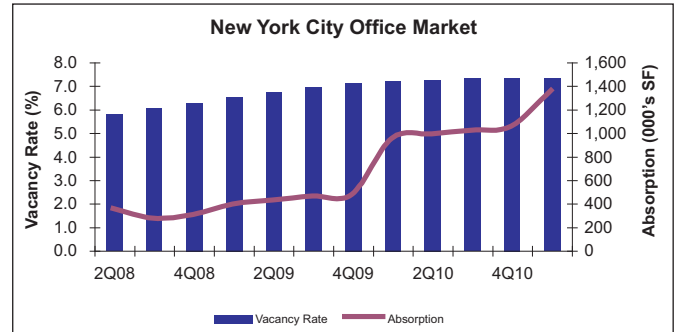
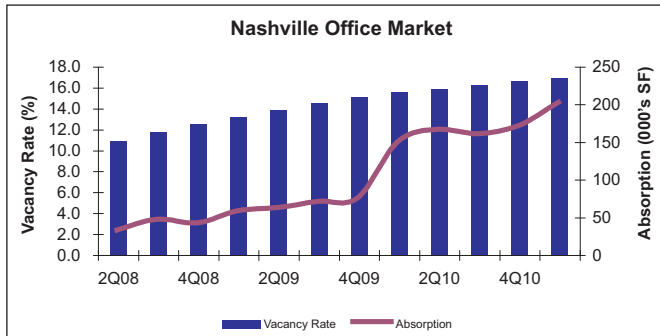
Office Market Vacancy and Absorption Projections (cont.)



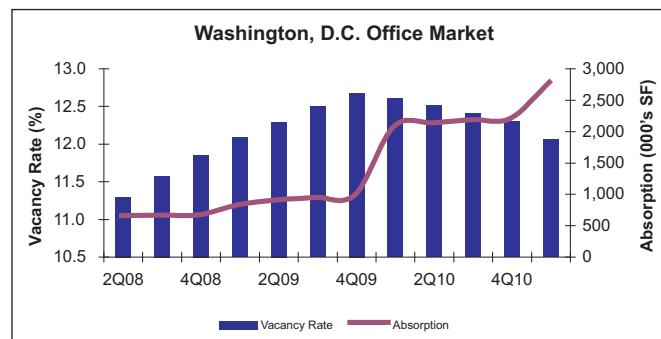
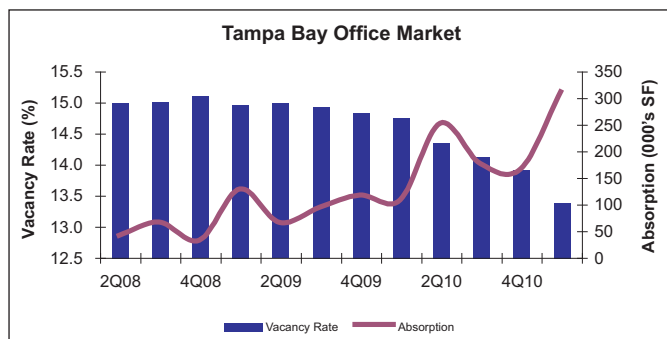
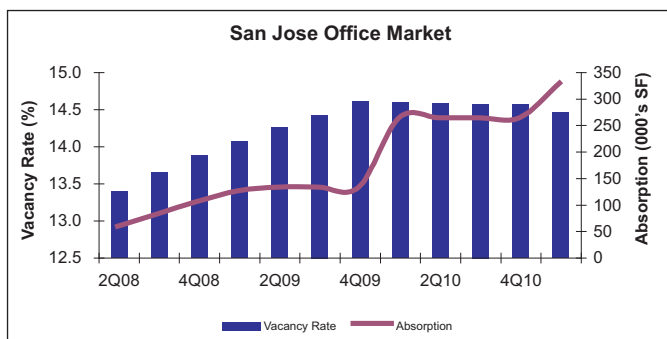
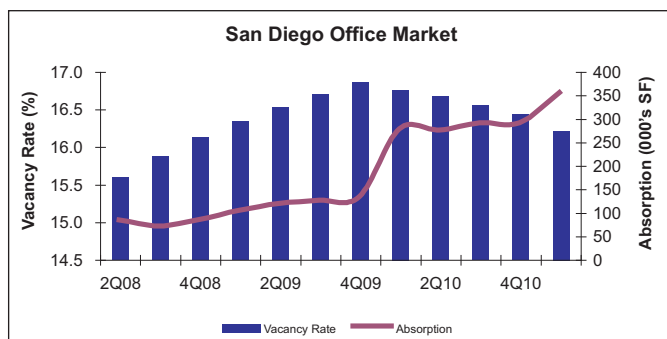
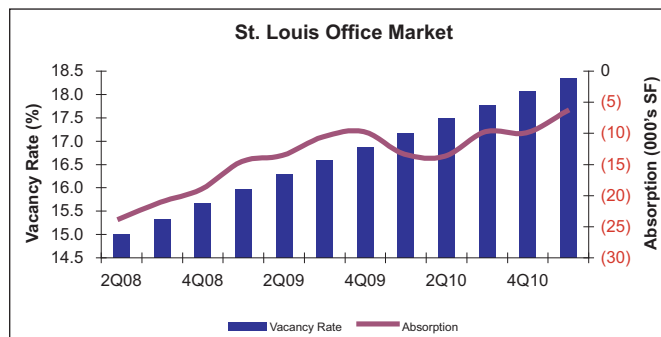
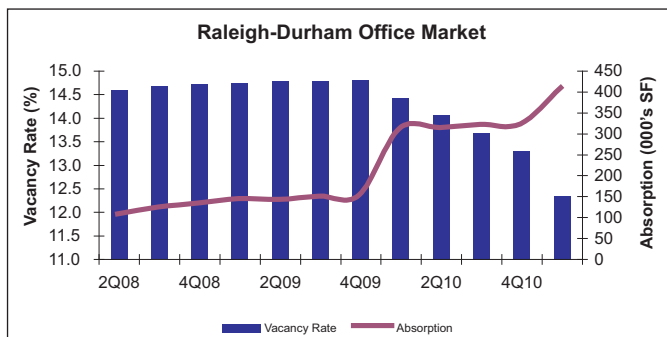
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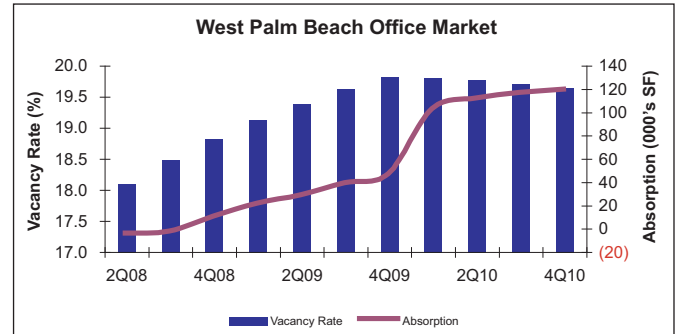
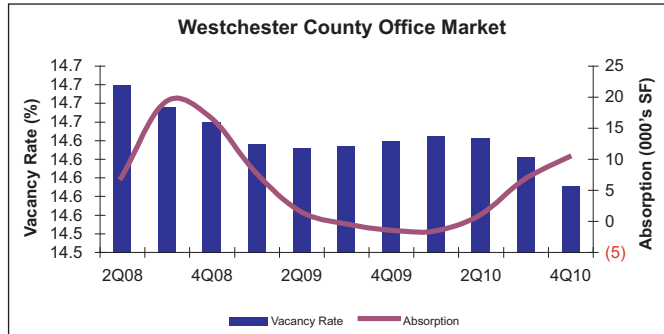
Office Market Vacancy and Absorption Projections (cont.)



Office Market Vacancy and Absorption Projections (cont.)

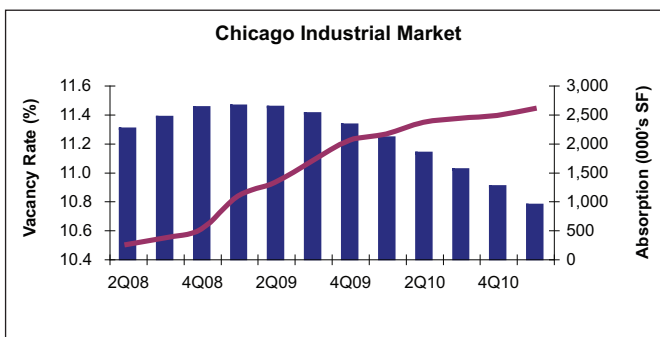
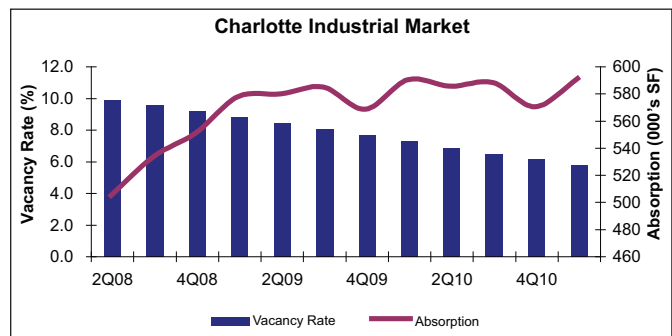
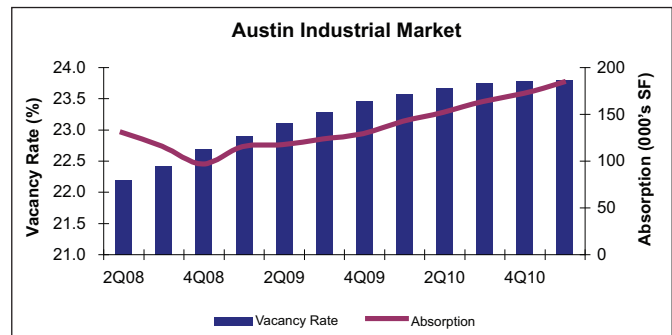
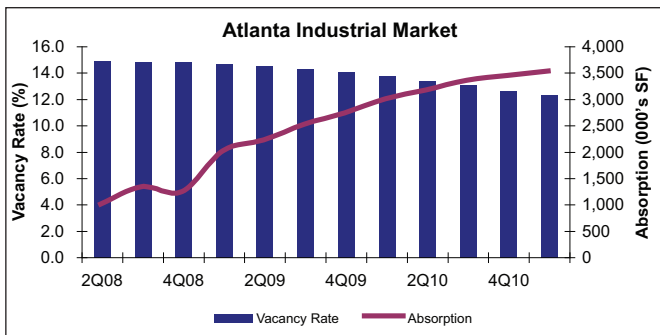


