BEAR STEARNS

Equity Research

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Investment Strategy

Approaching an Inflection Point in the Bubble Cycle

- **THERE ARE A NUMBER OF COMMON MISCONCEPTIONS REGARDING ASSET BUBBLES.** Bubbles are serial in nature and are often broad events. Contrary to popular belief, neither the bond market nor energy stocks is currently experiencing a bubble episode. Yet, in our opinion, one market that *is* in a bubble is real estate!

- **THE UNWINDING OF THE REAL ESTATE BUBBLE COULD BROADLY IMPACT FINANCIAL MARKETS FOR YEARS TO COME.** The speed with which the housing bubble deflates will have important implications for household spending and could determine how quickly and strongly the Fed increases liquidity again.

- **THE END OF ONE BUBBLE OFTEN TRIGGERS THE BEGINNING OF ANOTHER.** A bubble-induced economic slowdown oftentimes leads the Fed to once again inject liquidity into the economy. This phenomenon typically acts as a trigger that paves the way for the beginning of a new asset bubble.

- **AREAS WORTH CONSIDERING AS POTENTIAL FUTURE OPPORTUNITIES ARE ALTERNATIVE FUELS, NANOTECH, AND HEALTH CARE.** These are just a few potential areas that could see continued interest generated. While any of these could end up as a disappointment, a significant technological breakthrough at a time when the bubble environment is fertile could be quite profitable.

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All pricing is as of the market close on May 5, 2006, unless otherwise indicated.

Executive Summary

As a follow-on study to our report published last June, titled *Asset Bubbles: A Look at Past and Future Manias*, we thought it was time to reevaluate the current environment to see what has transpired in the past year and what we can expect in the next phase of the bubble cycle. Last year's study sought to explain why asset bubbles tend to repeat throughout history as well as how best to identify the economic conditions that commonly precede bubble-prone environments. In this report, we remind investors of the conditions that are conducive to asset bubbles, as well as dispel a number of myths surrounding them.

More importantly, though, we note that one of the big manias that was brewing last year at this time, the housing market, appears to be starting to unwind. (Yes, we think real estate is a bubble.) With this in mind, it is important to understand what the consequences of a housing slowdown could be for financial markets — a topic we discuss in chapter three.

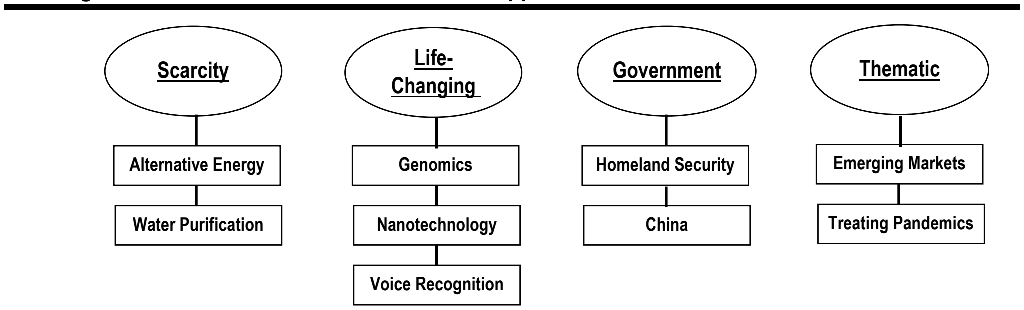
Implications of a Housing Slowdown for Financial Markets

Housing Slows ⟹ Consumer Slows ⟹ Fed Cuts Rates ⟹ Time to Think About Next Opportunities!

Source: Bear, Stearns & Co. Inc.

The end of a monetary tightening cycle often coincides with the end of an asset bubble. The reason for this is that an end of Fed tightening is usually a point at which the accommodative conditions that set the bubble in motion in the first place have dried up. Once an asset bubble begins to wind down, the Fed's response is typically to provide liquidity again to prevent a widespread economic slowdown. This phenomenon has often been the catalyst that sparks the next wave of speculation.

Looking Past Real Estate: Where Are the Next Opportunities?



Source: Bear, Stearns & Co. Inc.

The end of a mania brings a silver lining — the beginning of the next phase of the bubble cycle. Given today's backdrop, one in which the real estate bubble of the last few years is beginning to show signs of fatigue, we think now is a good time to start thinking about where the next opportunities could occur once the Fed eventually provides stimulus once again. Of course, the housing market is only just beginning to unwind and it could be some time before the economy is affected (by way of the consumer, of course). That said, it is not too early to start thinking about where the money will flow to once we see another wave of easy credit.

Chapter One: Q&A on Asset Bubbles

Our initial bubble report, titled *Asset Bubbles: A Look at Past and Future Manias*, reminded investors that history is littered with asset bubbles, which seem to repeat throughout the decades. We pointed out the striking similarities between the economic backdrops of numerous bubble episodes, from as far back as the 1600s all the way up through current day.

Indeed, each century has seen its fair share of manias and asset bubbles. Some investors are familiar with the more well-known historical bubbles, such as the notorious Dutch tulip mania in the 1630s, railroad stocks in England and the U.S. throughout the 1800s, and, of course, the Great Crash of 1929. That said, plenty more manias have occurred throughout the last few centuries that are more obscure than those mentioned above but that are worth taking note of, in our view.

HISTORY IS LITTERED WITH ASSET BUBBLES

Tracking Bubbles Throughout History

	1600s		1700s		1800s		1900s	2000s
1630s	Tulip Mania	1720s	Canals (UK)	1820s	South American Mining Cos. (UK)	1900s	Conglomerates	Real Estate
1690s	Hyacinth Mania	1790s	South Sea Co.	1840s	Railroads (UK)		Railroads	China?
	East India Co.			1850s	Railroads	1910s	War Companies	Hedge Funds?
				1860s	Gold Mining Stocks	1920s	Florida Land Speculation	Nanotechnology?
				1870s	Railroads		Motor Cars and Radio	Genomics?
				1880s	Railroads		Crash of 1929	Robotic Surgery?
				1890s	Railroads	1950s	Bowling Stocks	Voice Recognition?
							Vending Stocks	GPS?
						1960s	Electronics	Battery Life?
							Conglomerates	Fuel Cells?
						1970s	Nifty-Fifty	Alternative Fuels?
							Oil Companies	Water Filtration?
							Gold Bullion	Pesticides?
						1980s	Japanese Market	Pandemics?
							Junk Bonds	Emerging Markets?
							LBOs	Homeland Security?
							Housing	
							Biotech	
						1990s	Internet	
							Biotech	

Source: Bear, Stearns & Co. Inc.

In last spring's report, we reviewed some of the bubble episodes outlined above, in an attempt to understand how these situations occur and the effect they can have on financial markets. In our exploration, we found that enormous appreciations in asset prices and subsequent collapses are actually quite frequent in financial history. Indeed, our survey of prior centuries illustrates that these episodes tend to repeat with some periodicity.

Academic studies, such as those of Nobel Prize economist, Vernon Smith, explain, in part, that *experience* is the only way to avoid the pitfalls and to profit from asset bubbles. In an industry in which new participants are entering financial markets all the time, the "experience" needed to avoid falling prey to an asset bubble usually takes a longer time to unfold than the lifespan of a typical Wall Street career. As such, we attempted to offer a framework with which to identify bubble-prone environments. In the following chapter, we will review our bubble-prone environment checklist and reassess the current environment for signs of potential bubbles.

In the meantime, we can identify a certain cycle to the evolution of a bubble. While bubbles are often opaque to the general participant, there are certain characteristics that tend to breed bubble environments, and this is usually the psychology of optimism — i.e., economic expansion, general prosperity, and predictable banking and financial liquidity.

The idea that a financial disaster could occur at any moment is too far-fetched for individuals to imagine during times of such heightened exuberance. With that in mind, it should come as no surprise that some of the most outrageous cases of bubble psychology over the past 400 years have occurred in countries undergoing major industrial or technological revolutions, and, at the same time, enjoying dominance in trade and financial markets. As such, these have typically been developed economies, which welcome a risk-taking mentality, usually in the late stages of an economic expansion. In fact, the catalyst has often been a technological or industrial revolution that increases mobility, improves quality of life, and brings with it the opportunity to increase employment and wealth-making opportunities.

Q&A on Ten Common Misconceptions About Bubbles

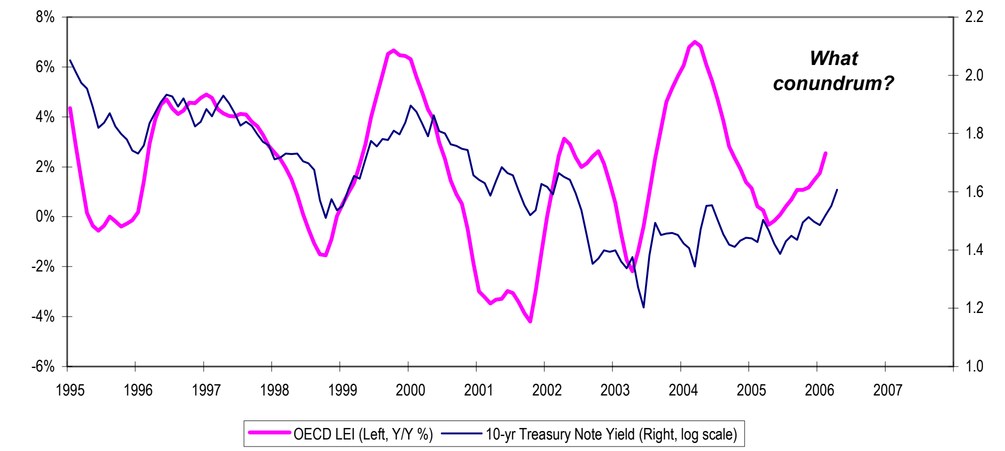
Question No. 1: Is the Term "Bubble" Misunderstood or Thrown Around Too Loosely?

Answer: Yes. From time to time, we have seen examples of the term "bubble" being applied to asset price swings that can be more easily explained by simple business economics (i.e., demand versus supply). For instance, the spike in oil prices in 1973-74 was due to a major drop in supply, while the rise in oil prices in recent years has more to do with an increase in demand from emerging countries like China and India — not necessarily bubbles. To be specific, the well-known energy bubble of the late 1970s did not arise until poor monetary policy fueled an inflationary environment that led to speculation in commodities and commodity stocks. It was only then that valuations became unhinged from fundamentals and investors lost sight of the fact that companies would increase exploration and production (i.e., supply) and that inflation would inevitably slow real economic growth (i.e., demand).

WHAT "CONUNDRUM" IN BOND YIELDS?

In recent years, we have heard many market pundits proclaim that the bond market is in a bubble. Persistently low bond yields in the face of tightening monetary policy and strong U.S. economic growth left many wondering whether too many investors were rushing into U.S. Treasuries, and if that rush might be reaching bubble proportions. Much like energy prices today, this bond market "conundrum" is really little more than a traditional demand/supply imbalance. Simply put, too many foreign investors are trying to put their U.S. dollar reserves to productive use, and U.S. bonds, agencies, and corporates are their vehicles of choice. Put in the context of a benign inflationary environment courtesy of high business productivity and beneficial import deflation, the persistence of low bond yields in recent years is really not much of a conundrum at all. More importantly, in order for bonds to qualify as an asset suffering from bubble psychology, one would need to prove that bonds are trading at prices well in excess of their fundamentals and that an eventual collapse of bond prices is possible. Since bond prices are based upon the discounted value of their future cash flows, and the discount rate is mostly a function of inflation and credit risk expectations, then an investor that believes we could be headed for a bubble-magnitude decline in bond prices would also have to paint a future picture of either hyper-inflation (e.g., the 1970s/early 1980s) or a depression (e.g., the 1930s) when credit spreads widen extraordinarily. These do not appear to us to be reasonable expectations.

Bond Yields Trend Alongside Economic Pressures



Source: Federal Reserve; OECD; Bloomberg; Bear, Stearns & Co. Inc.

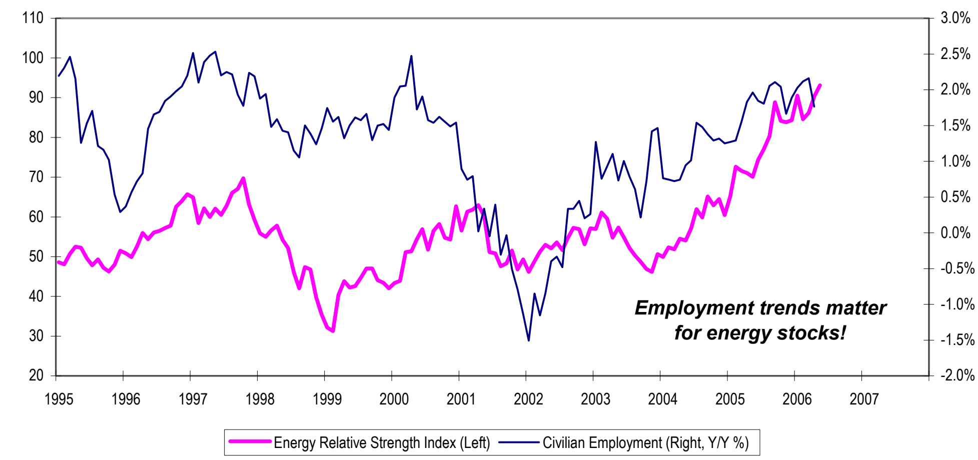
Furthermore, as the chart above illustrates, certain measures of economic expectations suggest that bond yields have been behaving exactly as we would expect in the current environment. Indeed, bond yields have typically trended alongside economic growth prospects (in this case, we use the OECD's Leading Economic Indicators). As such, the range-bound environment we've seen from bond yields since their peak in 2004 is not overly surprising. As the chart demonstrates, the global economic backdrop began losing momentum in mid-2004. Then, in mid-2005, we saw a re-acceleration in economic momentum. Unsurprisingly, this re-acceleration coincided with a rally in bond yields during the same time frame. In other words, the behavior of bond yields does not seem to differ very much from that of economic fundamentals — i.e., no bond bubble here.

ENERGY: HOT BUT NOT FROTHY!

On the heels of rapidly rising energy prices, another example of an asset class that has shown particularly strong price movements recently is energy stocks. Indeed, a number of market participants and media outlets have raised the question of whether or not the surge in energy prices is frothy, or if the increased trading volume in the sector is a sign of excessive speculation. However, we have found that price moves in the energy sector during the last couple of years have actually been warranted by fundamentals. That is, even though the relative performance of the energy sector has been more robust than we've seen in a decade, the valuation of these stocks suggests that such price moves have been warranted by the sector's fundamentals (remember, a mania or bubble environment is when prices move well beyond fundamentals).

At this juncture, it is not overly surprising that we've seen a significant appreciation in energy stocks, as they are a typical late-cycle play. What's more, the surge in energy stocks seems to be fundamentally justified. As the chart below illustrates, energy stocks are extremely sensitive to drivers of consumption like employment. As such, the economic recovery we've experienced in the past couple of years has coincided with an increase in energy demand.

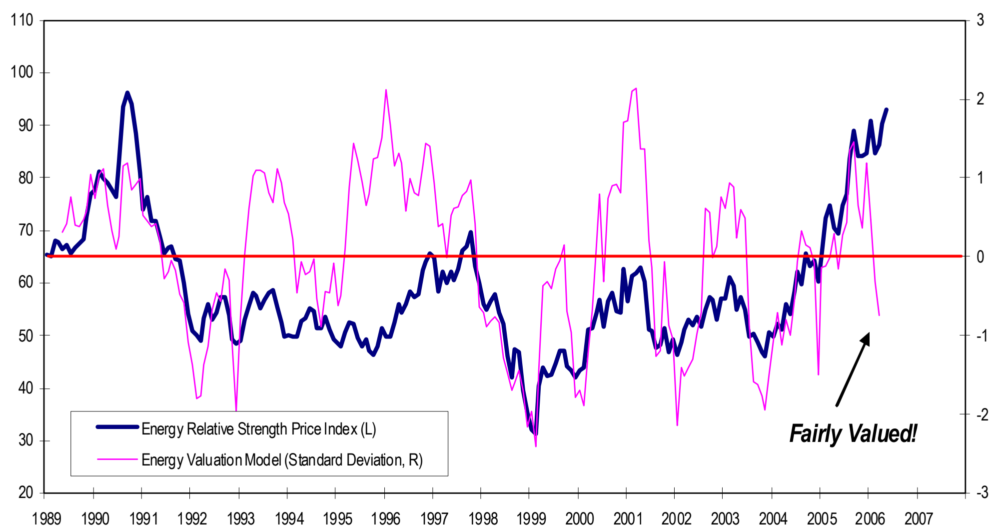
Energy Stocks: Highly Influenced by U.S. Consumption Trends



Source: FactSet Research Systems Inc.; Haver Analytics; Bear, Stearns & Co. Inc.