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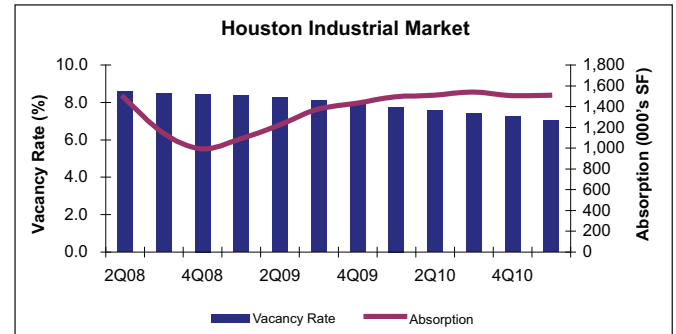
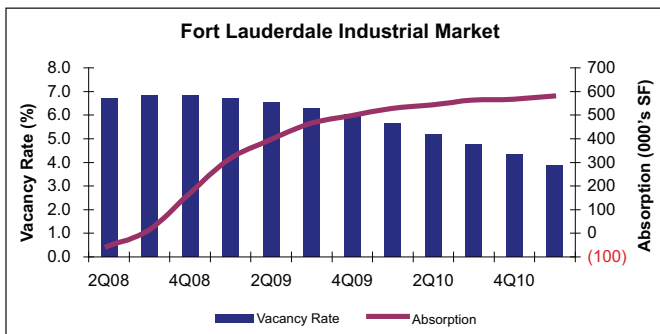
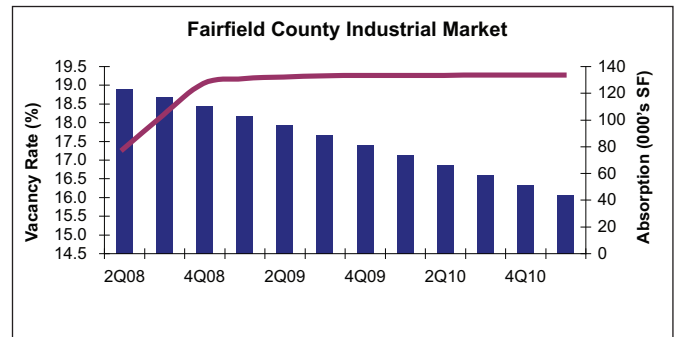
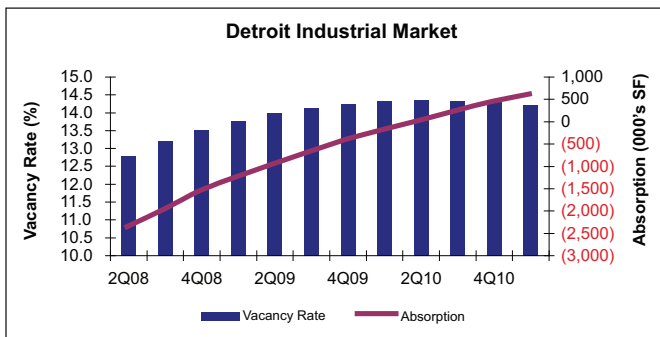
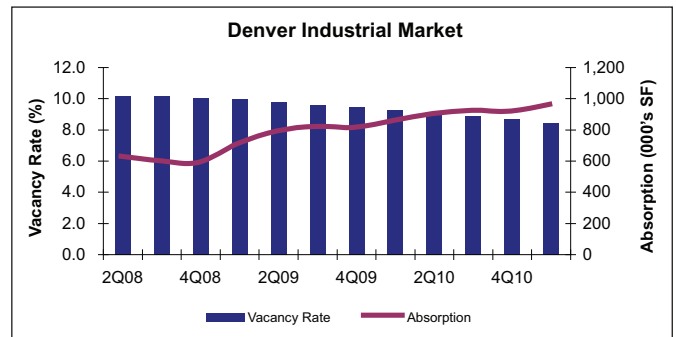
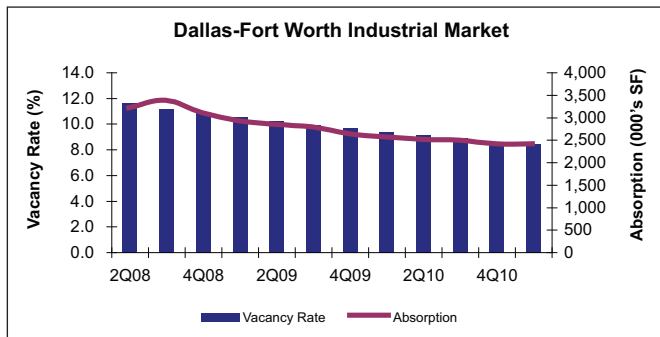
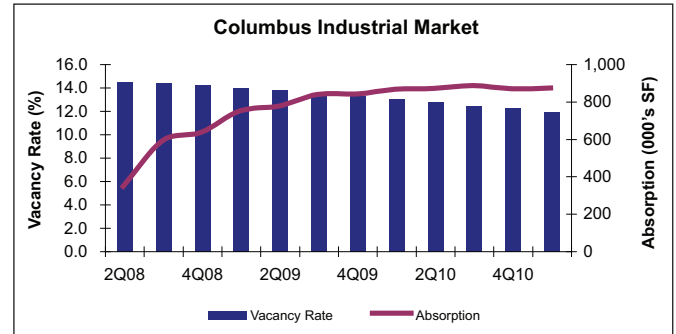
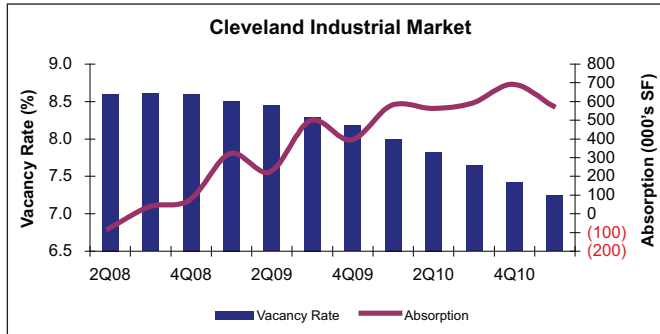


Industrial Market Vacancy and Absorption Projections

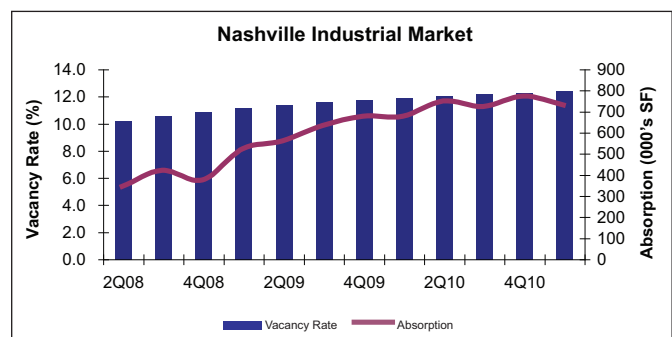
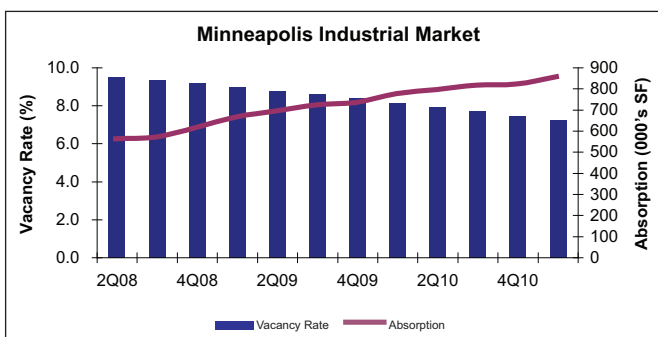
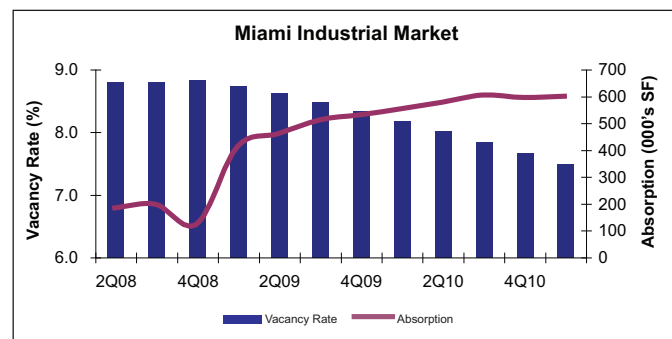
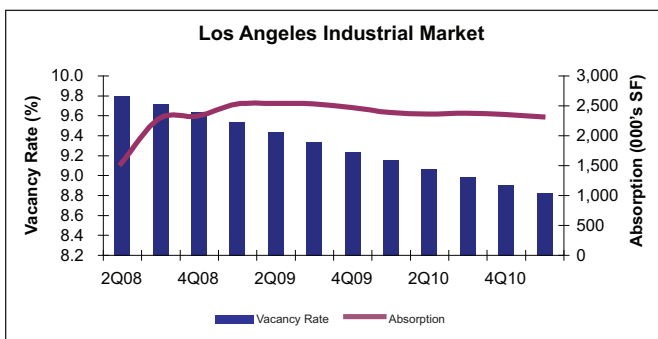
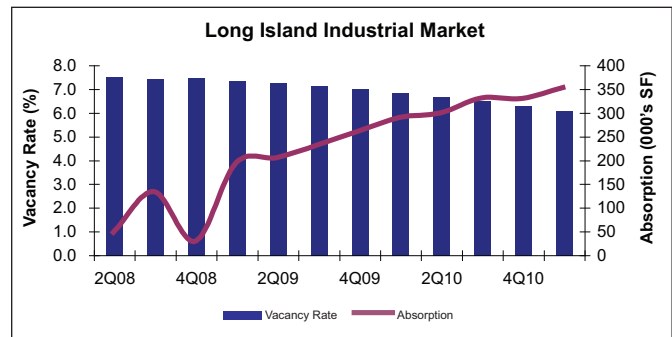
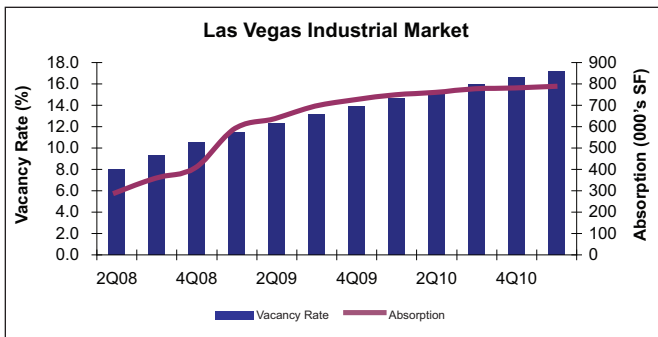
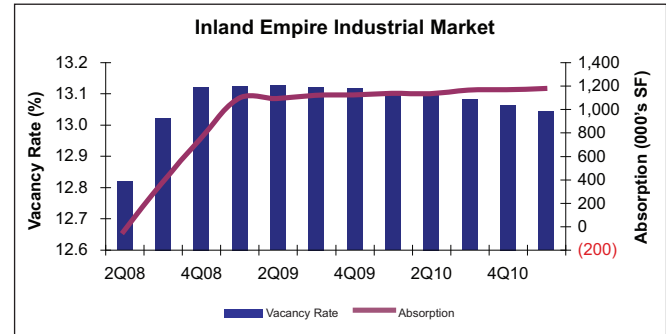
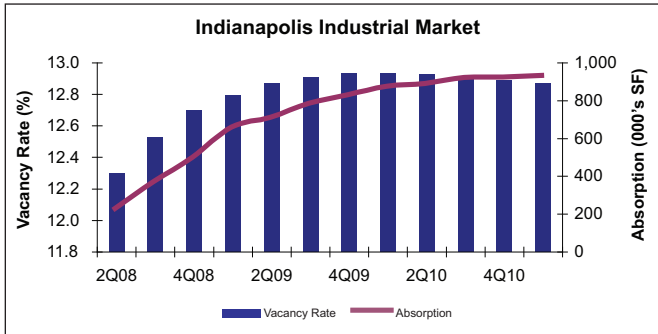
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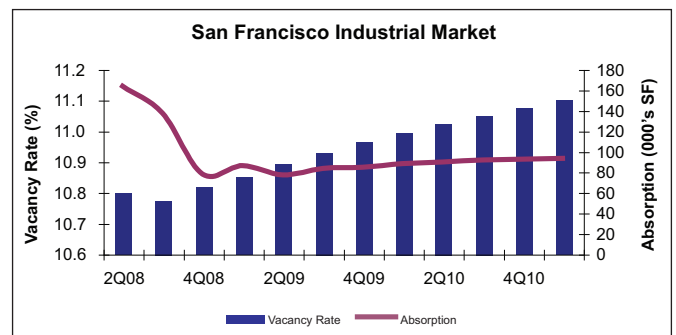
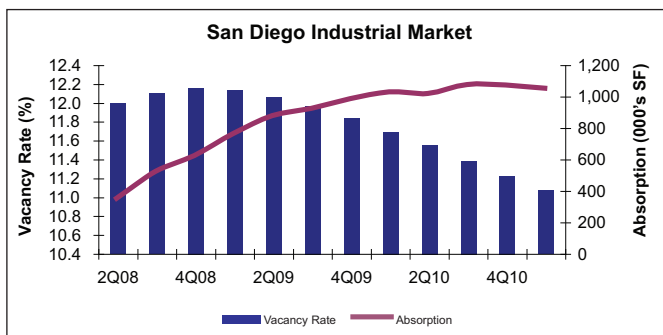
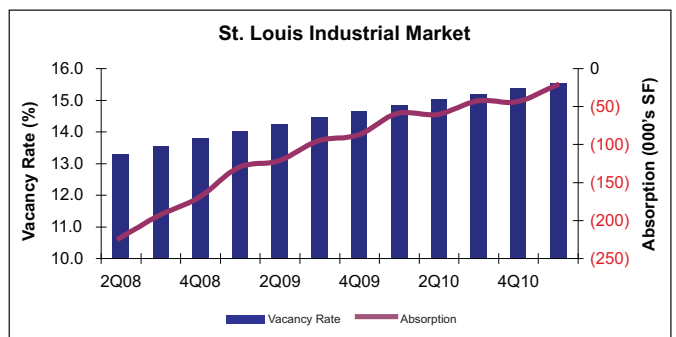
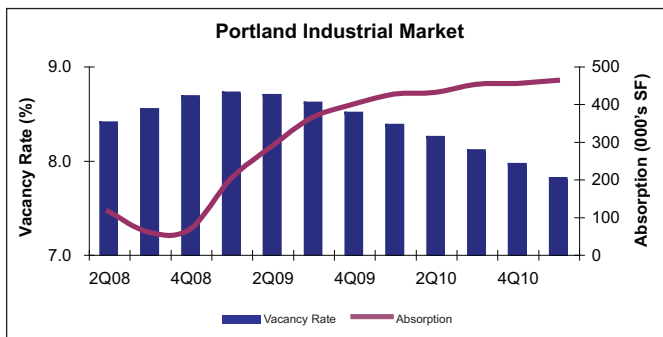
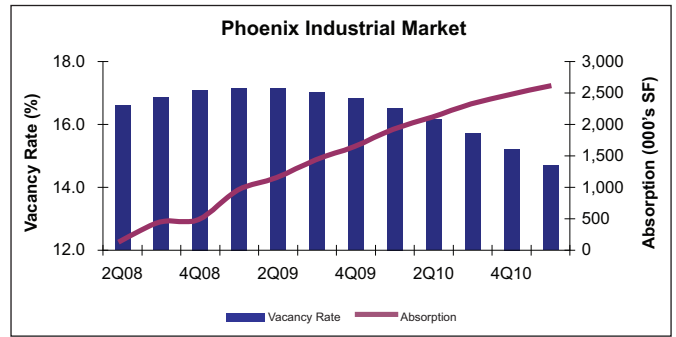
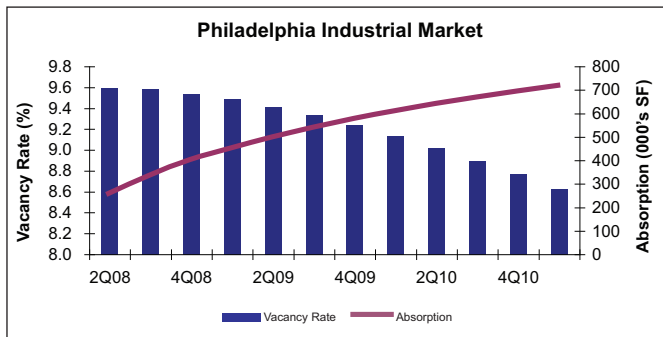
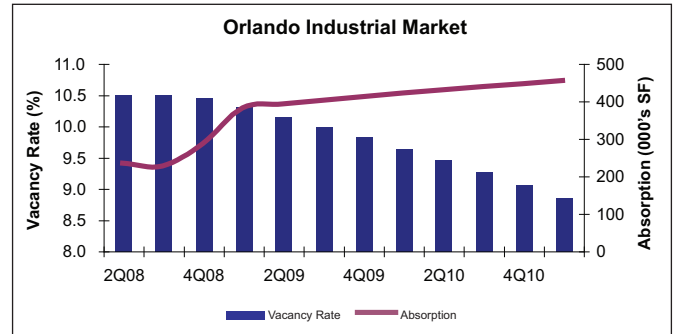
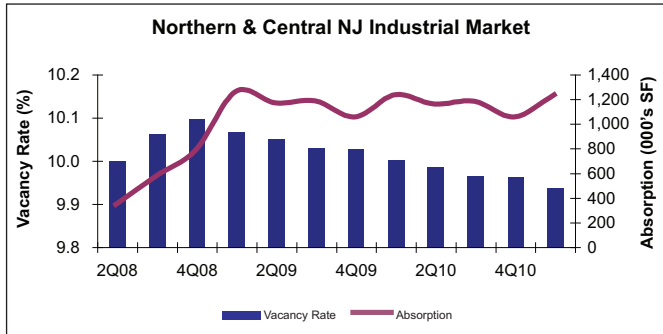
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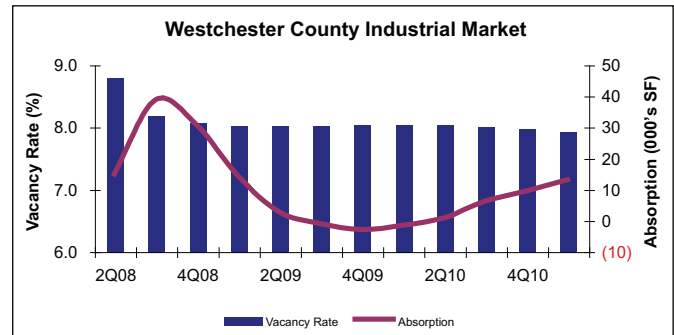
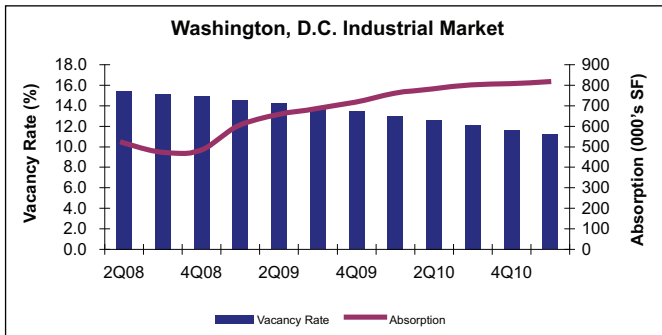
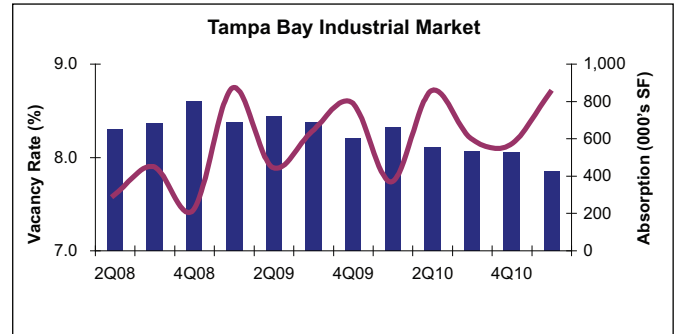
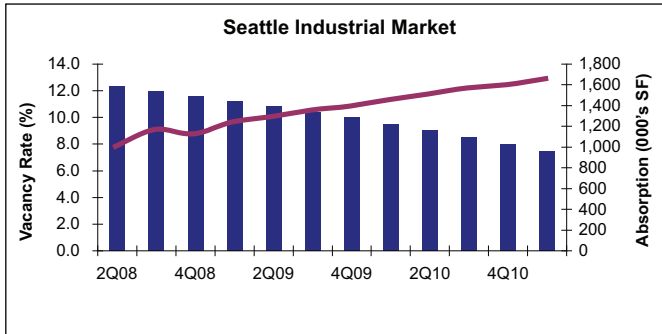
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Industrial Market Vacancy and Absorption Projections (cont.)