What's more, energy stocks are not trading at wild valuations at this time, and actually seem to be fairly priced relative to the economic backdrop. The chart below shows our macro valuation model for the energy sector, which blends several macroeconomic variables to which energy sector valuation shows sensitivity. The model suggests that energy stocks are currently trading right around macro fair value and that valuations are by no means as awry as we've seen during typical bubble episodes. In fact, at their most stretched, energy stocks traded at about 1.5-2.0 standard deviations from the fair value mean in 1995-96 and 2000-01. In addition, remember that at the bubble peak, tech stocks traded at more like 3.0 standard deviations from the mean! At zero, energy stocks' valuation does not seem stretched at all, but actually looks quite fairly valued. This is important because asset bubbles occur when asset prices exceed what fundamentals would justify. When it comes to energy stocks, there does not appear to be any such imbalance at this juncture — at least not yet!

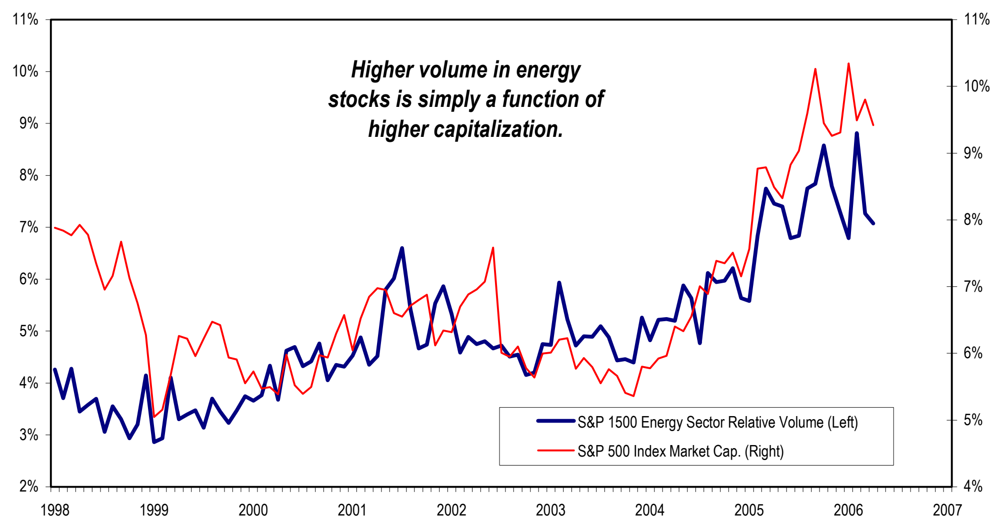
In Light of the Macro Backdrop, Energy Stocks Look Fairly Priced



Source: FactSet Research Systems, Inc.; Federal Reserve; Bear, Stearns & Co. Inc.

Others claim that the excessive trading volumes seen in the energy sector are evidence of some sort of an energy bubble. Indeed, the chart below illustrates that trading activity in the energy sector has certainly reached high levels in the past couple of years. As the price of oil has reached the $70 area in recent months, trading volumes in the sector have increased as well. In fact, trading volume in the S&P 1500 energy sector relative to that of the entire S&P 1500 spiked to a lofty 10% in recent weeks. At the same time as oil prices have climbed and trading volume has increased, the relative performance of the energy sector has also appreciated significantly. In fact, energy stocks have appreciated by more than 60% relative to the market since the beginning of 2004. Such a move has understandably sparked the question as to whether this move is due to speculation, or if such a move was warranted by the sector's fundamentals. However, as the chart below illustrates, the increased trading volumes are completely in line with the increase in the sector's market cap, reiterating the point that there does not seem to be an energy bubble in effect just yet!

Relative Trading Volume in Energy Sector Reached New Highs in 2005



Source: FactSet Research Systems, Inc.; Bear, Stearns & Co. Inc.

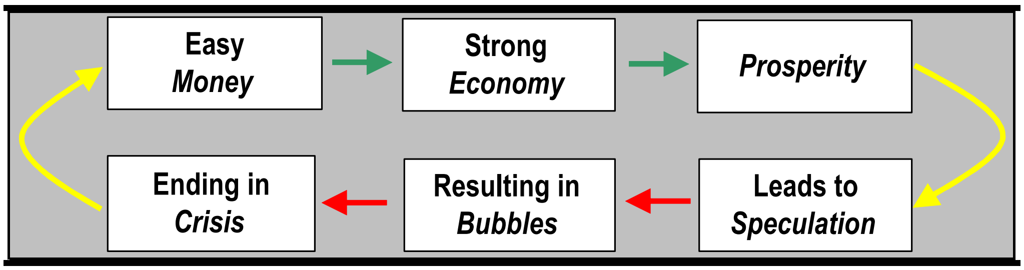
Question No. 2: Are There Similarities Leading Up to a Bubble Environment (i.e., Can We Identify a Bubble While We're in the Midst of It)?

Answer: Yes. Bubbles do not mysteriously occur. Instead, they are the result of the business and financial environment that exists at a point in time. The purpose of our bubble analysis is to show that many bubbles have similar economic characteristics and that these characteristics can be identified. We have found that there are a number of identifiable economic and behavioral similarities between environments that breed bubble episodes. For instance, we have found that most (if not all) historical bubble episodes have occurred in developed economies. This, of course, is not too surprising given that it is in these economies that participants typically feel comfortable assuming the most risk.

ORIGINS OF AN ASSET BUBBLE

What's more, using economic data from the past 150 years, we have discovered enough similarities between past bubble episodes to develop a framework to help identify bubble-prone environments. Indeed, we are able to identify a specific set of economic conditions that usually accompanies (or precedes) financial bubbles. First, we typically see that ample financial liquidity in the system fosters a prosperous economic backdrop, eventually causing increasingly optimistic investors to assume greater financial risk and to become more speculative in their investments. This speculation then evolves into an asset bubble, as prices move well beyond what fundamentals would justify. Eventually the bubble bursts, often bringing devastating consequences for the broader financial landscape.

Evolution of a Financial Bubble



Source: Bear, Stearns & Co. Inc.

So, why are bubbles often so difficult for the general participant to spot? The answer is simply that the environment that fosters the bubble psychology is one of extreme optimism marked by economic expansion, general prosperity, and perceived banking and financial liquidity. The idea that an adverse financial incident could occur at any moment is too far-fetched for individuals to imagine during times of such heightened exuberance. With that in mind, it should come as no surprise that some of the most outrageous cases of bubble psychology over the last 400 years have occurred in countries undergoing major industrial or technological revolutions, and, at the same time, enjoying dominance in trade and financial markets. A technological or industrial revolution that increases mobility, improves quality of life, and brings with it the opportunity to increase employment and wealth-making opportunities is just the catalyst necessary to ignite a bubble psychology phenomenon or an "It's Different This Time" mentality.

Like a perfect storm, these three bubble characteristics (economic expansion, general prosperity, and predictable banking and financial liquidity) can converge to create a psychology of endless prosperity. This is why the term "New Era" or "It's Different This Time" are common rallying cries during each of the major bubble events. This "New Era" psychology brings with it a change in the perception of risk and a chorus of believers proclaiming that it will be different this time and that new models must be created to monitor asset values. In the end, however, it becomes painfully obvious that there is no such thing as a "New Era."

The common thread of speculation is that it almost always occurs in an environment marked by prosperity. When "prosperity think" drives the price of a speculative asset far beyond the discounted value of its future cash flows, a bubble mania is evident.

Question No. 3: Why Should I Worry About a Potential Real Estate Bubble in California if I Live in Iowa?

Answer: Because it is important to remember that asset bubbles frequently begin as localized events, yet their ramifications often rattle the broader markets and sometimes the entire economy. A bubble can form in a single asset class, stock market industry, or geographic region and boil over to impact a multitude of industries and often the entire financial landscape.

For instance, the bursting of the dot-com bubble didn't only affect Internet stocks, but rather took down a number of broader market indices with it. When prices surge in one area, whether it be a group of stocks or home prices in a localized region, it can oftentimes become a contagion that affects other areas. For instance, the dot-com bubble's backdraft swept technology enablers like software and hardware manufactures and beneficiaries like financial services and retailers up with it. While the Fed typically refrains from acting to stop a bubble, since the bubble environment tends to inflate the economy through excess credit expansion, the Fed eventually will find itself intervening to try to cool the market and dampen speculation.

The Kettle Effect

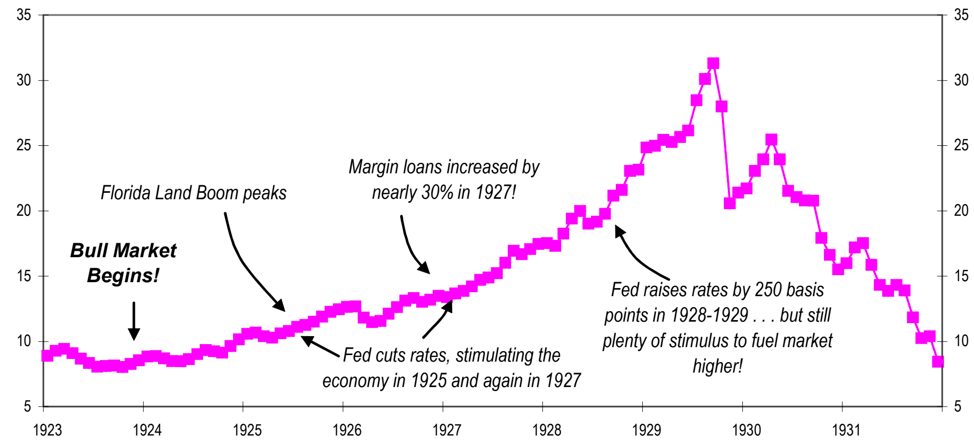
A great example of a localized bubble that later had far-reaching implications was the Florida Land Boom. While much of the nation enjoyed a surge in prosperity during the Roaring 1920s, property in Florida became particularly popular, as investors from all over the country raced to own a piece of this new frontier and to sell it at a quick profit. Prices soared as the familiar storyline that "prices can only go up" created a frenzy of greed that ignited wild speculation. What people didn't realize at the time was that the rise in Florida land prices was just the tip of the iceberg. The enormous inflows of gold from European combatant nations during and after World War I created a vast reservoir of financial liquidity in the U.S. banking system. All that excess financial liquidity inevitably drove interest rates to attractively low levels, which fostered strong credit demand that went into land, capital, and, finally, financial assets. The frenzy that characterizes so many bubble environments from the 1600s' tulip mania to the Gold Rush to the Internet craze, took hold among people seeking to own a piece of Florida real estate.

Land demand in Florida peaked in mid-1925, from which point interest dried up as the boom/bust cycle took shape. About six months later, the rush for Florida land cooled a bit, and by the time a deadly hurricane hit the next fall, Florida real estate prices plummeted. Hundreds of people died, thousands were injured, and millions of dollars in damage ravaged the Florida coastline, depressing an already weakening market for real estate in this part of the country. A second devastating hurricane hit in 1928, and by the time the Great Depression took hold in 1929, property prices in Florida had completely plummeted and would not recover until the 1960s, some 30 years later.

What cannot be ignored about this speculative period was the highly accommodative state of monetary policy that existed at the time. Despite signs of speculation appearing (i.e., Florida real estate as well as the equity market), the Fed lowered the discount rate nonetheless in 1925 and again in 1927 — eventually landing at a record low of 3.5% in 1927. During that year, the use of margin financing exploded. Finally, the Fed raised rates throughout 1928-29, and by August 1929, they were back to 6%.

Still, by that time, loans to investors from banks or brokerages represented about 18% of total capitalization of listed stocks. The market continued to move higher as rates were still too low to inhibit speculation.[i]

Was the Florida Land Boom a Signal of a Broader Bubble-Prone Environment?



Source: Standard & Poor's; Bear, Stearns & Co. Inc.

So, while we are not trying to blame the Florida land boom and subsequent bust for the equity market crash of 1929, we use the example to show that a bubble that appears on the surface to be isolated may in fact be a symptom of a much more dangerous bubble-causing environment. Any smart cook can tell you that bubbles always come out of the sides of the kettle before the lid blows off. Investors need to be aware of the degree of liquidity building within the financial system and the role that monetary policy direction will play in easing or exacerbating a speculative environment. In short, an isolated bubble may be a very important red flag.

Question No. 4: Are Bubbles Repetitive?

THE SERIAL BUBBLE

Answer: Yes, since monetary and fiscal policies can have a profound impact on economic strength, and therefore consumer confidence (i.e., risk-taking), policymakers can in fact create what we refer to as "serial bubbles" that repeat in just a few years or over many decades. That said, bubbles spaced apart by just a few years typically occur in different asset classes such as Florida land prices followed a few years later by the stock market. The dynamic behind this is largely a result of Fed intervention when a bubble bursts — that is, the Fed often cuts interest rates on the heels of an asset bubble winding down, in an attempt to dampen the impact of the correction. By loosening money supply, an environment of easy money is once again created, which, as we have seen, is typically what fuels the first stage of a speculative environment, paving the way for another bubble episode. This cycle is exactly what we saw in the 1800s and early 1900s with railroad stocks.

The major technological innovation of the railroad facilitated an economic surge, which increased living standards and set the groundwork for the Industrial Revolution. Unsurprisingly, this period of optimism led to financial speculation and overexpansion of capacity. This boom/bust cycle in railroad stocks repeated itself several times throughout the 19th century, creating a serial bubble in railroad stocks.

The railroad industry is one of the few industries that has experienced a repetitive bubble in the same asset class.

Railroad Stocks: The First Serial Bubble

Railroad Era Crisis and Bear Markets

Historical Railroad Period	Decline From Index Peak	Historical Railroad Period	Decline From Index Peak
Crisis of 1837	-75.3%	Crisis of 1884	-35.4%
Crisis of 1857	-63.1%	Crisis of 1893	-32.7%
Crisis of 1873	-47.8%	Crisis of 1907	-34.7%

Source: *Fluctuations in American Business: 1790 to 1860*; National Bureau of Economic Research; Bear, Stearns & Co. Inc.

The serial nature of railroad bubbles is not unusual given the sheer size and capitalistic history of the United States. While the first railroad bubbles occurred in companies formed to link waterways (canals, rivers, and oceans) to nearby cities, later bubbles occurred in more developed railroad companies building lines between major cities and across the continent. Eventually, though, the size of U.S. railroad operations began to outweigh the nation's ability to support them. In its final bubbles, the growth and maturation of railroads, and the enormous importance of their securities in equity markets, moved into a manipulation phase in which owners of railroad companies essentially traded away the companies' financial future for their own personal gain. In the future, we could see serial bubbles occur again (e.g., a second wave of Internet companies), but it is unlikely they will ever again unfold over the course of a full century.

The reality is that when there is an abundance of liquidity injected into the system and there is not a complete wipeout of underlying credit, investors can continue making money without having to put much capital at risk. Another example of this serial cycle occurring can be seen in the fallout from the Internet boom. Indeed, following the bursting of the dot-com bubble in early 2000, the Fed proceeded to cut interest rates. In fact, the fed funds rate went from 6.5% in mid-2000 to 1.0% by 2003. With access to credit so available, it is not surprising that we saw a wave of speculation ensue — this time in real estate assets.

While we will return to an assessment of the real estate market in chapter three, it is worthwhile to mention here that the dot-com bubble cycle — accommodative monetary policy leading to speculation in real estate — is reminiscent of the serial bubble cycle.

Question No. 5: Can It Really Be a Bubble if Everyone Says It Is?

Answer: Yes. If the majority of investors know that a bubble is occurring in an asset class and, at the same time, suspect that little can be done to stop it in the foreseeable future, then we will all know that a bubble is in play and continue to speculate until the bubble exhausts itself naturally or some change in government/monetary policy arrests its growth.

BUBBLES DO NOT HAVE TO BE INVISIBLE

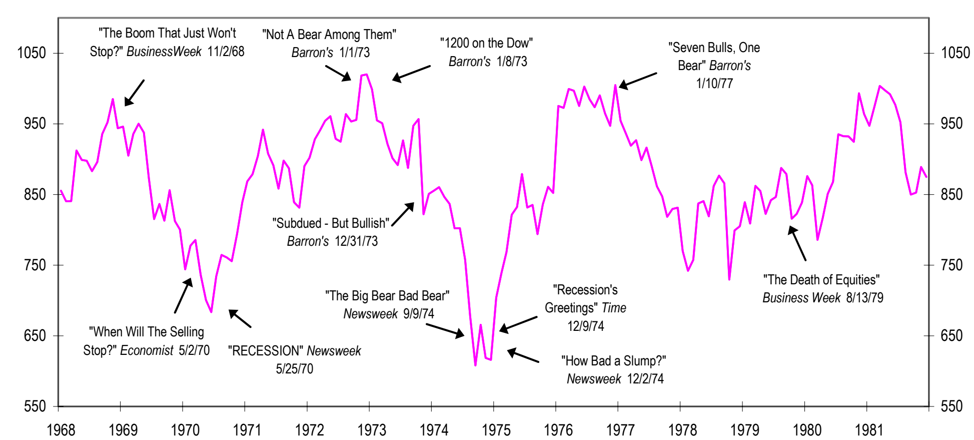
While pride forces many investors to claim that the bursting of the dot-com bubble came as a surprise to everyone, those who were reading the financial papers and not just watching the financial news networks know that the dot-com bubble had many skeptics. Just ask the value managers who were swept out the door along with their funds assets; they obviously were not believers. Despite wildly high P-to-"no E" ratios and the use of ever more absurd metrics like "eyeballs" and "page views" to justify valuations, most investors still fell prey to the "It's Different This Time" mentality or believed that they would be able to recognize the "right" time to get out. In the end, however, the ferocity with which stock prices fell, combined with human desire to hold on in the hope that prices would make one whole again, left many with just pennies on the dollar.