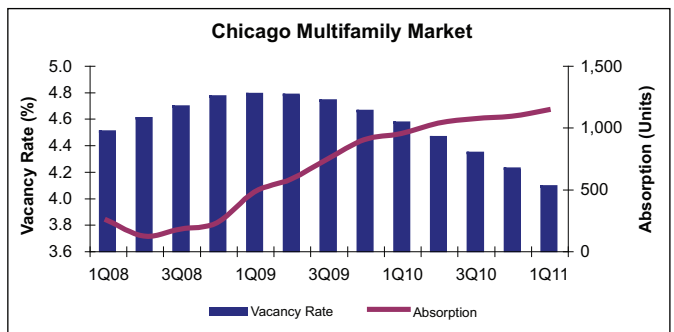
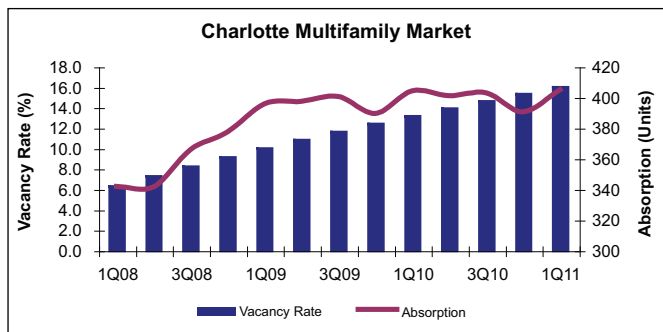
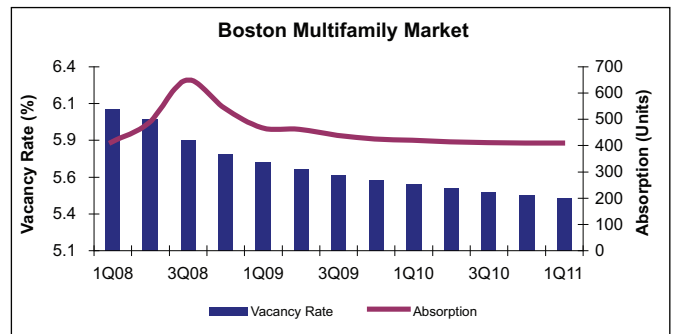
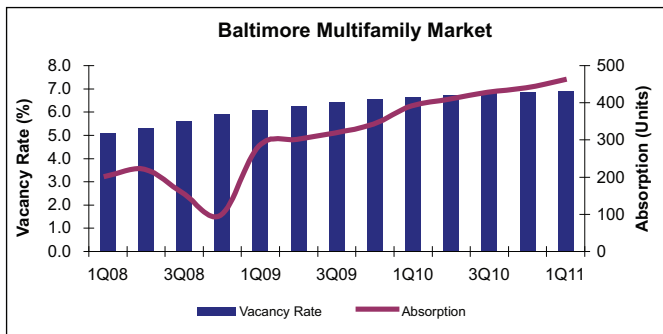
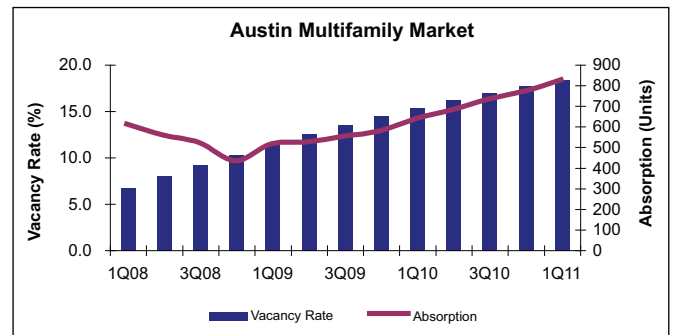
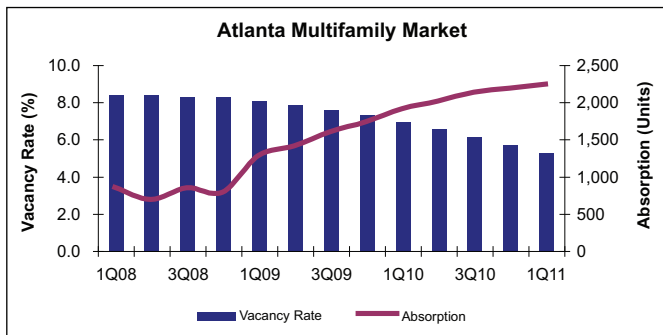


Industrial Market Vacancy and Absorption Projections (cont.)

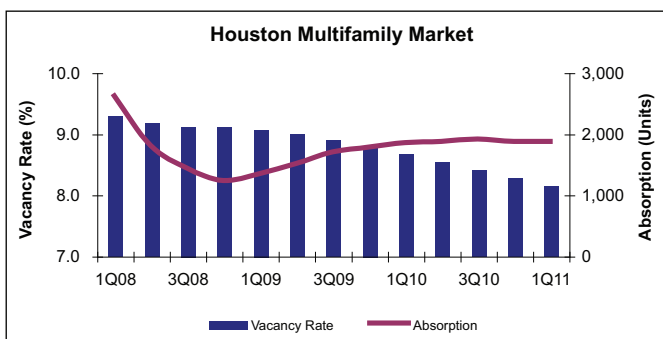
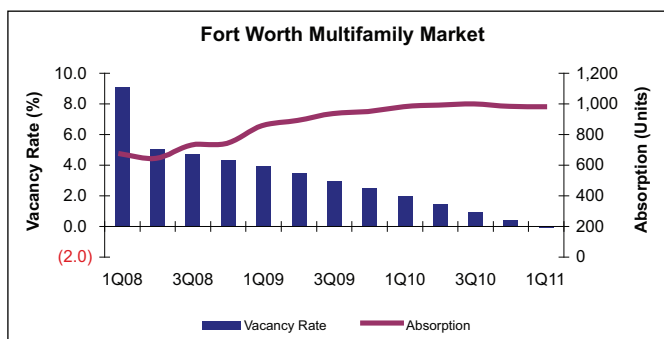
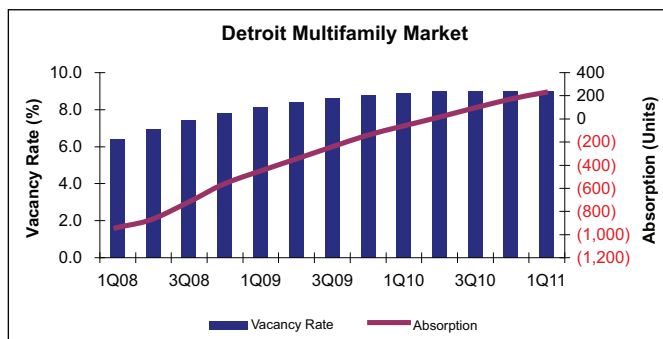
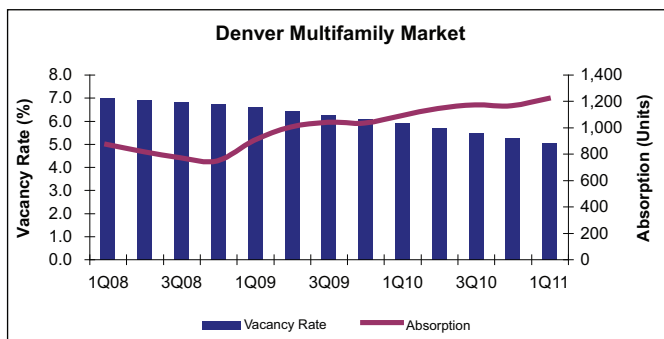
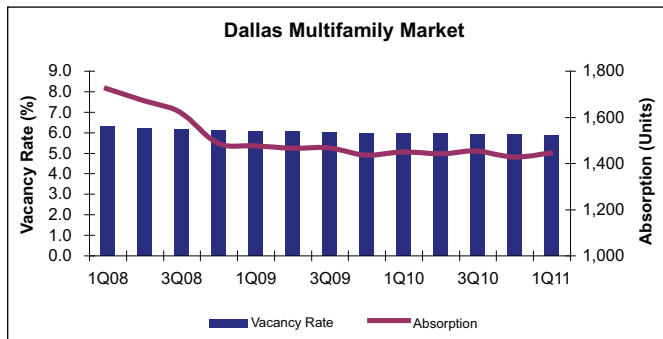
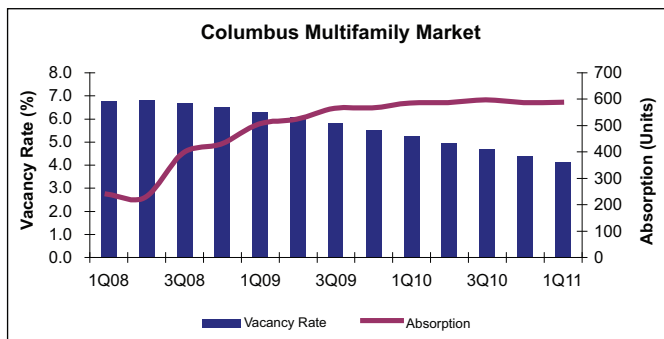
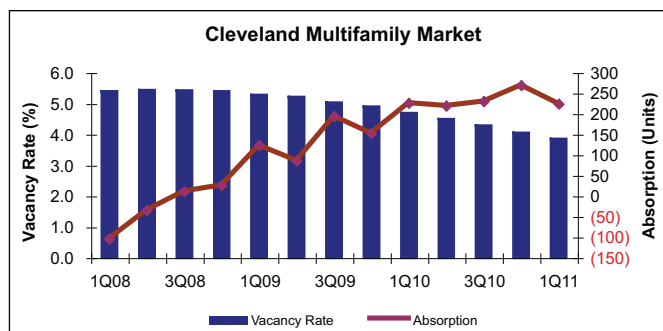
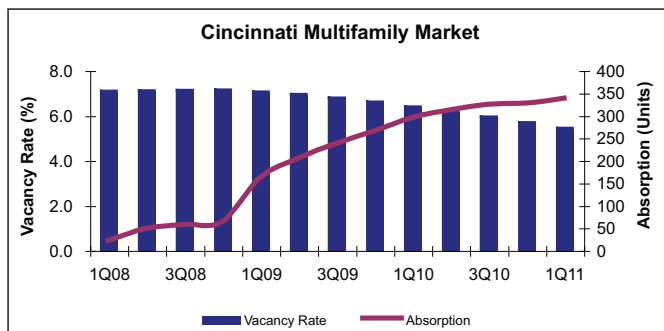