Question No. 6: What Role Does the Media Play in Fueling a Bubble?

MEDIA AS A CONTRARIAN INDICATOR?

Answer: Media outlets, such as cover story headlines and talk shows, have the ability to fuel a speculative fire, so to speak. While, of course, these attention-grabbers are designed to do just that — attract attention — they often can exacerbate a panacea or, alternatively, fuel a speculative bubble higher. For instance, in the month that the market reached its peak in 1929, just a week before the Great Crash, newspaper headlines were cheering "Stock Prices Will Stay at High Levels for Years to Come, Says Ohio Economist." Then, in the weeks following the crash, newspapers encouraged and tried to reassure the public with headlines like "Wall Street Optimistic After Stormy Day."[ii] The market proceeded to have another down leg in the following months, until it finally hit bottom in 1932 and the economy headed into recession.

Dow Jones Performance Coinciding with Magazine Headlines from the 1960s-70s



Source: Ned Davis, *The Art of Contrarian Investing*; Bear, Stearns & Co. Inc.

Interestingly, some investors like to use such headlines as contrarian indicators — that is, by the time the media posts a flashy headline about a sell-off or a bull run's sustainability, the story is usually already long in the tooth. In fact, Ned Davis points out that some of the best examples of crowd sentiment are illustrated in media headlines, and that using them as contrarian indicators can often be useful in helping to avoid "the crowd at extremes."[iii] Ned cites a study in his book that was conducted by an analyst named Paul Montgomery, which found that by taking a contrarian stance on magazine covers, investors can actually do quite well. In fact, the study suggests that while an investor could do well in the 30-day period following the storyline, by going against a bullish or bearish *Time* magazine cover story after that 30-day period and holding the investment for the next 11 months, that investors could have beaten the recommended buy and hold return by five times. Mr. Montgomery's analysis spanned back to the 1920s.[iv]

Question No. 7: How Long Do Bubbles Typically Last and Do They Always End in a Destructive Blowup?

Answer: The duration of the life of an asset bubble differs from episode to episode. For instance, "tulip mania," or the 1600s Dutch tulip bubble, lasted about three years before the market for tulips imploded. On the other hand, the South Sea Bubble escalated and collapsed all in less than one year. Railroads, as another example, experienced several multiyear boom/bust cycles throughout the 1800s.

Durations of Some Well-Known Bubbles

Classic Bubble Markets

Market Measure	Bull Market High Date	Bull Market High Close	Bull Cycle Rally	Bull Cycle Duration (Years)
Railroad Index	5/1835	27.80	116.3%	6.0
Railroad Index	12/1852	24.95	263.0%	10.8
Railroad Index	4/1872	45.20	390.5%	14.4
S&P Composite	9/7/1929	31.92	192.0%	3.4
Bowling & Vending	1960/61	88.55	1114.8%	2.0
Electronics	1961	282.90	382.4%	1.2
Conglomerates	1968	37.73	402.4%	3.9
Nifty-50 Cos.	12/1972	194.18	136.0%	2.5
Gold	1/1980	760.00	482.4%	3.0
Oil Stocks	11/26/1980	392.20	171.4%	2.8
Nikkei 225	12/29/1989	38915.87	301.1%	5.4
Biotechnology	1/10/1992	246.41	430.2%	1.2
Nasdaq	3/10/2000	5048.62	255.8%	1.4

Source: Bear, Stearns & Co. Inc.

Since an asset bubble is typically spawned from an easy money environment that leads to excess credit demand, the duration and magnitude of a bubble is directly proportional to how long this environment can or is allowed to persist. If liquidity is growing faster than credit demand, all else being equal, then the bubble environment has fuel to persist. That being the case, monetary policymakers play the most important role in bubble duration since a change in monetary policy immediately alters the balance between liquidity and credit demand. It is for this reason that Federal Reserve policymakers oftentimes refrain from trying to prick "suspected" asset bubbles. To a lesser although still important extent, fiscal policymakers can extend the life of a bubble environment, too, by stimulating demand through government deficit spending. Interestingly, sometimes what makes a difference in the lifespan of a bubble episode is something that is completely unrelated and unexpected. For instance, a political event, such as a war or a natural disaster, can play a big part in the lifespan of a bubble episode since either event will typically trigger easy money and/or deficit spending positions by monetary and fiscal authorities.

In fact, a number of the well-known market panics that culminated in an economic recession actually were preceded by natural or man-made disasters. Rebuilding efforts have to take precedence over bubble concerns, but, unfortunately, only prolong and possibly worsen the post-bubble aftermath. This is important in light of the fact that we have seen a dot-com bubble followed by a housing bubble in the midst of military engagements in the Middle East and reconstruction activities in the Gulf Coast region. Something to think about!

Natural Disasters Can Shorten or Prolong Bull Cycles

Panic of 1857 (Recession: July-57 to Dec-58)
- Fort Tegon, California Earthquake on Jan. 9, 1857 (Magnitude 7.9, 10th Largest U.S.)
- Hurricane 1856: Lousiana (Last Island) - Category 4 with 400 deaths (7th deadliest)

Panic of 1873 (Recession: Nov-73 to Mar-79)
- Chicago Fire on October 8, 1871
- Owens Valley, California Earthquake on Mar. 26, 1872 (Magnitude 7.6)
- Boston Fire on November 9, 1872
- Hurricane 1875: Texas - Category 3 with 176 deaths (18th deadliest)

Panic of 1884 (Recession: Apr-82 to May-85)
- Hurricane 1881: South Carolina/Georgia - Category 2 with 700 deaths (5th deadliest)
- Hurricane 1883: North Carolina - Category 2 with 53 deaths (29th deadliest)

Panic of 1893 (Recession: Feb-93 to June-94)
- Imperial Valley, California Earthquake on Feb. 24, 1892 (Magnitude 7.8, 16th Largest U.S.)
- Hurricane 1893: Lousiana (Cheniere Caminanda) - Category 4 with 1100-1400 deaths (3rd deadliest)
- Hurricane 1893: South Carolina/Georgia (Sea Islands) - Category 3 with 1000 - 2000 deaths (4th deadliest)

Panic of 1907 (Recession: June-07 to June-08)
- Hurricane 1906: South East Florida - Category 3 with 164 deaths (19th deadliest)
- Hurricane 1906: Mississippi/Alabama/Florida - Category 2 with 134 deaths (21st deadliest)
- San Francisco, California Earthquake on April 18, 1906 (Magnitude 7.8, 17th Largest U.S., 3000 dead from quake & fire)

Panic of 1920
- World War I (1914 to 1918)
- Hurricane 1919: Florida/Texas - Category 4 with 287 deaths (11th deadliest)

Panic of 1930 (Recession: Sept-29 to Mar-33)
- Hurricane 1928: Florida - Category 4 with 2500 deaths (2nd deadliest)

Panic of 200X?
- Hurricane Katrina 2005: Florida/Louisiana/Miss./Ala. - Category 4 with 1500 deaths (to be the 2nd deadliest)

Source: Bear, Stearns & Co. Inc.

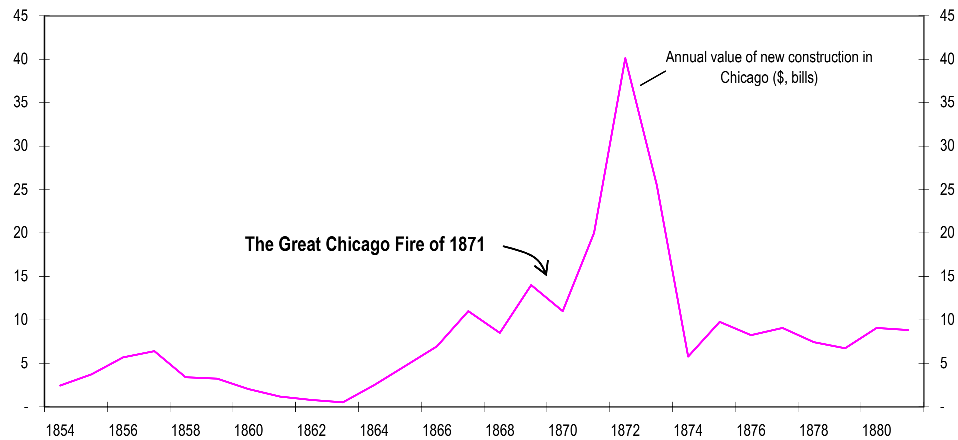
Question No. 8: Does a Natural Disaster Always Shorten a Cycle or Can It Ever Lengthen It?

Answer: As a matter of fact, sometimes one of these natural disasters or political events can end up distorting or even prolonging a go-go episode. A great example of this is the Chicago land boom in the 1800s. Following on the heels of canal and railroad construction throughout Chicago in the 1830s-50s, the value of real estate went through three major booms. The first unfolded when the canals were constructed, and ended with a financial crisis. The second came on the heels of railroad construction in the mid-1800s, and came to a halt because of another financial crisis as well as the onset of the Civil War. Ultimately, the war ended up benefiting Chicago significantly, making it a trading hub and a manufacturing and industrial epicenter. The surge in business opportunities again led to a boom in population, and once again real estate values climbed as new construction escalated. Chicago's progress as a commercial and industrial success wowed the world. Then, in 1871, following a prolonged drought, a fire swept over the city, destroying numerous businesses, theaters, banks, and government buildings. The fire incinerated more than 2,100 acres, eradicating 17,450 of the 60,000 buildings in the city, rendering 104,500 people (or one-third of the population) homeless, and causing a loss of merchandise, personal property, and buildings worth an estimated $200 million.[v]

NATURAL DISASTERS CAN PROLONG MANIAS

While the Great Chicago Fire essentially squelched the third wave of real estate mania in Chicago, it ended up triggering yet another episode of real estate fever — this time in the name of "reconstruction." In 1872 and 1873, real estate development in Chicago continued with even more fervor than before the fire. As such, many historians discuss the development from 1865 to 1873, but this begs the question of whether or not such feverish land development would have continued had the fire never happened.

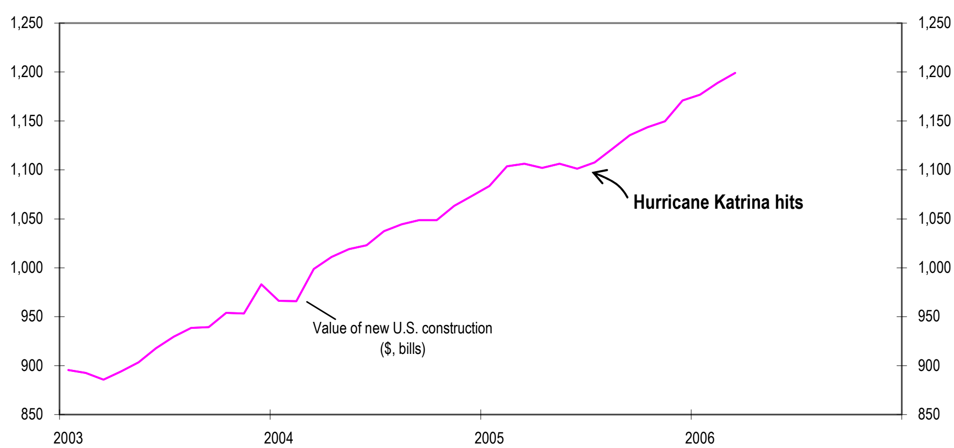
Was the Chicago Land Boom Finished Before the Great Fire Occurred?



Source: Homer Hoyt; Bear, Stearns & Co. Inc.

As the chart above illustrates, the Great Chicago Fire actually generated a significant amount of real estate activity. In fact, the 1871-74 surge in real estate development activity essentially prolonged the boom cycle in Chicago. Similarly, one can wonder whether some of the economic activity following 2005's Hurricane Katrina prolonged the boom cycle that started in 2003.

Was the Economy Losing Momentum Before Hurricane Katrina?



Source: Haver Analytics; Bear, Stearns & Co. Inc.

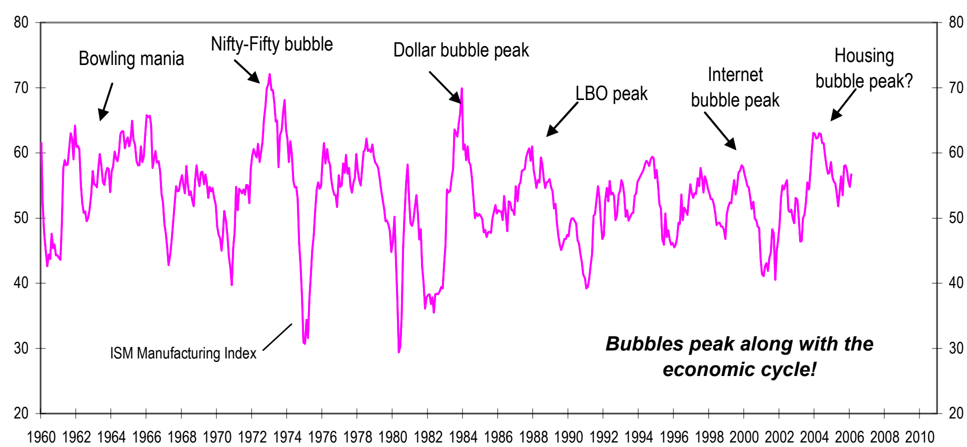
Question No. 9: Is It Possible to Time Profitable Entry and Exit Points in a Bubble-Prone Environment?

Answer: Getting out of a stock or an asset class at its peak is typically challenging, as is choosing the exact low point at which to enter. In fact, former Federal Reserve Chairman Alan Greenspan has argued that it is impossible to know an asset price bubble has formed until after it has burst.[vi]

While we agree that it is certainly easier to identify a bubble episode with hindsight, there are enough commonalities between historical bubble episodes to help us better identify what to look for leading up to a bubble bursting. Indeed, there are signs of frothiness we can usually identify, such as over-trading in a particular equity or asset class. For instance, market peaks usually see a move beyond fundamentals (e.g., Internet stocks traded at wildly high multiples during the peak, without offering any earnings).

What's more, bubble peaks tend to occur as the economic cycle approaches a high mark. That is, when momentum in the economy reaches extreme levels, it is often a sign that things are as good as they are going to get and that a more challenging environment is likely ahead. In fact, the chart below illustrates this point — the economic cycle here is represented by the ISM manufacturing index, which is a good proxy for oscillations in economic momentum. Interestingly, many asset bubbles hit their peak following periods of strong fundamentals, which are often cyclical in nature. As such, it is not surprising that many bubble peaks coincide with cyclical peaks.

Asset Bubble Peaks Typically Coincide with Top of Economic Cycle



Source: Institute for Supply Management; Bear, Stearns & Co. Inc.

Furthermore, while we agree with Alan Greenspan and other Fed governors that it is difficult to time a bubble precisely, the probability of a go-go cycle coming to an end after the Fed has already tightened policy is far greater. Conversely, when the Fed eases policy, we typically see investors' appetite for risk increase, and this is when the most speculative activity tends to occur.

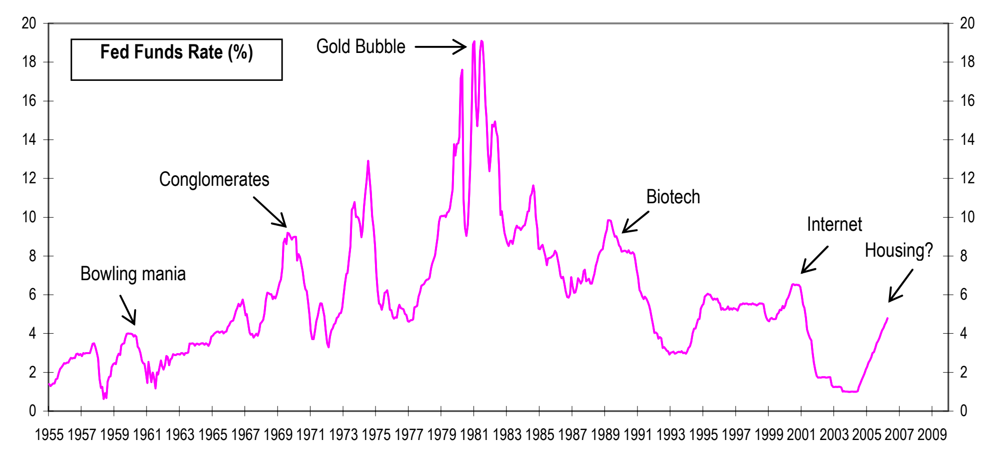
Question No. 10: Where Are the Opportunities Once the Bubble Begins to Deflate?