Multifamily Vacancy and Absorption Projections

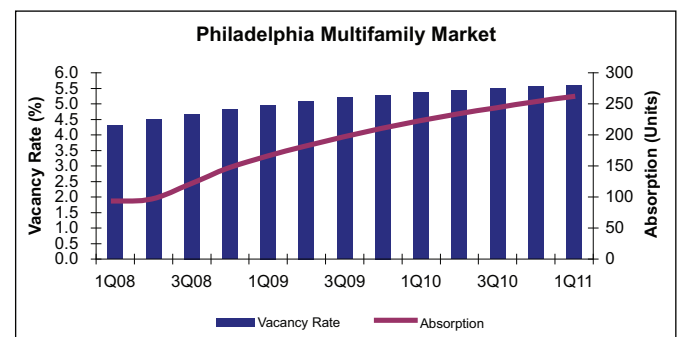
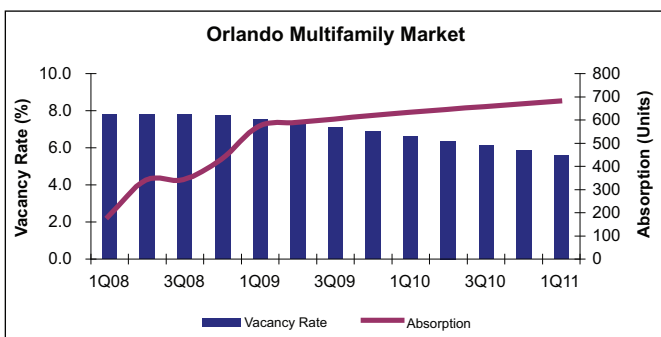
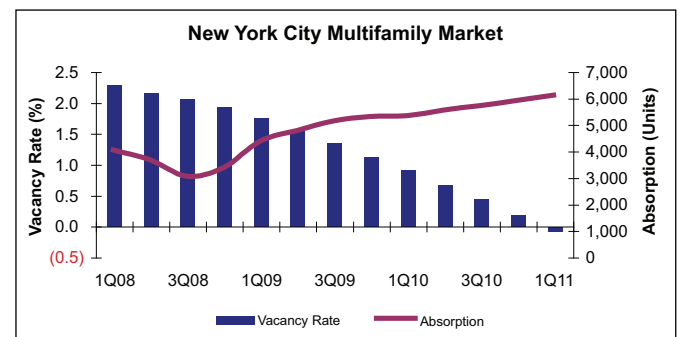
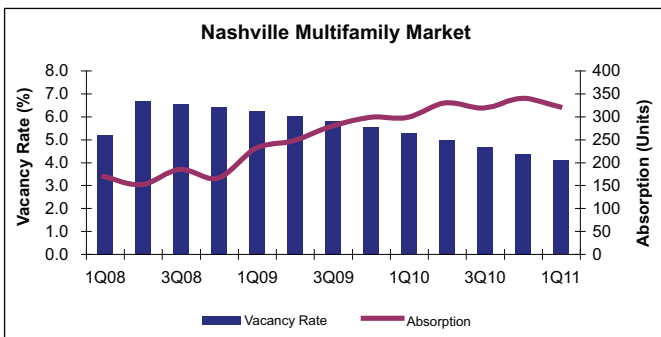
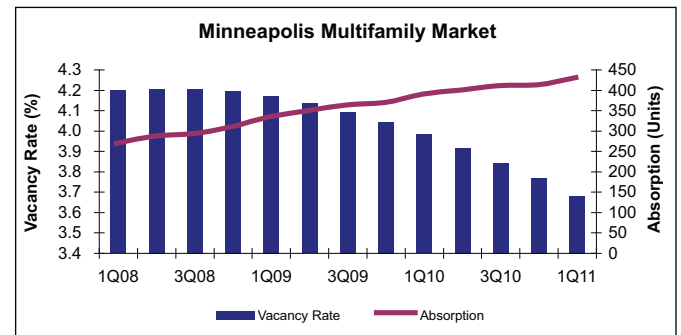
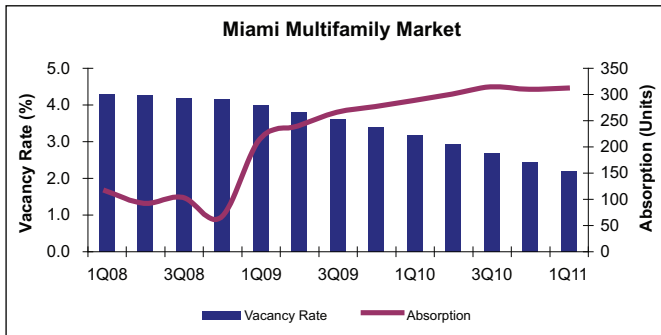
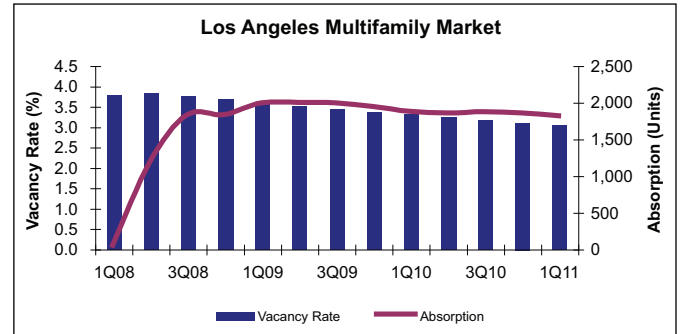
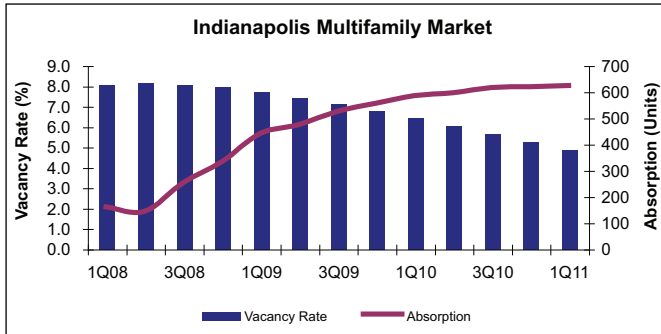
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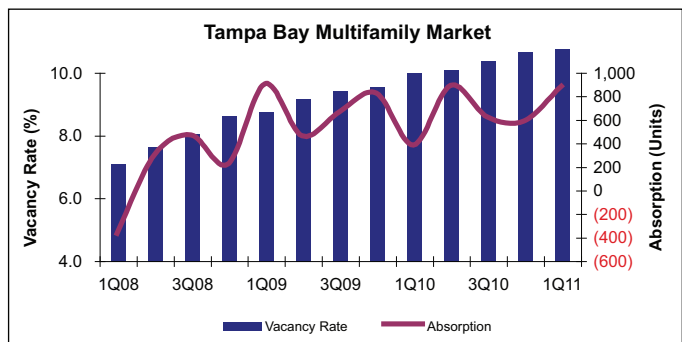
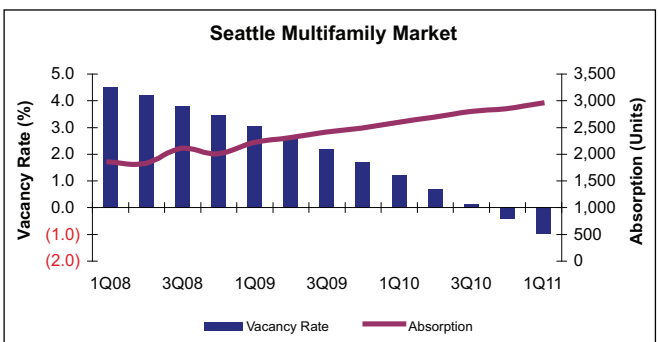
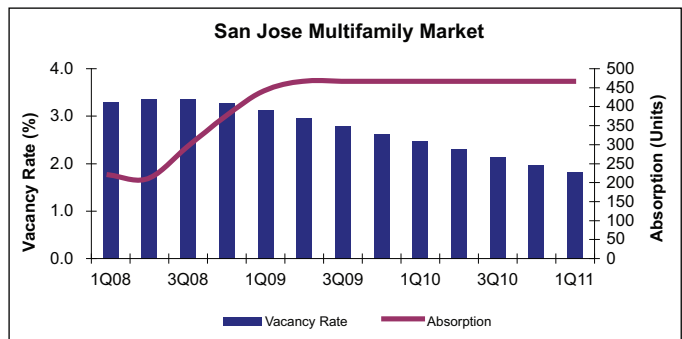
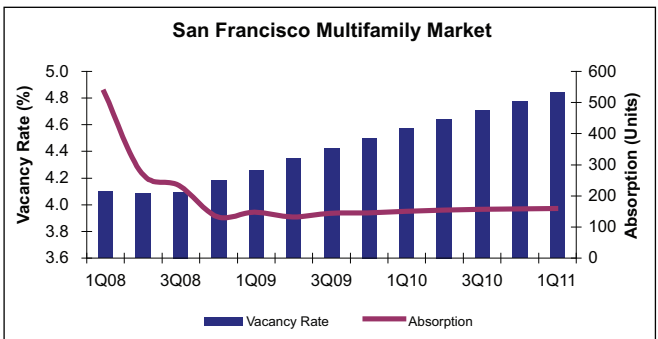
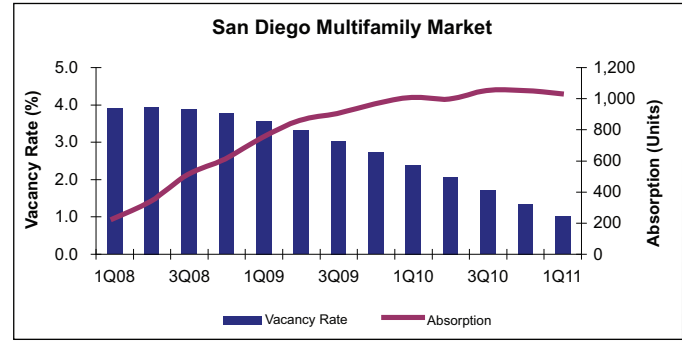
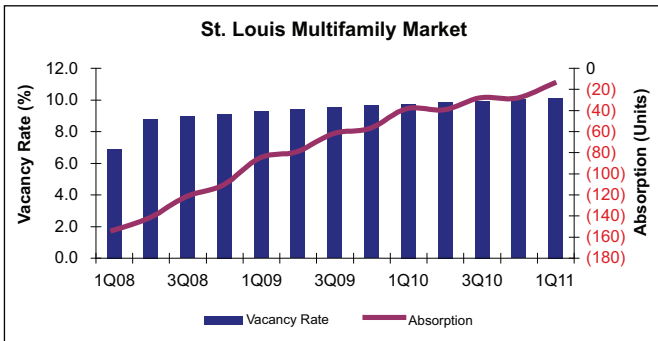
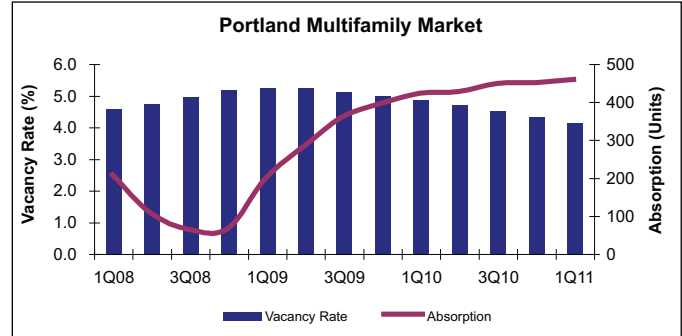
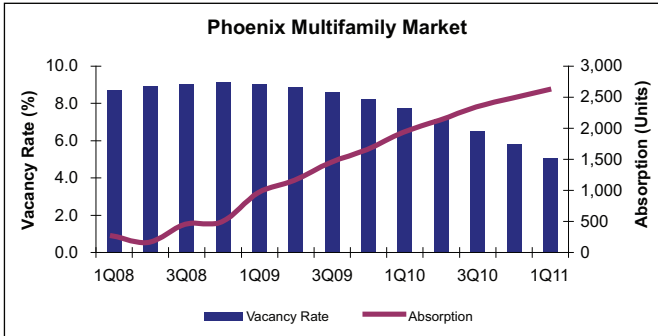
Multifamily Vacancy and Absorption Projections (cont.)



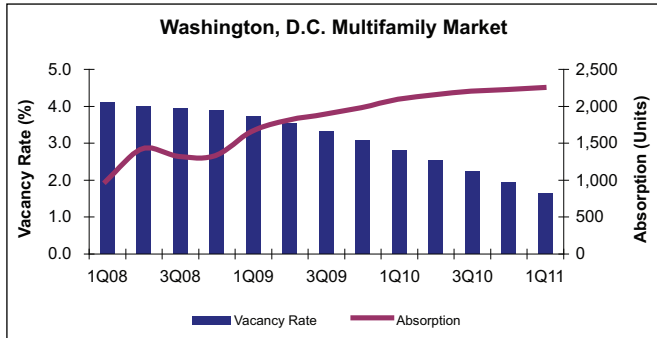
Multifamily Vacancy and Absorption Projections (cont.)



Multifamily Vacancy and Absorption Projections (cont.)

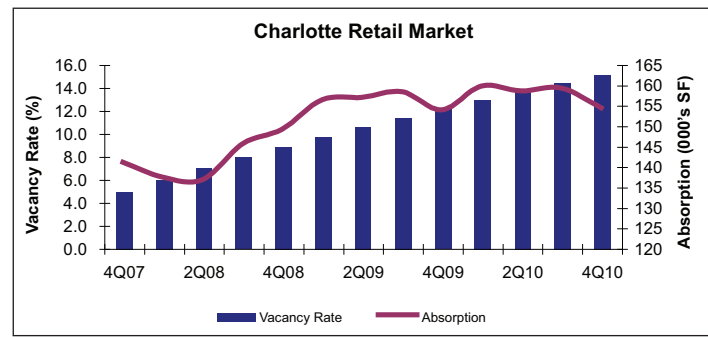
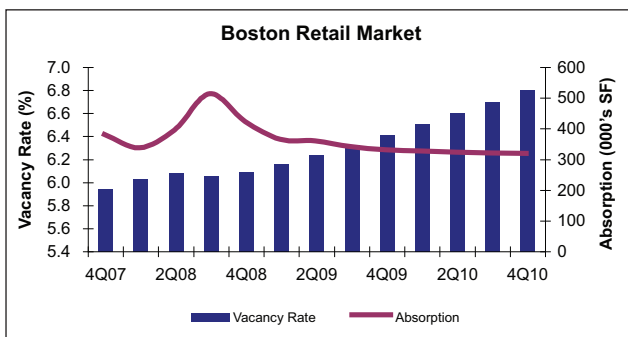
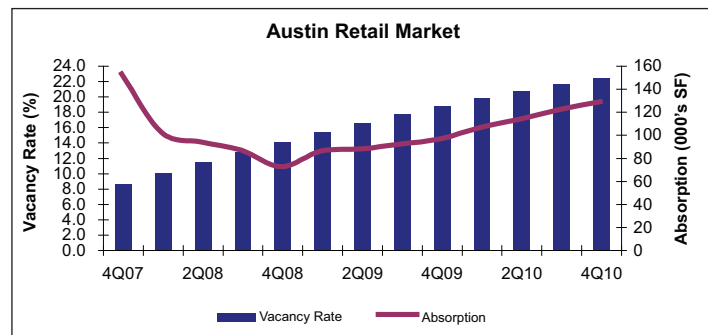


Multifamily Vacancy and Absorption Projections (cont.)

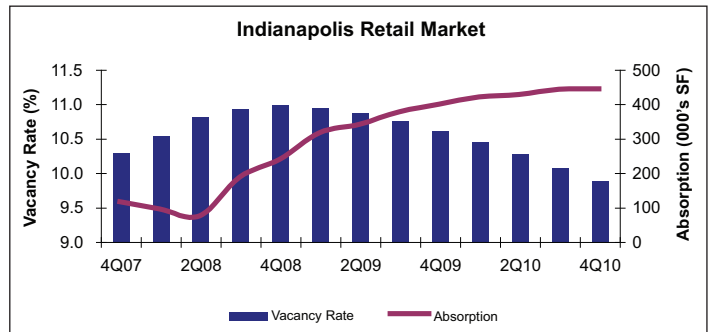
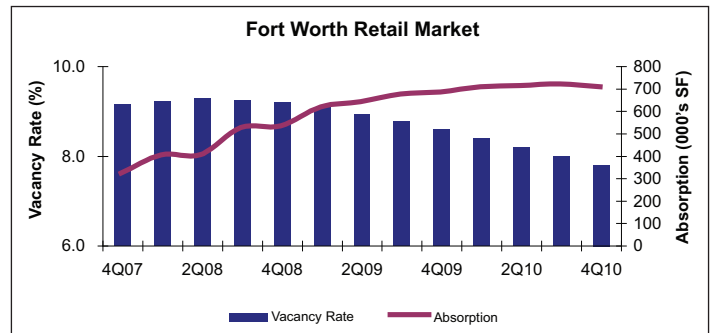
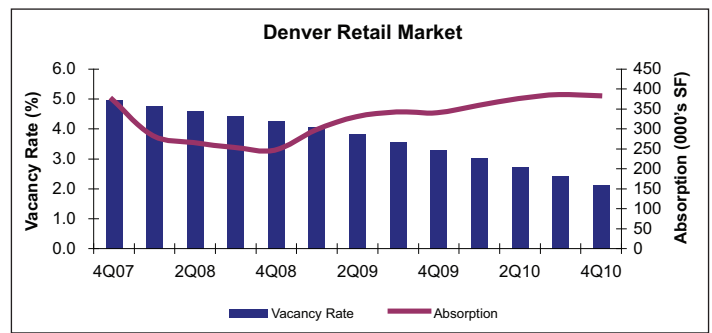
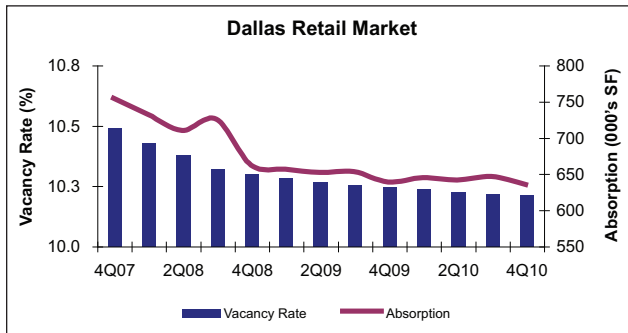
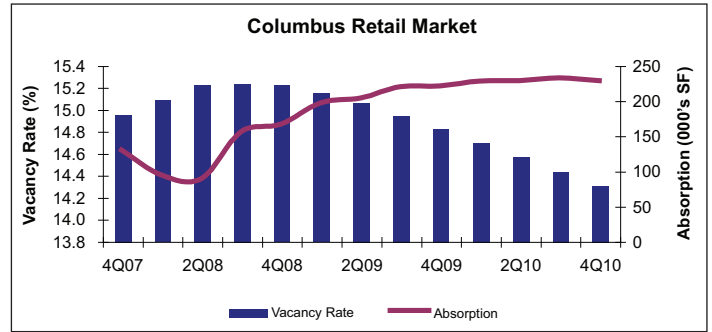
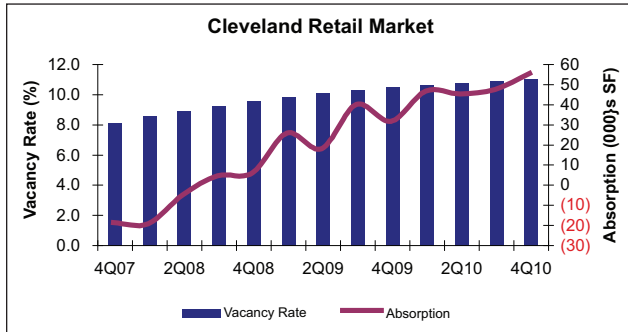