BUBBLE CONCLUSION OFTEN MEANS MORE STIMULATIVE MONETARY POLICY

Answer: Once there are signs that a mania is growing long in the tooth, there are often profitable opportunities for investors who are willing to be on the short side of the trade. Indeed, when there are signs of toppiness in the marketplace — as measured by excessive trading volumes, stretched bullish sentiment, or economic momentum that has reached a cycle high — it is often a good time to take a contrarian viewpoint. For those who are able to espouse a contrarian mentality, shorting or put options in a stretched sector or equity can offer a profitable trade. That said, shorting in a bubble environment is risky since every time a bubble asset looks weak, many investors believe that it is time to get back in, and prices surge forward once again. As a general rule, we like to see prices break significantly, retrace more than 50% of the decline, and then break to another new low. At the same time, look for some of the most staunch supporters to become ever more emphatic about it being time to snatch up the bargains. To our way of thinking, that is when it's time to take the other side of the trade.

Another strategy is to identify beneficiaries of Fed rate cuts. That is to say, that since the aftermath of many market manias consists of a market downturn, a campaign of monetary easing often follows. As such, identifying the segments of the market that benefit from looser Fed policy can often provide a profitable strategy for benefiting from a post-bubble environment. In this regard, bonds certainly come to mind. Since inflation is a lagging indicator of the economy, it is not uncommon for bonds to rally as the economy comes off the boil. That said, investors must be mindful of default risks, since many times it is difficult to determine how deeply an asset bubble has penetrated the economy. When a bubble bursts, it takes down the credit structure that supported it along with many of the companies that have directly benefited from it.

Bubble Deflation Often Results in Fed Rate Cuts



Source: Federal Reserve; Bear, Stearns & Co. Inc.

Chapter Two: Reassessing the Current Environment

As we have seen, bubbles have reappeared time and again throughout history. As such, it makes sense that there are some commonalities in the economic environment that tend to precede bubble periods. That is, there are certain conditions that typically make the development of a bubble episode more likely. In other words, not all expansionary economic backdrops lead to asset bubbles; rather, the catalyst can come from a variety of sources. In this chapter, we review our framework for identifying bubble environments to get a sense of where the current environment stands.

THE BUBBLE-PRONE ENVIRONMENT FRAMEWORK

Dissecting the Phases of the Bubble Evolution

Pre-Bubble Environment →	Bubble Peak →	Post-Bubble Environment
1) Easy Money	5) Speculation	11) Asset Prices Collapse
2) Strong Economic Growth	6) Yield Spreads Widen	12) Economic Slowdown Ensues
3) Prosperity	7) Pricing Pressures Accelerate	
4) Pricing Pressures Build	8) Short Rates Rise	
	9) Yield Curve Flattens	
	10) Business Activity Slows	

Source: Bear, Stearns & Co. Inc.

Using this framework for identifying a bubble-prone environment, we thought it would be helpful to take a quick inventory of where we are now in the cycle. (For those looking for greater detail on this framework, please see our original piece on asset bubbles from June 2005.) Here, we will revisit the criteria delineated above and determine where economic aggregates currently stand, what they are suggesting about the nature of the current backdrop, and how prone the present economy looks for the breeding of an asset bubble.

Summing Up the Phase I and Phase II Bubble Benchmarks

	Has this occurred?		Has this occurred?
1) Easy Money	1/2 √	5) Speculation	√
2) Strong Economic Growth	√	6) Yield Spreads Widen	√
3) Prosperity	√	7) Pricing Pressures Accelerate	√
4) Pricing Pressures Build	√	8) Short Rates Rise	√
		9) Yield Curve Flattens	√
		10) Business Activity Slows	X
Score:	**3.5/4.0**		**5.0/6.0**

Source: Bear, Stearns & Co. Inc.

Surveying our criteria for identifying a bubble-prone environment, it appears that the current landscape meets eight-and-a-half out of the ten prerequisites typical of a bubble-prone environment at this time. Indeed, we have recently experienced three-and-a-half out of the four conditions typically seen prior to a bubble: easy money, strong economic growth, prosperity, and a pickup in pricing pressures. What's more, five out of six of the criteria that we generally see at the time of a bubble peak are telling us that conditions could be ripe for a bubble to burst.

Interestingly, one element that has changed since our economic survey last year is that yield spreads seem to have troughed. In this regard, it is not surprising that we have begun to see a major bubble begin to unwind (i.e., real estate).

ALL BUBBLES ARE *NOT* CREATED EQUALLY

Different Types of Bubbles

In our original asset bubble piece, we suggested a system by which we believe we can classify the different types of bubbles that form, i.e., by thinking of the different catalysts or magnets for speculative behavior. As a reminder, we have found there to be four broad categories that all bubbles can be classified by: 1) life-changing innovations, 2) scarcity-driven, 3) thematic-driven, and 4) government-driven. In fact, each of the bubbles mentioned in the timeline in the first chapter, as well as those we studied in great detail last spring, fall into one of these four categories.

Classifying Asset Bubbles

1)	**Life-Changing:**	Innovation expected to dramatically impact business landscape.
2)	**Scarcity:**	Rare commodity creates mania.
3)	**Thematic:**	Particular asset theme becomes popular.
4)	**Government:**	Government fuels popularity by providing capital, monopoly, or security.

Source: Bear, Stearns & Co. Inc.

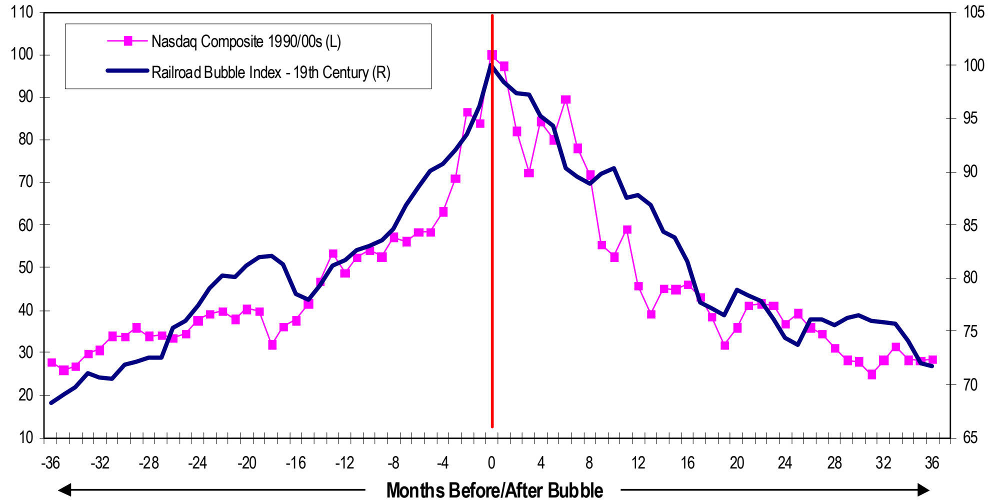
Life-Changing Innovations

Life-changing innovations are prone to fostering speculative bubbles because these are new technologies or infrastructures that have the ability to radically change a business landscape or world dynamic. As such, the new development drums up tremendous excitement, and its life-changing potential can often attract the willingness of investors to pay a premium in order to own a piece of this potential. Examples of these bubbles include canals and railroads, cars and radios, electronics, health care/biotech, and the Internet.

The Internet is a great example of a life-changing innovation because of its capacity to transform the way business is now conducted. Indeed, it has enabled individuals to transact across the globe, it has facilitated the syndication of information seamlessly and rapidly, and it has provided a platform for small mom-and-pop businesses in isolated locations to have a significant reach. Much like the railroads in the 18th century, the introduction of the Internet has transformed the way we conduct business, communication, and personal life, to name just a few!

The momentum that carried the stock market up to never-before-seen highs and the selling that sent it tumbling to new lows in the early 2000s was nothing new for the financial markets. This same type of boom/bust cycle occurred back in the 1600s with the tulip mania in the Netherlands, gold in the 1700s, railroads in the 1800s, and the Japanese equity bubble of the 1980s. The most vivid example for modern day investors is, of course, the Internet bubble of 1999 because it affected so many people — from teenagers to grandparents, from retail investors to institutions, from the folks living in the financial center of New York City to those inhabiting the plains of Iowa. More importantly, though, we start here because it is still fresh in many investors' minds — a stark reminder of the impact financial asset bubbles have on all of us.

History's Most Recent Bubble Compared to Another Life-Changing Bubble: Railroads



Note: Centered and based to 100 at each index's monthly peak.

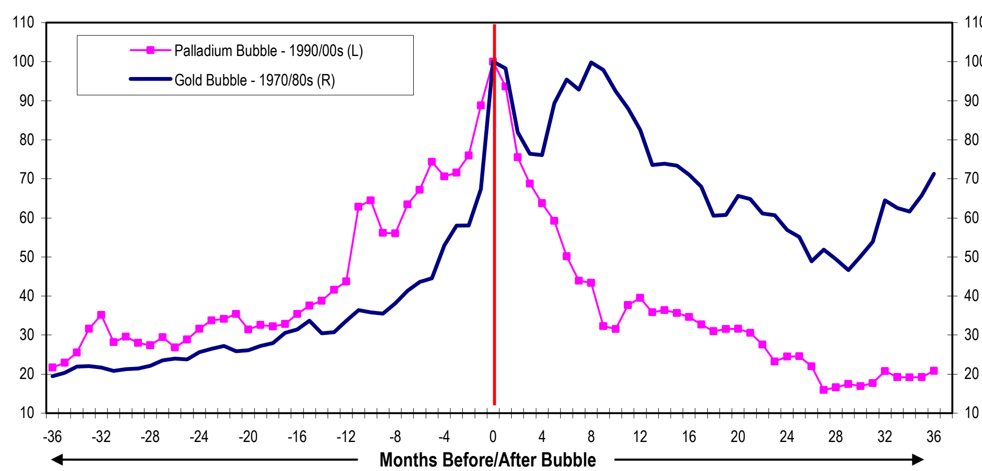
Source: Haver Analytics; Bear, Stearns & Co. Inc.

Scarcity-Driven Manias

On the other hand, scarcity-driven manias drum up enthusiasm and garner a premium from investors because the commodity in question is believed to be limited in supply. Importantly, it is the perception of scarcity that drives these types of bubbles. Some examples of scarcity-driven manias include the tulip bubble, the hyacinth bubble, oil, gold, and the Florida land boom in the early 1900s.

Indeed, commodity-based bubbles are probably the most recognizable scarcity manias. In large part, this is because it is easy to identify supply/demand imbalances when it comes to commodities. An obvious scarcity bubble in recent memory is the Great Gold Bull of the 1970s. A number of factors, including a decoupling of gold from currencies, fueled demand for gold in the 1970s, triggering a media frenzy, robust foreign investment, and a flood of interest among the inflation-fearing general public, rather than just the typical investing class — the typical stuff of asset manias.

1970s Gold Bubble Compared to Another Scarcity Bubble: Palladium



Note: Centered and based to 100 at each index's monthly peak.

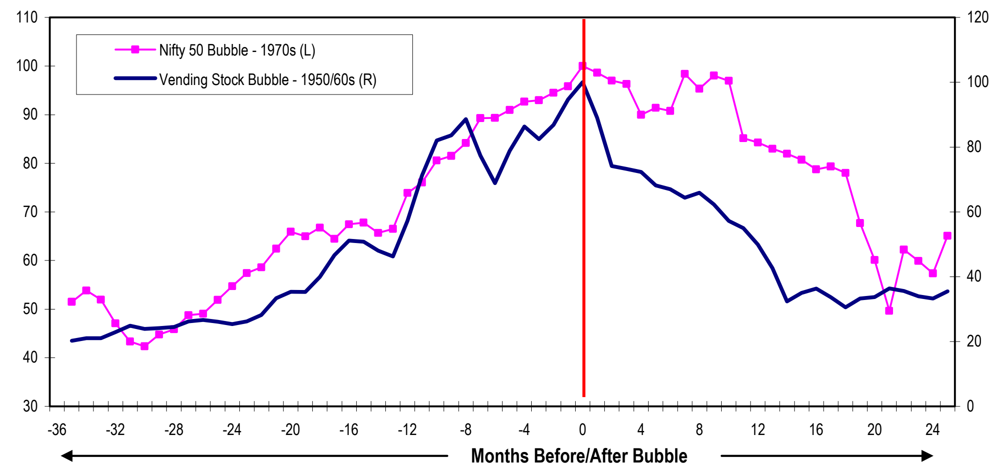
Source: Haver Analytics; Bear, Stearns & Co. Inc.

Thematic-Driven Bubbles

Thematic-driven bubbles occur when a particular asset theme becomes popular, and crowd mentality promotes ownership in the group. Examples of these manias are war armament companies in the early 1900s, bowling stocks and conglomerates in the 1960s, and junk bonds and real estate in the 1980s.

The Nifty-50 bubble of the 1970s occurred when a group of blue-chip stocks became wildly popular among investors. Companies in this group were typically characterized by consistent earnings growth and stability, and high price-to-earnings (P/E) ratios. The thinking was that investors shouldn't worry about how expensive a stock appeared, because they would buy and hold these names forever. As such, the stocks became known as "one-decision" stocks and were bid up to exorbitant P/Es.

Nifty-50 Bubble Compared to Another Thematic Bubble: Vending Stocks

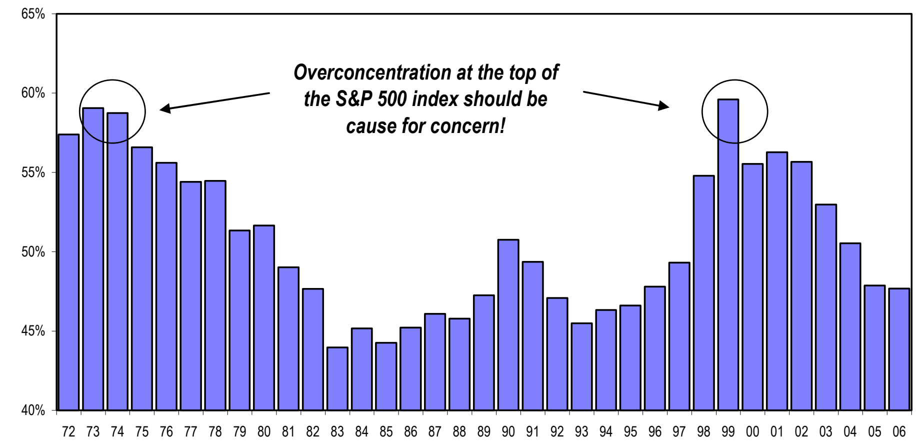


Note: Centered and based to 100 at each index's monthly peak.

Source: Haver Analytics; Standard & Poor's; Bear, Stearns & Co. Inc.

The Nifty-50 stock bubble was in some ways similar to the technology stock bubble that took hold in 1999/2000. The rise also led to an overweight of the 50-largest companies in the S&P 500. This concentration become self-fulfilling as funds were created to focus on narrow groups of mega-cap names and investors willingly poured more capital into these outperforming funds. The end result was not pleasant.

S&P 500's 50-Largest Stocks as a Percentage of Total Index Market Capitalization



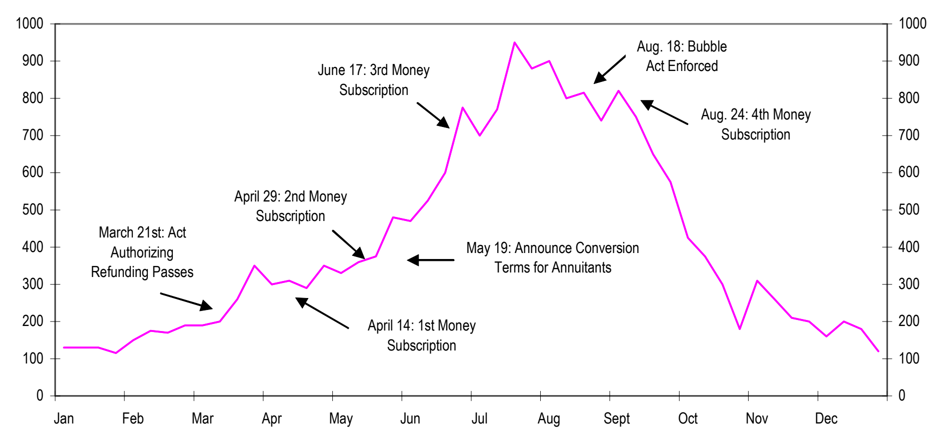
Source: Bear, Stearns & Co. Inc.

Government-Driven Bubbles

Government-driven bubbles come about when the government provides capital and regulatory favors to secure the rise of a certain asset. The Mississippi bubble, the East-India and South Sea companies, as well as the 1980s Japanese market, are all examples of times when the government got overly involved by either sponsoring the corporate sector by providing liquidity, or by guaranteeing monopolies.

The South Sea Company bubble episode is a great example of a government-driven mania. Indeed, this incident illustrates how when government is at the mercy of a corporation's interest, either because of personal gain (as in the case of many members of England's Parliament) or by granting special rights (such as the trade monopoly and the Bubble Act), a bubble can be artificially inflated for some time. Such practices were not unique to the South Sea Company episode — the same sort of government involvement occurred during the railroad manias and again in Japan. Unfortunately, when these bubble episodes unravel, they can be the most destructive because of the toll it takes on the entire financial system as a result.

South Sea Share Price in 1720: A Government-Driven Bubble



Source: Peter M. Garber, *Famous First Bubbles*, p. 116; Bear, Stearns & Co. Inc.

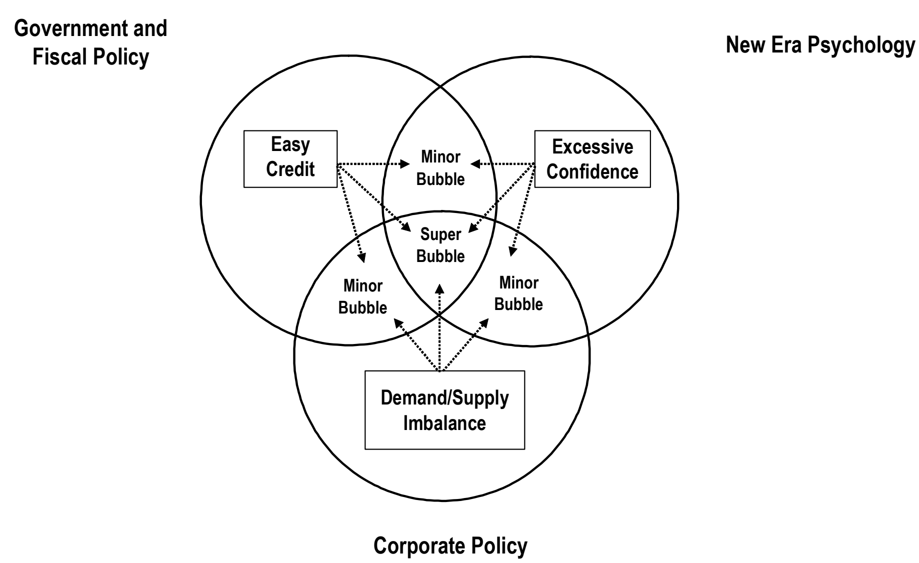
A more recent government-driven bubble is now occurring in China. The Chinese government's policy of managing the Yuan/US$ exchange rate is to inflate financial asset prices within China as Yuan deposits build within its financial system. Furthermore, the need to reinvest export-created dollar reserves is playing a role in the stubbornly low interest rates that have been inflating financial asset prices in the U.S. as well. Worldwide, the rapid expansion of financial liquidity and the impact that it has had on credit demand represents a very serious threat to the global financial system.

Framework for Mania Analysis

By now, we've hopefully established that asset bubbles are by no means uncommon to financial history. The fact is, every generation has lived through its fair share of market manias. While they are certainly easier to pinpoint after they have played out, hindsight is not mandatory for identifying bubble environments, in our opinion. Rather, we believe that there are tangible characteristics common to bubble-prone environments that make the process of identifying bubbles easier. As mentioned, liquidity and economic prosperity often lead to speculation, which culminates in a bubble and then a deflation. Along the way, there are identifiable changes in economic metrics that can signal a bubble episode.

Once the economic backdrop is ripe for a bubble, different combinations of conditions typically determine the shape and size of the bubble period — i.e., a certain set of conditions will typically determine the magnitude and type of asset bubble.

Recipe for Bubble-Prone Environment



Source: Bear, Stearns & Co. Inc.

For instance, the diagram above illustrates that different combinations of occurrences in the macro backdrop will likely lead to different bubble outcomes. A simple way to think of this is that depending on the ingredients that go into the recipe, the finished product (i.e., the bubble) can be a very different being. For instance, if a backdrop is showing signs of just one of the ingredients mentioned above (e.g., either easy credit, excessive confidence, or a supply/demand imbalance), only a minor bubble typically occurs. It is when all three exist at the same time that a major bubble comes to fruition. In other words, major asset bubbles occur when government and fiscal policy facilitates easy credit, at the same time that corporate policy fosters some sort of a supply/demand imbalance and consumers' excessive confidence causes them to assume greater risk and engage in speculative behaviors.

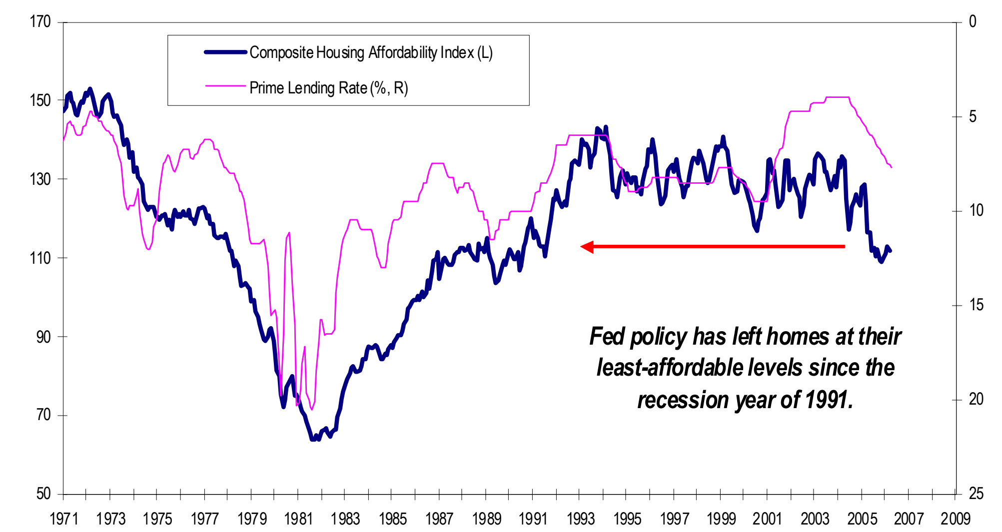
Put another way, the magnitude and duration of a bubble is largely dependent on the variables that fostered the bubble-prone environment to begin with. One aspect of the economic backdrop that has changed since last year is that yield spreads appear to have troughed. With the end of this accommodative period of monetary policy, we will likely see the end of certain forms of speculation that we've seen in recent years. In fact, in the following chapter, we will explore the hyperactive housing market we've been experiencing over the past couple of years. We will demonstrate how it has largely been a product of the "perfect storm" created by the combination of factors mentioned above. More importantly, we will explore what it means if this powerful mania is about to slow drastically.

Last year at this time, we made a case for the likelihood that a housing bubble was brewing. Indeed, we noticed that a number of the variables outlined in the prior chapters that typically signal a bubble-prone environment were in full force. We had experienced a few years of easy credit, thanks to an accommodative Fed and a powerful fiscal package — both set in motion in an attempt to recharge the economy following the aftermath of the 2001 market collapse. This, in turn, fueled confidence, not to mention that many were looking toward real estate as a new speculative avenue.

EASY ACCESS TO CREDIT: FUEL FOR THE FIRE!

If you would have suggested ten years ago that so many individuals would have ready access to such high levels of credit, people would have thought you were crazy. In recent years, stories about homebuyers getting $500,000 mortgages with all fees rolled in and maybe even a cash payout for home furnishing have become commonplace. That being the case, why not speculate, and why stop at one property when you can easily get financing for two? To make matters worse, traditional mortgage lenders (i.e., banks and S&Ls) are increasingly taking a back seat to nontraditional lenders that just wrap up the loans and ship them out to investors as mortgage-backed securities. So, there is little disincentive on the part of the financial sector not to originate mortgage loans for eager speculators and homebuyers.

Higher Fed Funds Rate Already Eroding Housing Affordability



Source: Census Bureau; Bear, Stearns & Co. Inc.

Some investors believe that the rapid rise in home prices is nothing more than a simple demand and supply issue. They claim that family formation, immigration, and baby boomer retirees explain the strong demand for housing, or at least that these factors support the rise in home prices that we have already witnessed. We find this argument a little hard to swallow since home appreciation historically has been far weaker during periods when these demographic factors were much stronger. Rather, if you want to find the origin of a bubble, you rarely have to look any further than the credit market, and ours has been financing a lot of housing. The question now is can all of theses buyers (speculator and homeowner alike) support the debt service on these homes? If the answer to that question is yes, then it is more likely that housing will deflate in real terms as home prices stagnate while inflation eats away at their value. However, if a weakening economy were to pressure incomes or if rising interest rates on variable mortgages were to drive servicing costs significantly higher, we could easily see severe nominal declines in home prices in certain regions and, if things get really bad, nationally.

At this juncture, a number of indicators of real estate activity are still very stretched, yet we have begun to see signs that the housing bubble may be winding down. Housing starts and building permits have begun to slow, and now that the Fed is nearing the end of its tightening campaign, the landscape that was so conducive to easy credit is gradually changing. While we have not seen anything that suggests the slowdown is becoming severe or that there is any sort of panic, investors should be aware that housing has bubble characteristics, and for that reason, risks here are higher than in other financial asset classes.

A REAL ASSESSMENT OF A REAL ESTATE BUBBLE

How Do We Know It's a Real Estate Bubble?

In chapter one of this report, we noted that it is not uncommon for many investors to be fully aware that a financial asset bubble is forming, and yet many will still fall prey to it. Why? Because bubbles can generate massive amounts of wealth, and individuals are often looking for get rich quick schemes. Like smoke where there is fire, you will oftentimes also find the media where there is money being made. Media outlets, such as newspapers, print magazines, and talk shows, have the ability to fuel a speculative fire. Accordingly, one of the best "qualitative" measures of a bubble is how prevalent the subject is in the media.

For instance, a number of Web sites, books, and television programs seem to imply that speculation surrounding real estate is rampant. One real estate Web site that specializes in bringing together parties interested in real estate "flipping," www.condflip.com, boasts the following tagline in huge bold letters: "Bubbles Are for Bathtubs." Another example is a television show called *Flip This House*, which follows a team of renovators as they buy properties and then proceed to fix them up in order to flip them and turn a quick profit. Similarly, a book titled *The Automatic Millionaire Homeowner: A Powerful Plan to Finish Rich in Real Estate*, was published in March 2006. Here, the author essentially says that it's foolish *not* to own real estate in today's market when access to credit is so simple.

Four Quantitative Ways to Identify Signs of a Housing Bubble

1) Stretched Valuation
2) Signs of Speculation
3) Breadth of Participation
4) Supply/Demand Imbalance

Source: Bear, Stearns & Co. Inc.

What's more, Standard & Poor's has indicated that it will be launching ten indices that will track housing prices in various U.S. metropolitan cities. These indices will then serve as the basis for futures and options contracts that will trade on the Chicago Mercantile Exchange. The contracts will essentially enable homeowners (as well as other market participants) to wager on the direction of home price indexes in these ten metropolitan areas, allowing individuals to hedge their homeownership risk or merely go long or short on a specific housing market. If this isn't a sign of speculation, what is?!

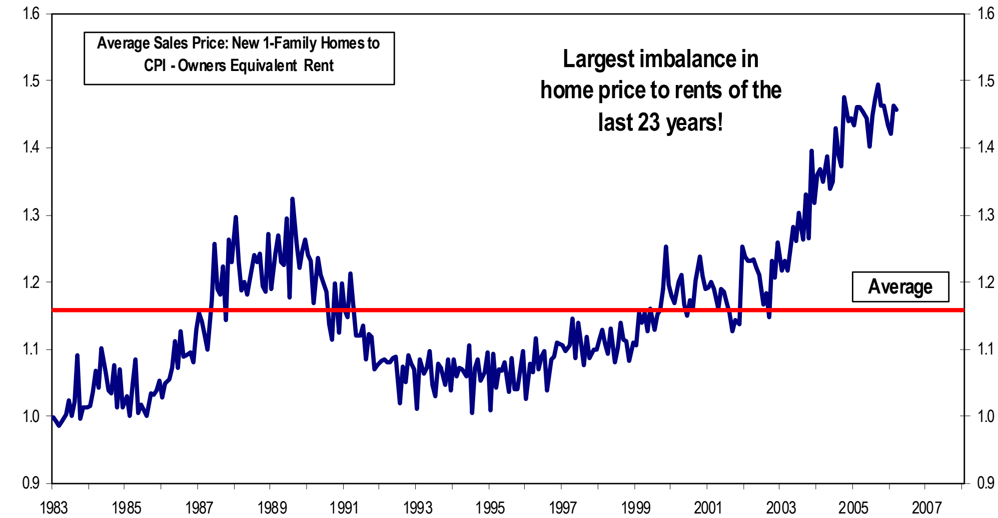
Many of the graphs that follow suggest to us that there is a high level of speculation in real estate. We have seen housing starts and housing permits reach period highs. This, of course, leads to speculative activities, which when they reach the mainstream, is a fairly good indication that the mania has escalated into a full-fledged bubble. At this point, we think it is important to understand how this speculation came to fruition — i.e., by understanding the dynamic that drives the real estate market. Like virtually all markets, the real estate market is governed by a series of supply and demand fundamentals. As we have seen, real estate fundamentals have been quite strong in recent years.

Since real estate is a completely different entity than the equity market, it is important to consider how to measure whether or not real estate is experiencing a bubble. Accordingly, a number of the metrics we use to analyze the housing market suggest that the market is still very stretched. In particular, we think it is important to understand four areas of the real estate market: 1) valuation, 2) speculation, 3) breadth of the housing phenomenon, and 4) the supply/demand imbalance. In all, the main measures we consider to be quite helpful for gauging the real estate market show that there is still a fair amount of speculative activity occurring.

1) Stretched Valuation

There are a number of ways to gauge the frothiness of the housing market. We find it helpful to start by looking at valuation. One valuation method we have found to be quite useful is to assess home sale prices relative to rental prices. At this time, both series on their own look stretched. What's more, as the chart below illustrates, the median home sale price is currently much more expensive than the cost of home rentals, on a relative basis. In fact, when plotting mean home sale prices to the rental component of the Consumer Price Index (CPI), we see that homes for sale are more expensive relative to rents than they've been in more than two decades.

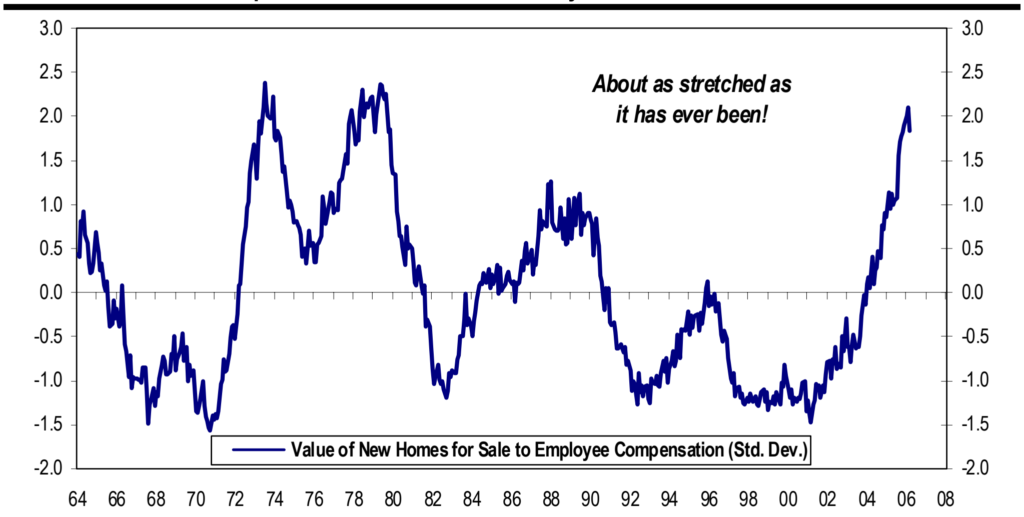
Home Sale Prices Far More Stretched than Rental Prices



Source: Census Bureau; Bureau of Labor Statistics; Bear, Stearns & Co. Inc.

Another way to measure just how stretched real estate valuations have become is to look at home prices relative to income. The chart below shows the ratio of the value of new homes for sale relative to employee compensation. This series can be thought of as a good proxy for real estate valuation, since it essentially measures a ratio of prices to means. The chart below shows that this measure of valuation is as stretched as it's been since the late 1970s!