Retail Vacancy and Absorption Projections

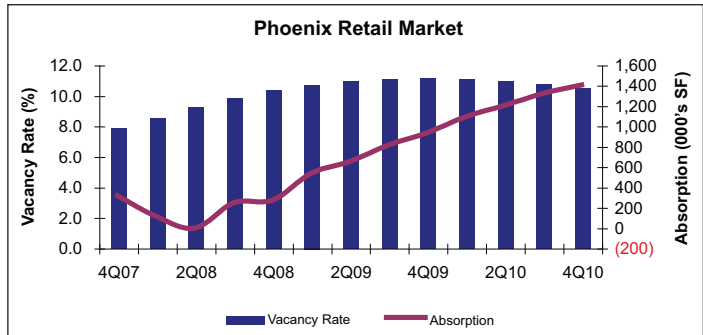
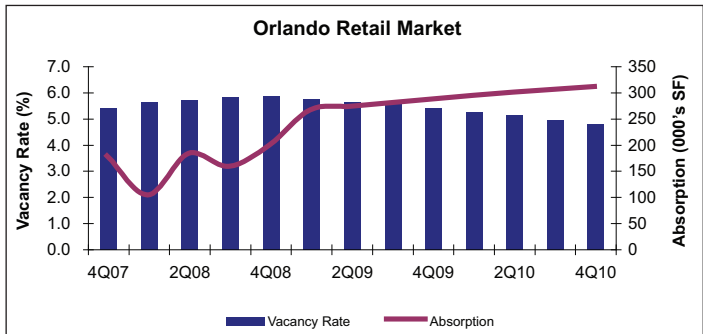
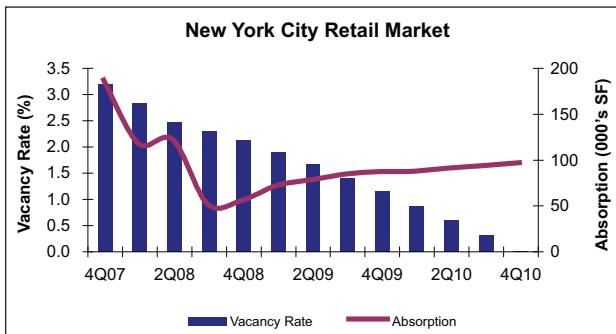
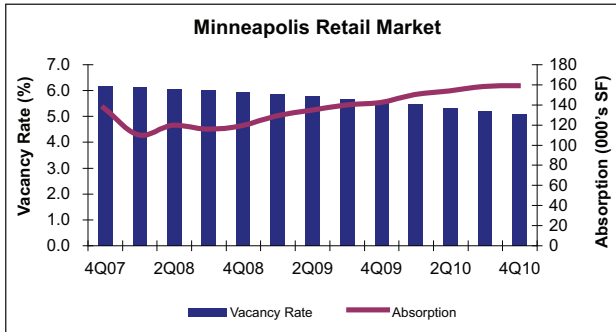
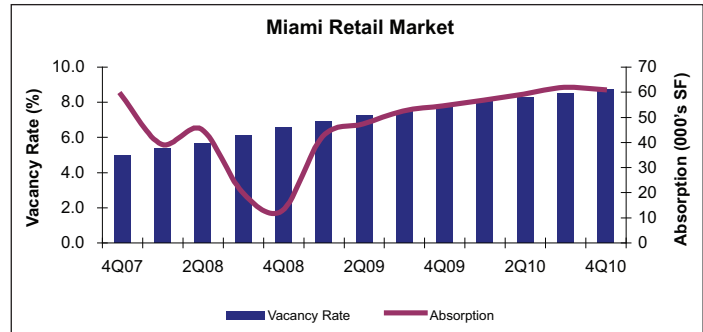
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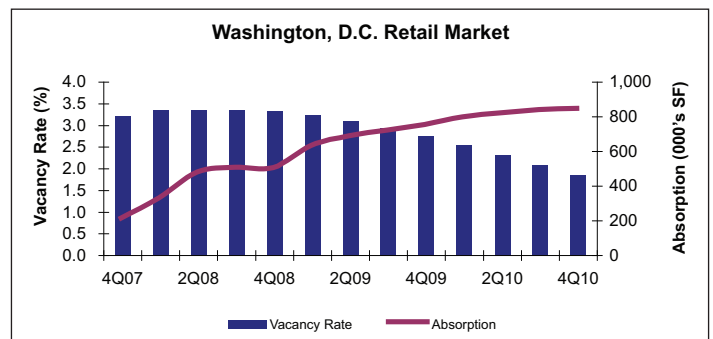
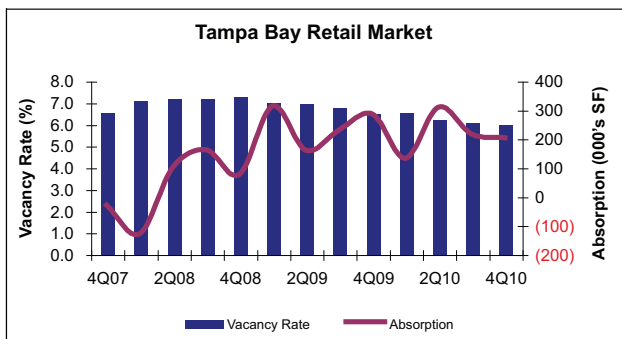
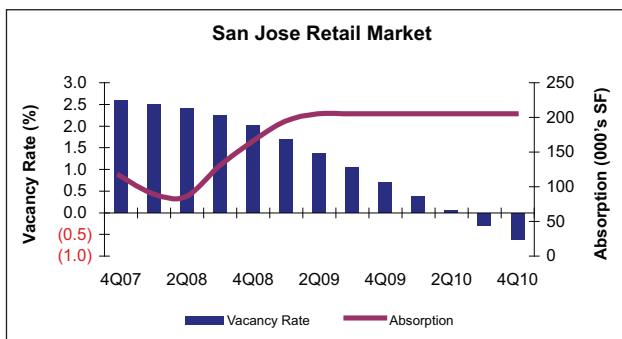
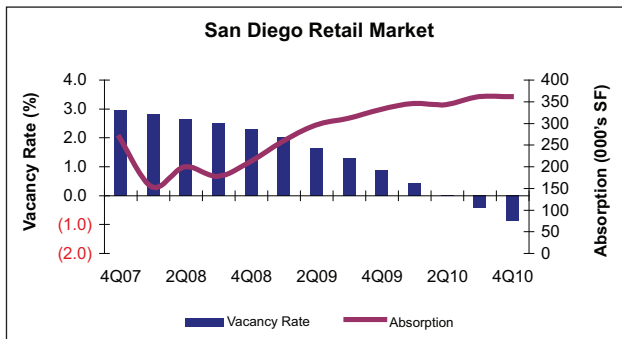
Retail Vacancy and Absorption Projections (cont.)



Retail Vacancy and Absorption Projections (cont.)

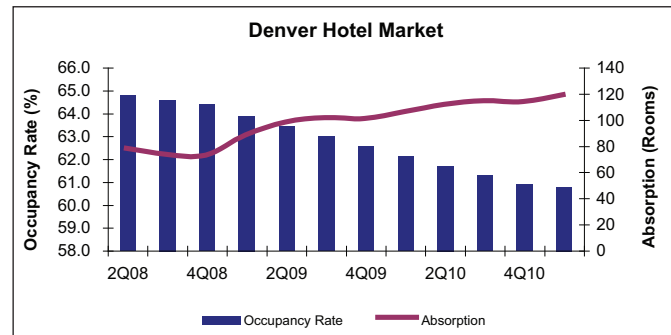
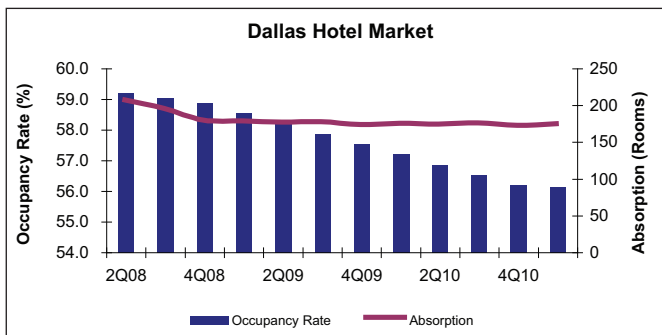
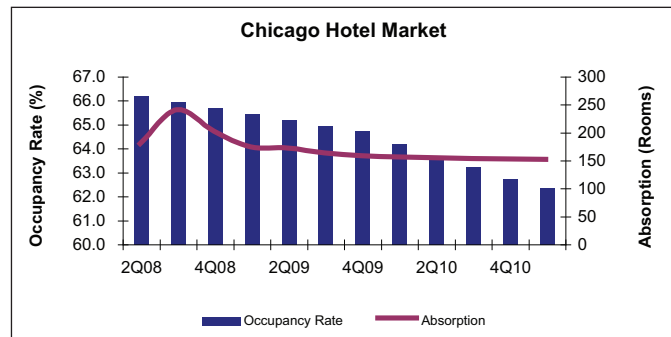
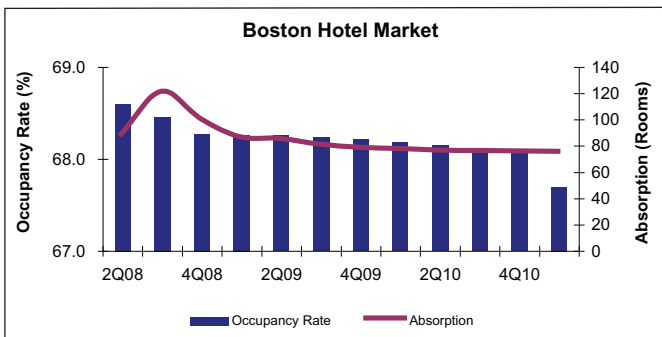
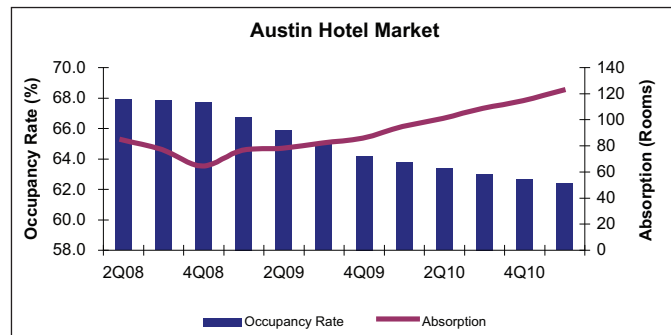


Retail Vacancy and Absorption Projections (cont.)