Real Estate Meets the Speculative Criteria: A Move Beyond Fundamentals



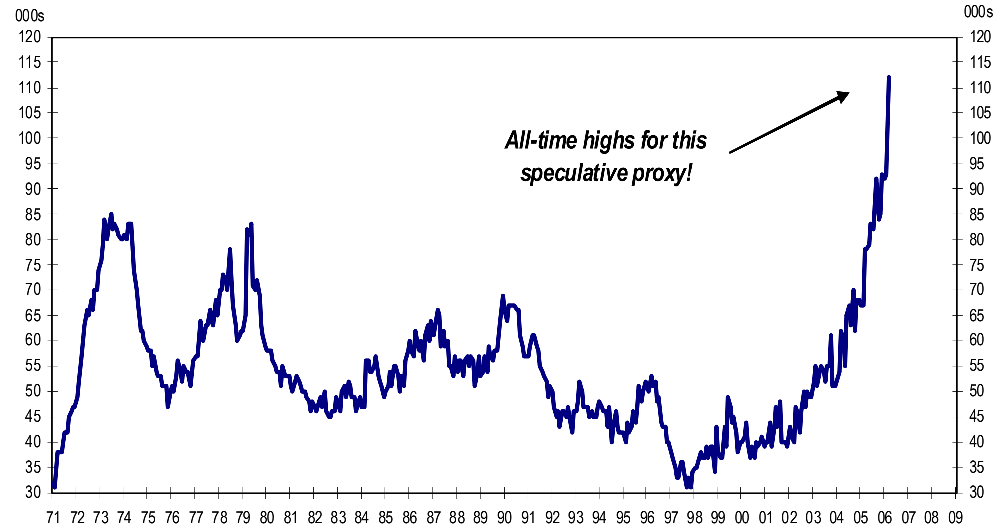
Note: New homes for sale times median price of a new home sale ($ in billions) divided by employee compensation (SA, $ bills.).

Source: Census Bureau; Bureau of Economic Analysis; Bureau of Labor Statistics; Bear, Stearns & Co. Inc.

2) Signs of Speculation

The next step in determining if, in fact, the housing market is experiencing a bubble is to examine the signs of speculation. We have found that the economic backdrop has, indeed, stirred up quite a frothiness in the real estate market in the past few years. The chart below provides a very good proxy for speculation in real estate. The series consists of the number of new houses for sale for which construction has not yet begun. A look at this series over time drives the point home that real estate speculation has never been this high. As we shall see later, this is a particularly precarious situation at this juncture since homeowners' ability to meet their mortgage obligations is alarmingly stretched.

New Houses for Sale — Units Not Started

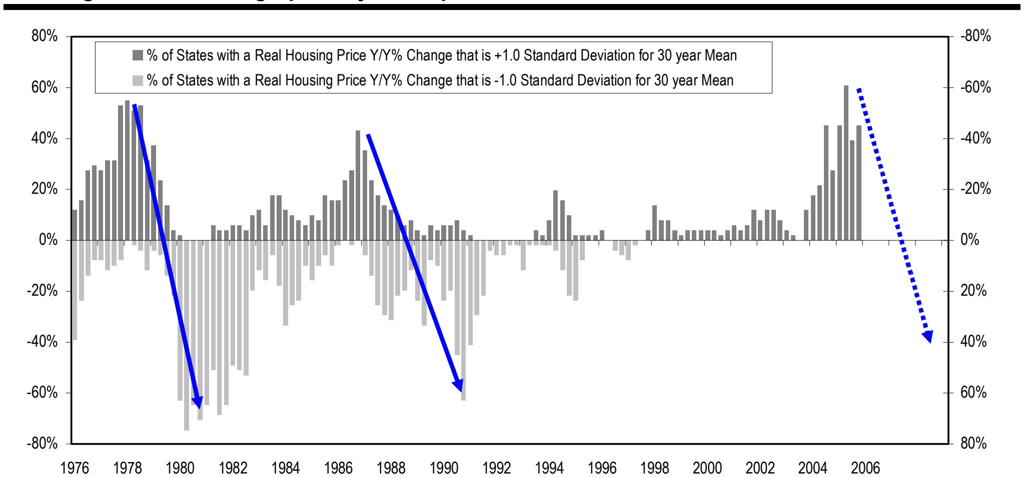


Source: Census Bureau; Bear, Stearns & Co. Inc.

3) Breadth of Participation

Next, we must determine whether the phenomenon is widespread, or if it is localized, to determine whether or not real estate is experiencing a bubble. Interestingly, the chart below demonstrates that speculation in the housing market is not merely limited to the East Coast and the West Coast, but is a truly broad-based phenomenon. That is to say, the percentage of states experiencing well-above-average levels of home price appreciation is higher than it's been in several decades. This suggests that the real estate frenzy has breadth — a significant piece of evidence that the phenomenon is by no means just a localized event. With such a geographically widespread scope, the implications of a housing slowdown would also likely be far-reaching!

Housing Boom Is a Geographically Widespread Phenomenon . . . Not a Localized Event!

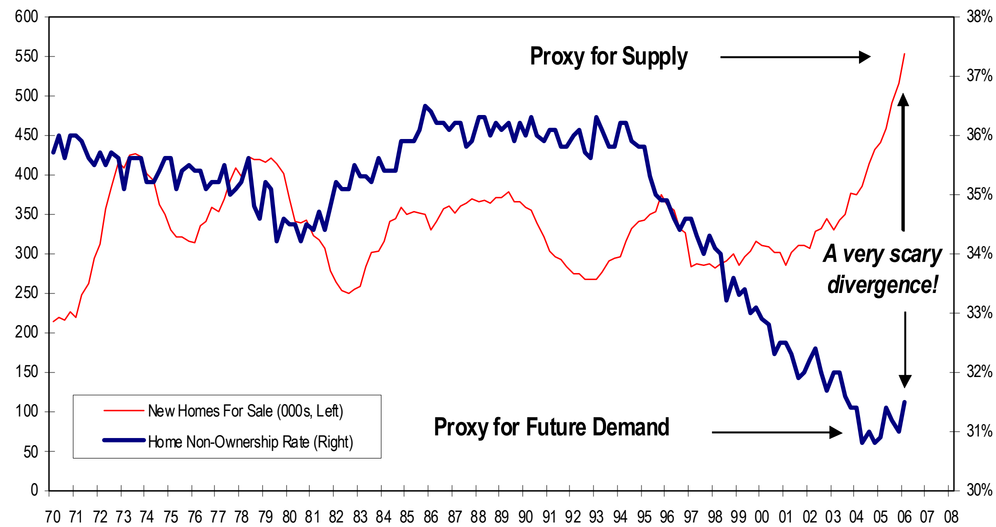


Source: Office of Federal Housing Enterprise Oversight; Bear, Stearns & Co. Inc.

4) Supply/Demand Imbalance

The next step in deciding whether or not the housing phenomenon is a bubble is to understand the supply/demand fundamentals and to determine if there is an imbalance. The chart below shows how strong the increase in housing supply has been in recent years — in fact, we haven't seen such a potential supply/demand disparity since the 1970s and very early 1980s. The difference this time around is that the rate of home non-ownership has declined sharply in recent years. This is particularly worrisome since the rate of non-ownership is essentially a proxy for future consumption. At this juncture, this extreme imbalance is certainly worth paying attention to, in our view.

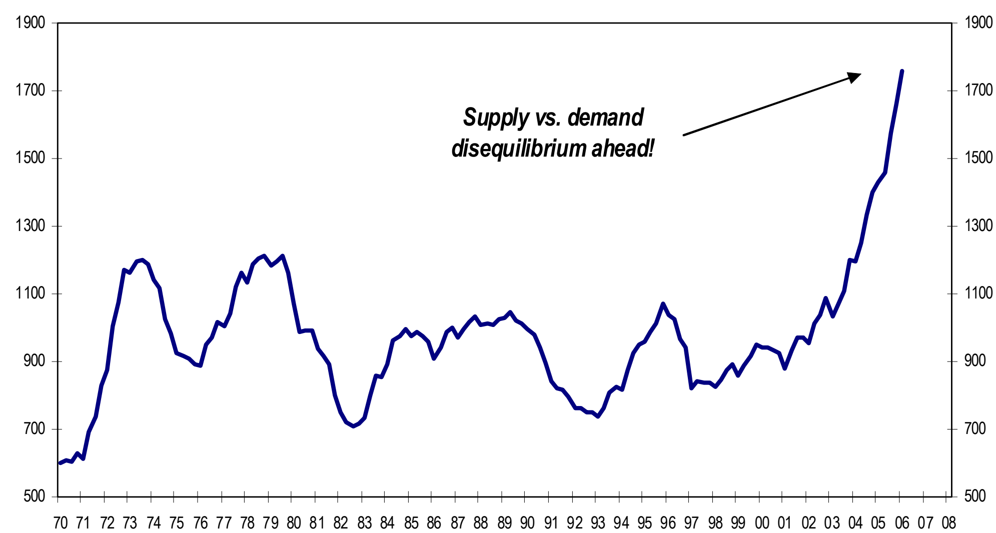
Increasing Supply + Shrinking Demand = Eventual Imbalance!



Source: Census Bureau; Bear, Stearns & Co. Inc

Below, we can see how significant the imbalance described above has become. Indeed, the series here consists of the ratio of new homes for sale divided by the home non-ownership rate. Importantly, this ratio is currently sitting at a greater-than-35-year high. Such an extreme supply/demand imbalance, in our opinion, is signaling a critical warning to investors about the risk/reward profile for real estate investing at this time. Remember, a macro imbalance, coupled with a changing capital-borrowing landscape, is worrisome for real estate investors!

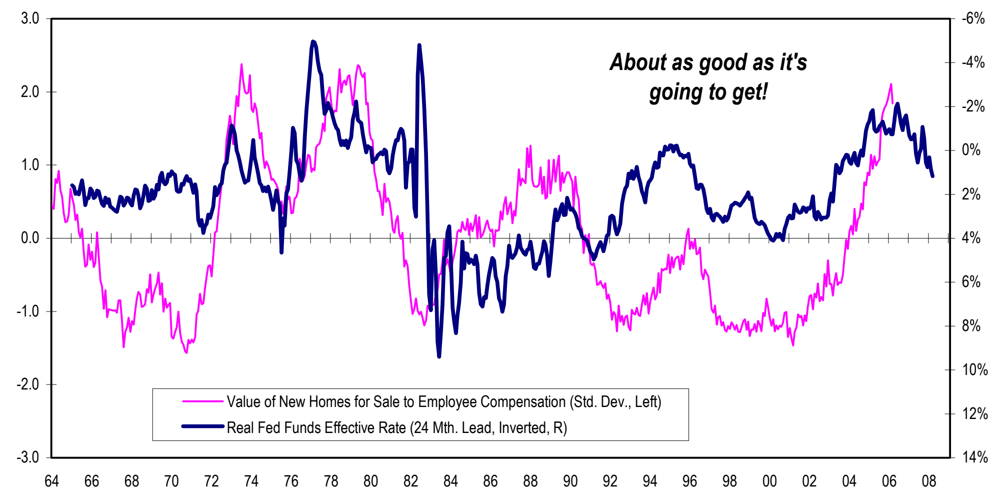
New Homes for Sale (Supply) Divided by the Home Non-Ownership Rate (Demand)



Source: Census Bureau; Bear, Stearns & Co. Inc.

In fact, the accommodative monetary backdrop that fueled this speculative behavior in real estate could be about to change. That is to say, monetary policy takes time to filter through the economic system and affect the housing market. Declining rates in the past few years stimulated investor appetite for borrowing, which feeds right into the housing market. Now that the Fed has shifted gears and has been tightening policy for about two years now, we would not be surprised to see the frenzy in the housing market begin to die down.

How the Imbalance Eventually Unfolds



Note: New homes for sale times median price of a new home sale ($ in billions) divided by employee compensation (SA, $ bills).

Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Federal Reserve Board; Bear, Stearns & Co. Inc.

Implications of a Housing Market Bubble

THE HOUSING BUBBLE IS SHOWING SIGNS OF STRESS

If the housing market is in fact beginning to show signs of a slowdown, it is important to consider what the implications would likely be. As we have illustrated before, the winding down of a broad-based bubble typically has far-reaching consequences — including equity prices and the state of the consumer, to name a few!

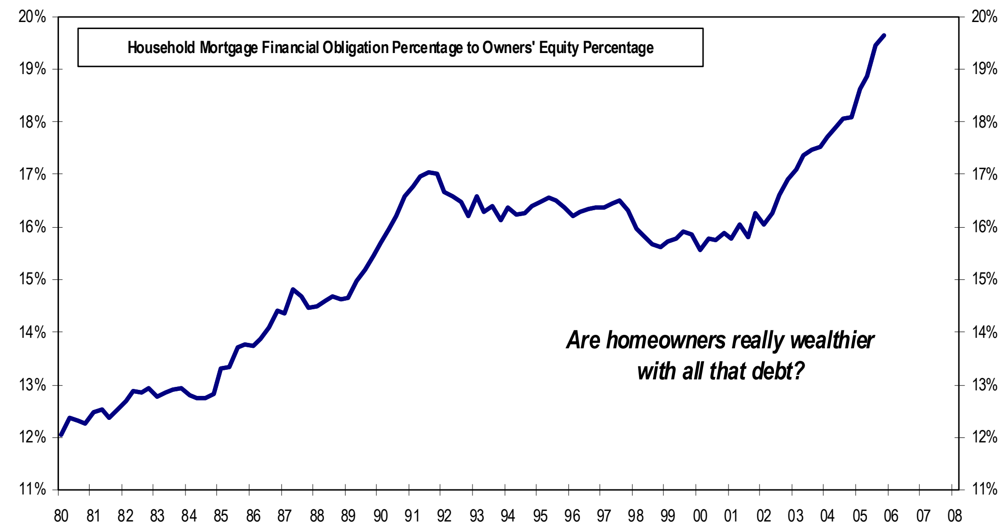
Implications of a Housing Slowdown for Financial Markets

Housing Slows ⟹ Consumer Slows ⟹ Fed Cuts Rates ⟹ Time to Think About Next Opportunities!

Source: Bear, Stearns & Co. Inc.

Our primary concern is that housing markets are frothy at a time when credit conditions are being tightened. Furthermore, it typically takes some time for tighter monetary policy to really affect the housing market. This is worrisome since homeowners have never been as leveraged as they are now, as far as we can determine. The chart below presents a ratio of household mortgage financial obligation percentage to the percentage of homeowners' equity. At a 25-year high, this barometer of household mortgage risk should be of some concern. In other words, as a hugely supportive tailwind of accommodative interest rates is likely about to shift directions and wind down at the same time as households are severely financially leveraged, we cannot help but point out that real estate investors may be due for a major correction sooner or later.

The Household Balance Sheet Is Extremely Stretched



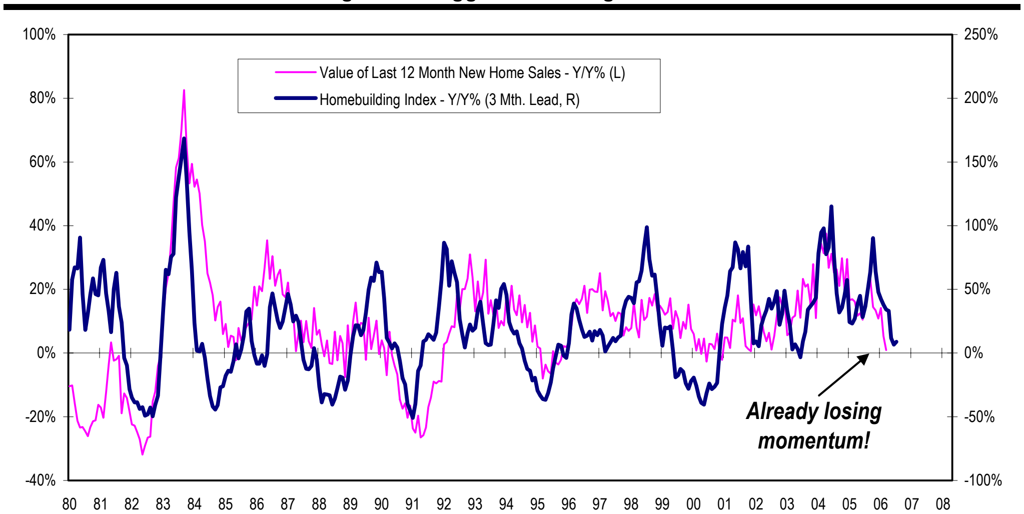
Source: Federal Reserve Board; Bear, Stearns & Co. Inc.

Ironically, homeowners today actually own less of their homes than in the past. While easy access to credit through mortgages has certainly made it easier for people to own homes, the amount of debt they are assuming in the process is crippling. What's more, as their mortgage obligations increase, their equity percentage in their home actually decreases, as we can see in the chart below.