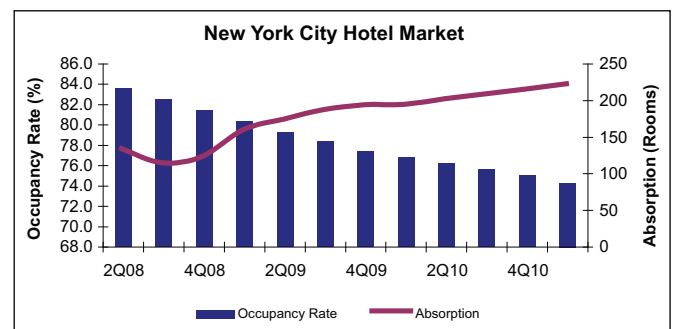
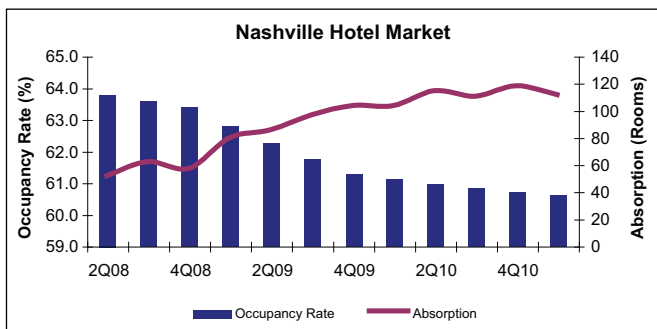
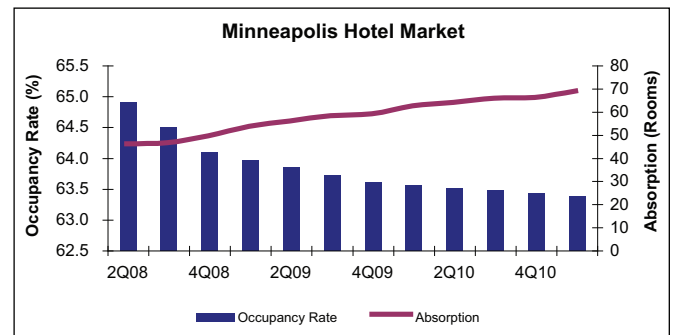
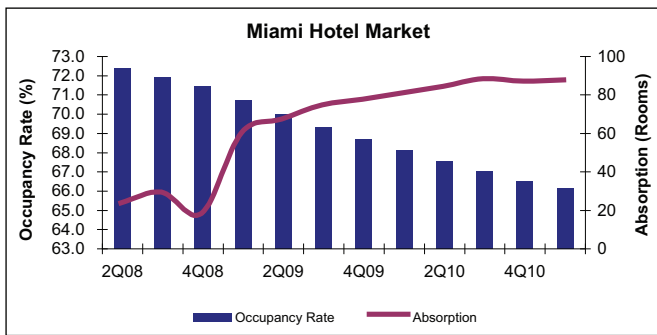
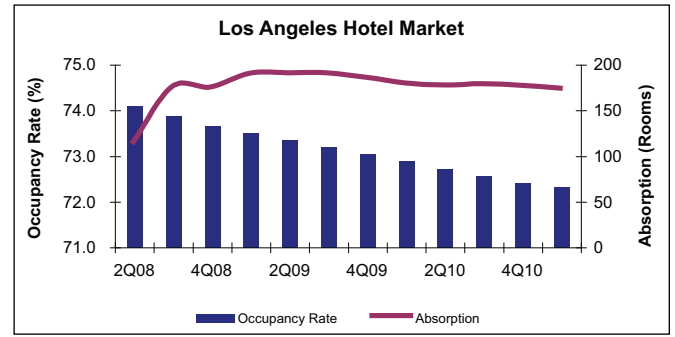
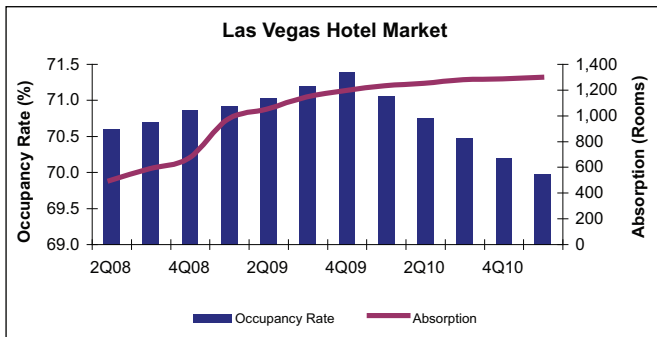
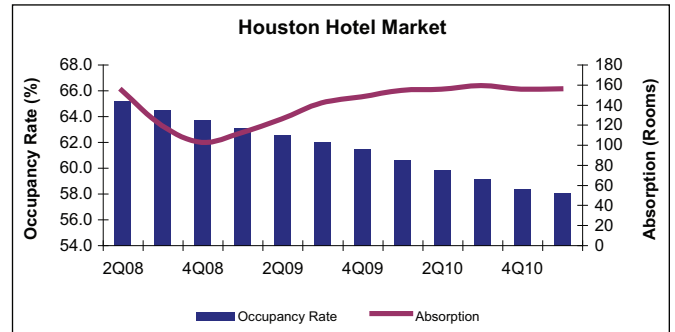
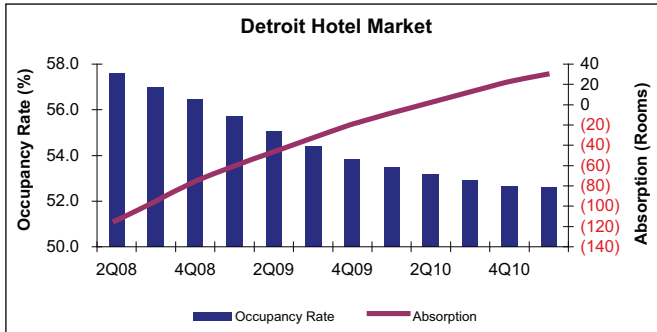


Hotel Vacancy and Absorption Projections

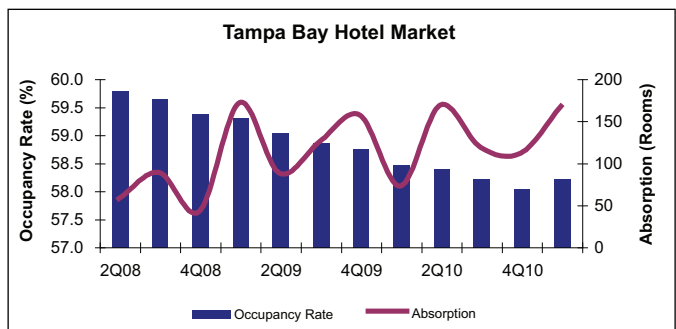
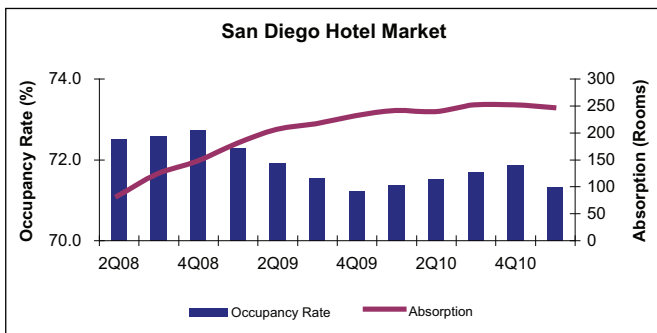
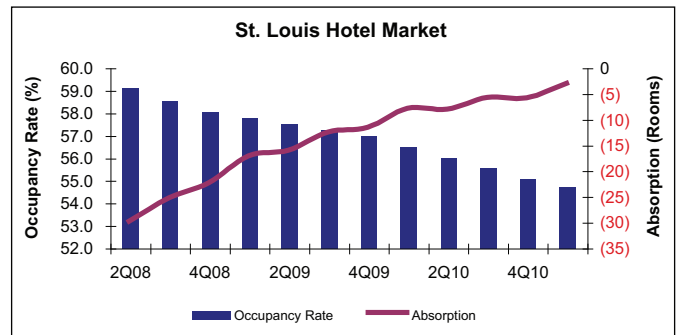
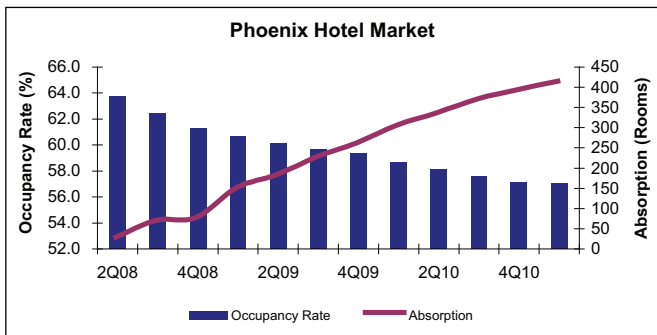
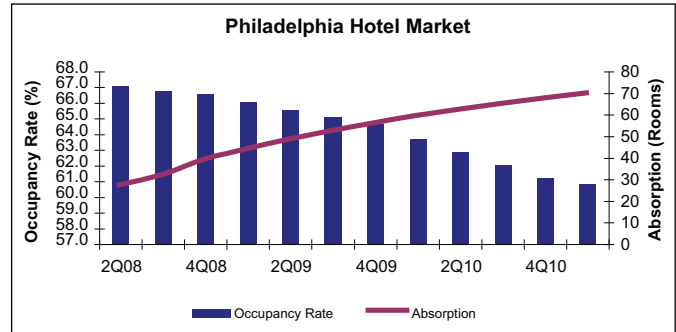
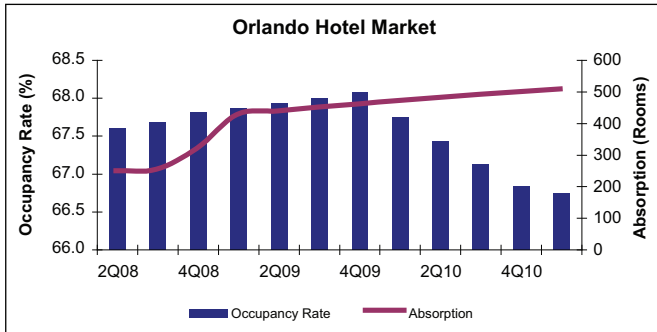
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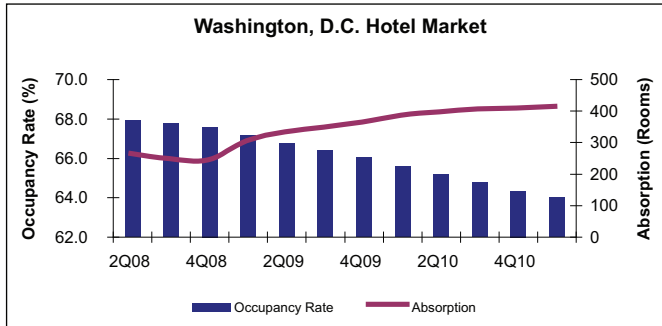
Hotel Vacancy and Absorption Projections (cont.)



Hotel Vacancy and Absorption Projections (cont.)



Hotel Vacancy and Absorption Projections (cont.)



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About Dr. Peter Linneman

Dr. Linneman, who holds both Masters and Doctorate degrees in economics from the University of Chicago, is the Principal of Linneman Associates. For over 25 years he has provided strategic and financial advice to leading corporations. Through Linneman Associates, he provides strategic and M&A analysis, market studies, and feasibility analysis to a number of leading U.S. and international companies. In addition, he serves as an advisor to and a board member of several public and private firms.

Dr. Linneman is the author of the leading real estate finance textbook, *Real Estate Finance and Investments: Risks and Opportunities*. His teaching and research focuses on real estate and investment strategies, mergers and acquisitions, and international markets. He has published over 100 articles during his career. He is widely recognized as one of the leading strategic thinkers in the real estate industry.

He also serves as the Albert Sussman Professor of Real Estate, Finance, and Business and Public Policy at the Wharton School of Business, the University of Pennsylvania. A member of Wharton's faculty since 1979, he served as the founding chairman of Wharton's Real Estate Department and the Director of Wharton's Zell-Lurie Real Estate Center for 13 years. He is the founding coeditor of *The Wharton Real Estate Review*.

All inquiries and comments can be directed to Dr. Peter Linneman at (215) 636-8490 or plinneman@linnemanassociates.com.
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