Since equities tend to discount the economic outlook ahead of time, housing stocks can essentially signal what is likely unfolding in the housing market. The chart below shows the relationship of homebuilding stocks to home prices. Essentially, it suggests that if the performance of homebuilding stocks in the last year is any indication, the slowdown in the housing market is likely to persist for some time.

Housing Stocks Suggest Slowdown Could Persist

A Slowdown in the Homebuilding Index Suggests Housing Market Could Continue to Cool

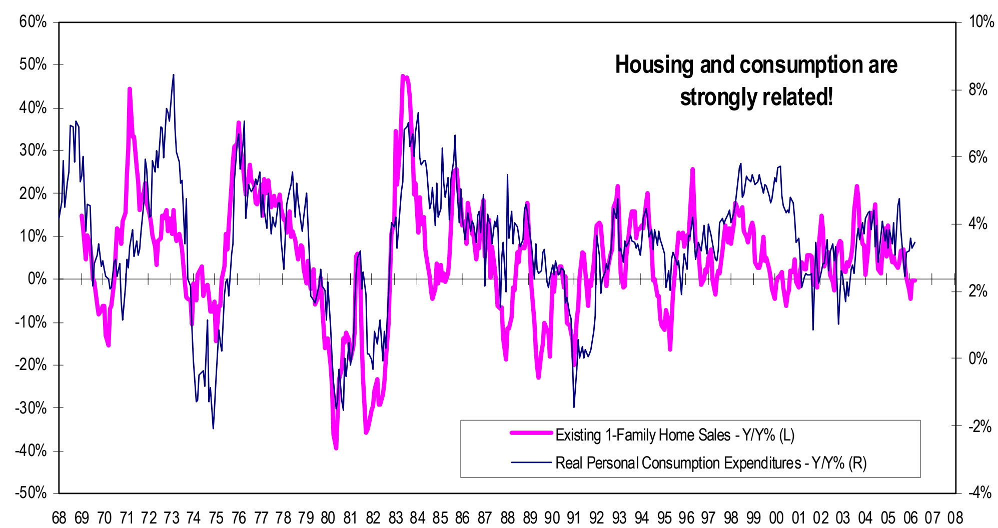


Source: Census Bureau; Standard & Poor's; FactSet Research Systems, Inc.; Bear, Stearns & Co. Inc.

HOUSING SLOWDOWN WOULD WEIGH ON CONSUMER

What's more, a slowdown in the housing market would most likely have painful repercussions for the U.S. consumer. The chart below illustrates quite succinctly that if housing slows, the consumer also slows. Not only would homeowners struggle with over-leveraged homes that, if they wish to sell, they may have to take a loss on, but this could also occur at the same time that the cost of their debt is ballooning. Still, homeowners are not the only ones who would feel the pain of a housing slowdown — rather, the broader economy would likely slow as housing has been such a crucial contributor to the recent economic recovery. With this key component slowing, the broader economy could suffer, which also would weigh on the consumer.

If Housing Slows, Look for the Consumer to Slow

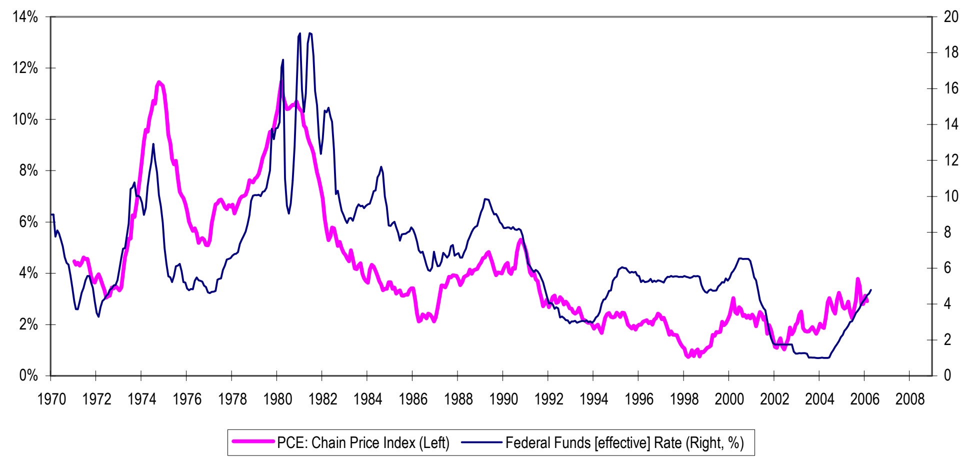


Source: National Association of Realtors; Bureau of Economic Analysis; Bear, Stearns & Co. Inc.

SILVER LINING: ACCOMMODATIVE FED POLICY AHEAD?

Eventually, if consumption slows drastically, the Fed would likely have to step in and cut rates in an attempt to refuel the economy again. The good news is that when this happens, easy money becomes apparent and access to capital becomes more plentiful. As we've seen, this is the environment that can fuel another economic backdrop conducive to speculation, and this is typically when new investment opportunities tend to arise.

If Consumer Slows, Fed Will Likely Cut Rates . . . Beginning of Speculation Elsewhere?



Source: Federal Reserve; Haver Analytics; Bear, Stearns & Co. Inc.

In fact, the silver lining to the end of a housing bubble is that Fed rate cuts could be on the horizon once again. Accommodative monetary policy would likely trigger an expansionary economic period once again, and would most likely reignite investors' appetite for risk. By the same token, rate cuts essentially signal the next period of opportunities. If this is on the horizon, it makes sense to think about what areas could potentially benefit from inflows when the money starts flowing!

Chapter Four: Where Will the Money Flow to Next?

As we saw in the last chapter, the silver lining in a bubble episode winding down is that it sets the stage for the next set of bubble opportunities. That is, in the wake of a bursting bubble, the Fed must often cut rates to stimulate the economy again, thereby increasing the financial liquidity that spurs new bubbles. When the cycle gets started again in this manner, easy credit once again becomes available, and signs of speculation begin to appear.

The key, then, to take advantage of the next wave of speculation is to have some idea of where the money could flow to the next time liquidity becomes ample again. We thought it would be most logical to explore where these opportunities are most likely to occur, according to our established framework of different bubble types.

As a reminder, the four categories by which we can classify most bubble episodes are 1) life-changing, 2) scarcity, 3) thematic, and 4) government. In the table below, we offer a "brainstorming" attempt at suggesting which areas could see opportunities in the future. Remember that before an asset bubble bursts, there are often lucrative opportunities as attention gets drawn to these areas.

Potential Opportunities Down the Road

Bubble Type	Potential Areas of Interest	Bubble Type	Potential Areas of Interest
Life-Changing	> Nanotechnology	**Scarcity**	> Water Filtration
	> Genomics		> Alternative Fuels
	> Robotic Surgery		> Pesticides
	> Biometrics		
	> Voice Recognition		
	> GPS Technologies		
	> Battery Life		
	> Fuel cells		

Bubble Type	Potential Areas of Interest	Bubble Type	Potential Areas of Interest
Thematic	> Pandemics	**Government**	> Homeland Security
	> Hedge Funds		> China
	> Emerging Markets		

Source: Bear, Stearns & Co. Inc.

Opportunities of the Life-Changing Type

Imagining future innovations and how they will alter life is not only a fun pastime, but also important due diligence when trying to be a forward-thinking investor. That is, to take advantage of the next speculative environment, it is worthwhile to have some good ideas in your back pocket that can be put to work as soon as the environment becomes ripe. Still, implementing these ideas in the equity markets is challenging, since the opportunities are essentially boundless. However, we thought it would be helpful to brainstorm some possible areas that could see a surge in growth (or a prolonged lifespan) from this point in time.

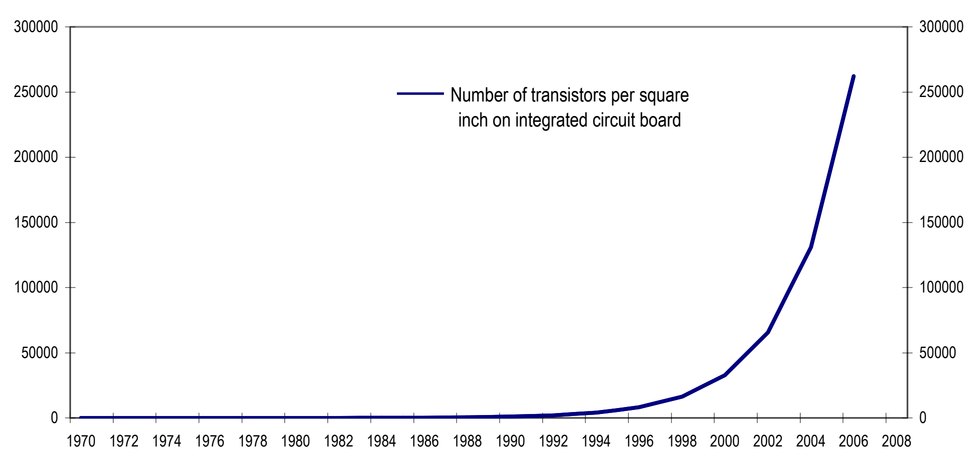
The first area that comes to mind is technology, since tech innovations are the most obvious "life-changing" developments. For instance, we can imagine that technological innovations will continue to play a crucial role in the health care space, particularly in detecting and treating new diseases as well as those that continue to bewilder the scientific community. Furthermore, technological developments play a huge role in the surgical world of medicine, where new and improved procedures render former procedures antiquated everyday! Indeed, robotic surgery and genomics are just a couple of areas involving technological innovations and science. Industries that are widely considered to be mature, such as computer technology and construction materials, could quickly be stirred into a speculative frenzy if research in light and composites resulted in faster computer systems and more durable and less expensive trains, planes, and automobiles.

Some tech areas are well-known but still in their infancy, as far as we can tell — e.g., voice recognition technologies, Internet-to-phone capabilities, expansion of wireless infrastructures, GPS technology uses, battery life, genomics, fuel cells, and biometrics.

NANOTECHNOLOGY

One area that encompasses a number of these themes is nanotechnology. Indeed, nanotechnology refers to an area of science that involves the making and manipulation of complex devices with the ability to work at the microscopic level. It is not a single industry, but rather a science that offers possibilities for many different industries, across a wide array of materials and products. Nanotechnology gets its name from the nanometer — the tiniest unit of measurement, which is equivalent to a billionth of a meter, or 100,000 times as thin as a human hair.[vii] Atoms exist in the nanosphere, as do things like microchips, as well as organisms and viruses. Nanotechnology is one area we foresee garnering more attention from investors in the future. Indeed, it is already beginning to catch on in the marketplace because its commercial potential is limitless, with the ability to affect nearly every single sector — from health care to manufacturing. Many think it could be the "next big thing," leading us to think that one day it could be the next "life-changing bubble." Since it is a concept that has only recently reached the marketplace, it is an area that has not yet peaked.

Will Nanotechnology Go the Way of Moore's Law?



Source: Intel Corporation; Bear, Stearns & Co. Inc.

We raise the idea of nanotechnology for investors to keep in mind as a life-changing innovation that is in a very early stage of development. If we apply "Moore's Law" to nanotechnology, we can see how nanotechnology has been influential for the evolution of the semiconductor during the past 40 years. Moore's Law refers to the observation made in 1965 by Gordon Moore, co-founder of Intel, that the number of transistors per square inch on integrated circuits has doubled every year since the integrated circuit was invented. If nanotechnology's influence continues to be so powerful, we can expect the enthusiasm surrounding it to be significant, providing even greater opportunities for investors.

While nano-stocks themselves have yet to garner a significant amount of speculative activity, the idea that this technology will transform businesses as we know them is circulating among financial circles. Indeed, business periodicals are beginning to whisper about which industries and corporations will likely be the beneficiaries of a nanotechnology boom. So, while we are by no means suggesting that a bubble is brewing for nanotech stocks, the life-changing capacity of this science is reminiscent of other life-changing events that caused bubbles (e.g., railroads, radio, television, electronics, and dot-coms). The promise of delivering life-changing results without delivering any earnings (or even products!) reminds us of the Internet days.

What's more, there are several funds that have begun to appear, focusing primarily on nanotech stocks. Reminiscent of the Internet funds that evolved in the 1990s and the biotech funds of the 1980s, nano funds are in a very early phase. Nevertheless, we thought it would be interesting to list the ones we were able to track down.

A Sample of Some Publicly Traded Nanotechnology Funds

Fund Name	Ticker	Description
Activest NanoTech	ACNATCH	Open-end investment fund with objective of long-term capital appreciation. Invests primarily in equities of companies whose products and services are preferred by younger generations. Formerly known as Activest Lux NanoTech.
Nanoscience Opportunities	NANOOPP	Open-end investment fund with objective of growth and income. Invests in global equity securities excluding emerging markets.
DAC Nanotech Funds	HANNANO	Open-end investment fund with objective of growth through global investments in nanotech company eqiuities. Includes companies in the development and servicing of nanotechnology. Formerly known as H&A Lux DAC.
First Trust 824 - Nanotechnology Portfolio Series	FTNATX	Unit Investment Trust focusing on nanotech companies. Termination date: 12/9/2008
First Trust 947 - Nanotechnology Portfolio Series	FTNAMX	Unit Investment Trust focusing on nanotech companies. Termination date: 3/9/2010
Nanocap Offshore Fund	NANOFFS	Open-end investment fund with objective to deliver superior investment returns over a long market cycle. Consists primarily of US securities, both long and short positions, with opportunistic investments in Asia and other regions.
PowerShares Lux Nanotech Portfolio	PXN	U.S. exchange-traded fund. Seeks investment results that correspond to the price and yield of the Lux Nanotech Index (LUXNI). Invests 80% of assets in nanotech companies' common stocks.
VCH Expert - Nanotech	VCHNANO	Open-end investment fund. Objective is long-term capital growth. The fund in world-wide in equities of companies that produce, develop, and improve nanotechnology.

Source: Bloomberg; Bear, Stearns & Co. Inc.

In addition, there are two nanotechnology indices that are currently publicly traded: the Merrill Lynch Index (NNZ), which consists of 27 companies and trades on the American Stock Exchange, and the Lux Nanotech (LUXNI). The Merrill index consists mainly of micro-cap stocks — i.e., most have market caps under $1 billion, with a good portion less than $250 million. Obviously, such small-capitalization structures, coupled with unconfirmed business models, make nanotech stocks a very risky venture at this point, in our opinion.

Opportunities of the Scarcity Type

Bubbles that arise from a scarcity of resources typically involve commodities or goods of which there is a finite supply or accessibility — e.g., renewable energy sources, water purification, and perhaps vaccines. While the danger posed by bird flu is clear and present, areas such as water filtration and energy alternatives are ones we imagine will see continued interest and exploration for many years to come.

ALTERNATIVE FUELS

Alternative fuels is one area of the energy market we think will only continue to gain the attention of investors going forward. With energy prices having reached all-time highs and a geopolitical landscape driving the U.S. to become less oil-dependent on the rest of the world, we think more and more resources will be directed toward alternative fuel sources and initiatives.

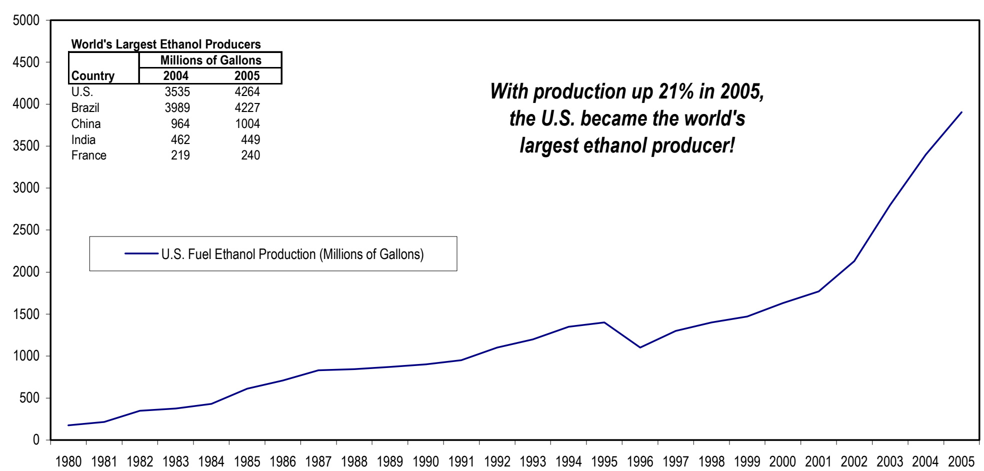
The Flow of Energy

Domestic Production	% of Total	Domestic Consumption	% of Total	Petroleum Consumption by End User	% of Total
Coal	22%	**Petroleum**	**40.2%**	**Transportation**	**67%**
Natural Gas and NGPL	21%	Natural Gas	23%	Industrial	24%
Crude Oil	**11%**	Coal	22%	Residential & Commercial	6%
Nuclear Power	8%	Nuclear Electric	8%	Electric Power Industry	3%
Renewable Energy	6%	Renewable Energy	6%		
Net Domestic	68%				
Foreign Imports					
Petroleum	**27%**				
Other	6%				
Net Foreign	32%				

Source: Energy Information Administration; Bear, Stearns & Co. Inc.

While increased production of fossil fuels like coal and natural gas can help alleviate some of the burden of foreign oil, renewable fuel sources such as wind, water, solar, and biomass have been gaining attention as potential substitutes by many investors. The Energy Information Administration (EIA) reports that petroleum obtained from foreign sources accounts for roughly 27% of the U.S. fuel supply and about 70% of U.S. petroleum fuel consumption. Since about 67% of petroleum eventually ends up consumed by the transportation industry, it is fairly clear why ethanol, a biomass alternative, is becoming so popular. Ethanol has a lot going for it. It is a more environmental-friendly alternative than methyl tertiary butyl ether (MTBE), and its production facilities don't carry the same level of "not in my back yard" concerns that nuclear and wind turbines do. The Renewable Fuels Association (RFA) reports that U.S. ethanol production has climbed 139% over the last five years (to 3.9 billion barrels annually), and that another 2.2 billion barrels of additional production capacity is currently under construction or planned.

U.S. Fuel Ethanol Production (Millions of Gallons)



Source: Renewable Fuels Association; Bear, Stearns & Co. Inc.

While growing rapidly, the ethanol market is not particularly fragmented. Currently, the top ten producers of ethanol contribute about 46% of total production, with Archer-Daniels-Midland garnering almost 25%. Interestingly, however, these top ten producers are expected to add less than 15% of the new capacity under construction, which would lower their market share to 36%. In fact, according to the RFA, 76% of the new capacity will be coming from 28 new ethanol industry participants. So, if anything, this industry is becoming more fragmented. The list that follows presents the largest U.S. ethanol producers based upon current and projected ethanol capacity. While only a few of these companies are publicly traded, they may be worth keeping an eye on since, in time, they could very well become future investment candidates.

Largest U.S. Ethanol Producers

Company	Current Capacity (mmgy)	Under Construction/ Expansions (mmgy)	Total
Archer Daniels Midland	1070	0	1070
VeraSun Energy Corporation	230	110	340
Aventine Renewable Energy, LLC	150	57	207
Hawkeye Renewables, LLC	50	150	200
ASAlliances Biofuels, LLC	0	200	200
Abengoa Bioenergy Corp.	110	88	198
Midwest Grain Processors(1)	95	57	152
US BioEnergy Corp.	0	145	145
Cargill, Inc.	120	0	120
The Andersons Clymers Ethanol, LLC	0	110	110
New Energy Corp.	102	0	102
Advanced Bioenergy	0	100	100
MGP Ingredients, Inc.	78	0	78
Tate & Lyle	67	0	67
Chief Ethanol	62	0	62
Horizon Ethanol, LLC	60	0	60
Frontier Ethanol, LLC	0	60	60
Prairie Ethanol, LLC	0	60	60
Otter Creek Ethanol, LLC(1)	55	0	55
Sioux River Ethanol, LLC(1)	55	0	55
Pinal Energy, LLC	0	55	55
The Andersons Albion Ethanol LLC	0	55	55
AGP(1)	52	0	52
Little Sioux Corn Processors, LP(1)	52	0	52
Northstar Ethanol, LLC	52	0	52
Voyager Ethanol, LLC(1)	52	0	52
Corn, LP(1)	50	0	50
Dakota Ethanol, LLC(1)	50	0	50
Glacial Lakes Energy, LLC(1)	50	0	50
Great Plains Ethanol, LLC(1)	50	0	50
Iowa Ethanol, LLC(1)	50	0	50
James Valley Ethanol, LLC	50	0	50
Michigan Ethanol, LLC	50	0	50
Northern Lights Ethanol, LLC(1)	50	0	50
Blue Flint Ethanol	0	50	50
Green Plains Renewable Energy	0	50	50
Heron Lake BioEnergy, LLC	0	50	50
Illinois River Energy, LLC	0	50	50
Lincolnway Energy, LLC(1)	0	50	50
Red Trail Energy, LLC	0	50	50
Redfield Energy, LLC	0	50	50
Siouxland Ethanol, LLC	0	50	50

(1) Farmer-owned.

Source: Renewable Fuels Association; Bear, Stearns & Co. Inc.

Below is a stock list containing some names from the alternative fuel space. Note that we have included only U.S. equities and that the list does not include the big energy names, which are also typically involved in developing alternative practices. Rather, this list is meant to identify some of the smaller, less-known names. It is by no means intended to be a complete list, but merely meant to give investors a platform upon which to begin thinking.

Some Alternative Fuel Stocks

Ticker	Name	P/E 2006E	Market Cap. ($Mill.)	Closing Price 5/5/06
AFVS	AFV Solutions Inc.	N/A	N/A	11.00
ACHM	Alchemy Enterprises Ltd.	N/A	N/A	1.40
AENS	Alternative Energy Inc.	N/A	N/A	2.78
ATER	Alternative Energy Resources	N/A	N/A	1.20
AMSU	Amanasu Environment Corp.	N/A	N/A	0.46
AOOR	Apollo Resources International Inc.	N/A	91.5	0.87
CTBG	Coil Tubing Technology Inc.	N/A	N/A	0.20
CGGE	Consolidated Energy & Technology Group	N/A	N/A	1.50
CYNT	Cyntech Technologies Inc.	N/A	N/A	0.12
CY	Cypress Semiconductor	41.9	2,351.5	17.60
DAR	Darling International Inc.	28.1	293.7	4.49
EBOF	Earth Biofuels Inc.	N/A	N/A	4.40
EFTI	EarthFirst Technologies Inc.	N/A	87.6	0.14
ENER	Energy Conversion Devices Inc.	N/A	1,472.3	50.15
ESLR	Evergreen Solar	N/A	918.3	14.26
FCEL	FuelCell Energy Inc.	N/A	640.1	13.47
HGCP	Hansen Gray & Co.	N/A	N/A	0.18
HW	Headwaters Inc.	12.8	1,405.4	34.85
IMCO	IMPCO Technologies Inc.	30.0	209.1	8.10
IHDR	Internatl Hydro International Inc.	N/A	N/A	0.25
KFX	KFX Inc.	N/A	1,230.0	18.50
MKBY	McKenzie Bay International Ltd.	N/A	N/A	0.69
WFR	MEMC Electronic Materials	28.0	8,940.7	47.56
MCEL	Millennium Cell Inc.	N/A	81.8	1.76
NATK	North American Technologies Group	N/A	11.4	0.18
NXSO	Noxso Corp.	N/A	N/A	0.30
NVIC	N-Viro International Corp.	N/A	4.4	1.40
QTWW	Quantum Fuel Systems Technologies Worldwide Inc.	N/A	224.2	4.57
RTK	Rentech, Inc.	N/A	494.1	4.56
SPWR	SunPower	115.7	2,347.2	39.35
STP	Suntech Power	58.5	5,057.4	36.28
SYNI	Syngas International Corp.	N/A	N/A	0.56
UQM	UQM Technologies Inc.	N/A	130.1	5.99

Source: FactSet Research Systems, Inc.; Bear, Stearns & Co. Inc.

Opportunities of the Thematic Type

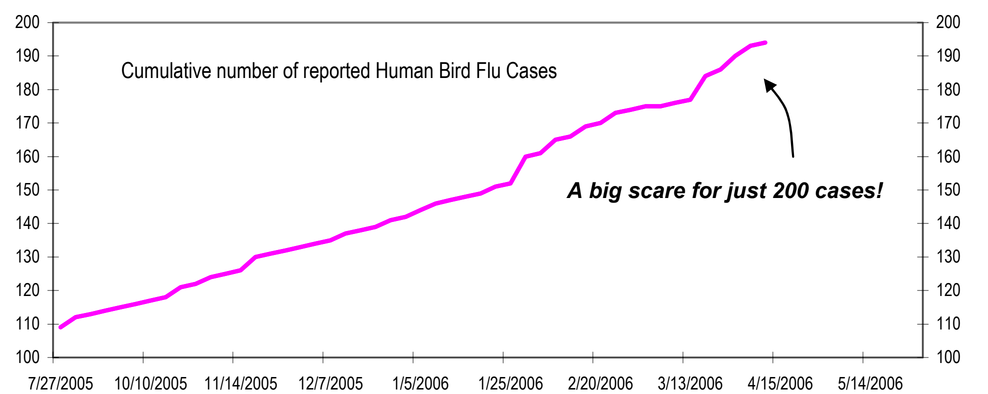
PANDEMICS

One theme we hear a lot about these days is the worry surrounding pandemics and bioterrorism. While we would never encourage profiteering from unfortunate situations, we do think that thematic manias can often arise from the potential of worrisome scenarios. For instance, our government has announced increased spending efforts to monitor avian influenza outbreaks and to stockpile vaccines that will hopefully protect the public in the case of a pandemic. Naturally, investors will be eager to know which companies will benefit most from such spending.

As long as a bird flu epidemic remains more of a possibility than a widespread pandemic, we think that stocks in the pre-pandemic phase will fetch more attention. These, of course, are mainly the diagnostic companies and the research companies. In this regard, the big pharma companies will likely be on the radar; however, Quidel (QDEL-11), Meridian Bioscience (VIVO-26), and Crucell (CRXL-27) are three small diagnostic companies worth noting at this early stage of a potential bird flu epidemic.

If the bird flu becomes more of a reality than a possibility, vaccines will become critical. Here, companies that produce drugs to prevent or combat the virus will likely gain attention — e.g., Vical (VICL-7.27), which is working on a DNA vaccine, and Hemispherx Biopharma (HEB-3.17), which has developed a compound that could increase some existing anti-virals. Many of the big pharma companies would likely take center stage as well in the case of an actual widespread human outbreak, as many of them are in the vaccine market. The worst-case scenario surrounding the avian flu is a full-fledged human epidemic, whereby a "thematic" mania could escalate into a "scarcity" scenario, in which vaccines become a sought-after commodity. However, for now, we hope that it remains a thematic play!

Avian Flu Outbreaks



Source: World Health Organization; Bloomberg; Bear, Stearns & Co. Inc.

Investors looking to protect their portfolios in the event of a bird flu outbreak can look to the SARS epidemic for guidance. Measuring industry group performance from the first SARS case in November 2002 to the World Health Organization's (WHO) global alert warning in March 2003, it would seem that expectations about how the consumer will react to an epidemic is perhaps the best guide to how stocks will perform. Obviously, people will want to stay out of public places, limit time in the office, and cut back on travel. Not surprisingly, during the SARS scare, the discretionary sector suffered most, with airlines, automobile manufacturers, and retailers taking a big hit. The impact of a sudden decline in consumer spending was expected to slow economic growth, and therefore industrials and materials also took a big hit. On the flip side, since people would be expected to stay indoors as much as possible and protect their families, utilities, energy, health care, and telecom were among the better-performing sectors.

Sector and Industry Group Performance During the Last Pandemic Scare — SARS

S&P 1500 Sector	SARS First Case to Global Alert Warning
Discretionary	-12.4%
Industrials	-12.4%
Materials	-11.4%
Staples	-9.2%
S&P 1500	-8.1%
Financials	-7.6%
Health Care	-6.9%
Telecom	-6.8%
Technology	-4.6%
Utilities	-1.3%
Energy	2.0%
S&P 1500 Industry	
Airlines	-39.7%
Automobiles	-27.2%
Auto Components	-19.5%
Multiline Retail	-18.8%
Metals & Mining	-17.0%
Beverages	-15.1%
Media	-14.8%
Specialty Retail	-14.1%
Diversified Financials	-13.9%
Construction Materials	-13.5%
IT Consulting & Services	-13.4%
Chemicals	-13.4%
Leisure Eqpt. & Products	-13.2%
Aerospace & Defense	-13.0%
Trading Co.	-12.8%
Commercial Serv. & Supplies	-12.0%
Food & Drug Retailing	-11.9%
Industrial Conglomerates	-11.7%
Biotech	-11.7%
Electrical Equipment	-11.4%

When people don't spend, discretionary and industrials suffer...

...but if stuck at home will still consume digital content and energy.

Travel, Retail, and Consumer Finance will likely feel the brunt of a bird flu epidemic.

Consumer electronics, household products, real estate, and energy tend to benefit as consumers nest.

S&P 1500 Sector	SARS First Case to Global Alert Warning
Machinery	-10.0%
Diversified Telecom	-9.9%
Road & Rail	-9.9%
Insurance	-9.8%
Air Freight & Couriers	-9.7%
Health Care Provider & Services	-9.5%
Semiconductor (Equipment)	-9.2%
Home Improvement Retail	-9.1%
Household Durables	-9.0%
Building Products	-8.9%
Hotels, Restaurants, & Leisure	-8.8%
Construction & Engineering	-8.3%
Containers& Packaging	-6.7%
Food Products	-6.7%
Household Products	-6.6%
Electronic Equipment	-4.6%
Tobacco	-4.5%
Wireless Telecom	-4.5%
Banks	-4.4%
Pharmaceuticals	-4.1%
Comptuter & Peripherals	-3.7%
Paper & Forest Products	-3.7%
Health Care Equipment & Supplies	-3.4%
Communciation Equipment	-3.4%
Software	-3.0%
Real Estate	-2.8%
Personal Products	-2.2%
Textiles & Apparel	-0.8%
Equipment & Services	-0.7%
Internet Software & Services	2.3%
Oil & Gas	4.0%
Office Electronics	7.0%

Source: WHO; FactSet Research Systems, Inc.; Bear, Stearns & Co. Inc.

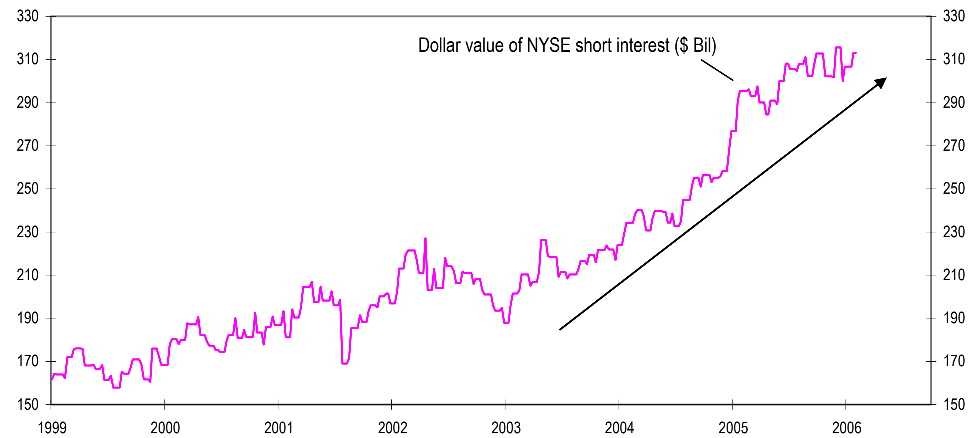
HEDGE FUNDS

Another investment area that continues to be extraordinarily popular in financial circles is the hedge funds arena. An enormous amount of capital has continued to flow into these investment vehicles during the past few years. Like other manias we've seen throughout history, there has been a mammoth surge in wealth among hedge fund participants in a relatively short period of time.

While we are not suggesting that hedge funds are currently in a bubble per se, we think there is evidence to suggest that the industry is currently in a bubble-prone environment. Indeed, hedge funds have garnered significant attention from investors in recent years and are an undeniable force in today's financial landscape.

The current infatuation with hedge funds recalls the sentiment toward venture capital firms and dot-coms in the late 1990s, when professionals, both young and old, jumped ship for the potential of landing a fortune. The reason we call it a potential bubble is that hedge funds have become powerful enough that even the slightest cause for concern can send ripples throughout the market.

Short Interest as a Proxy for Hedge Fund Trading



Source: Ned Davis Research; Bear, Stearns & Co. Inc.

Indeed, we estimate that about 20% of trading volume on the New York Stock Exchange is currently comprised of short interest. It is difficult to estimate how much of all trading activity can be attributed to hedge funds — we hear anything from 30% to 50% is the typical breakdown lately. Regardless of the exact figure, it is easy to imagine how a fallout among the hedge fund community would have significant ramifications for the equity market.

So, often in an asset bubble environment, investors are lulled into complacency by the consistently strong returns. The quantitative data coming from many hedge fund sources readily support the claim that hedge funds have provided price returns well in excess of equities over the past ten years, and that correlation rates are very low, or strongly negative. These two observations have been the centerpiece of an expanding investment philosophy that claims that hedge funds are an alternative asset that can augment long-term returns and improve portfolio diversification. Notwithstanding this, the accuracy of hedge fund return statistics has come under fire from those who claim that the databases that generate these statistics suffer from a high degree of survivorship bias.

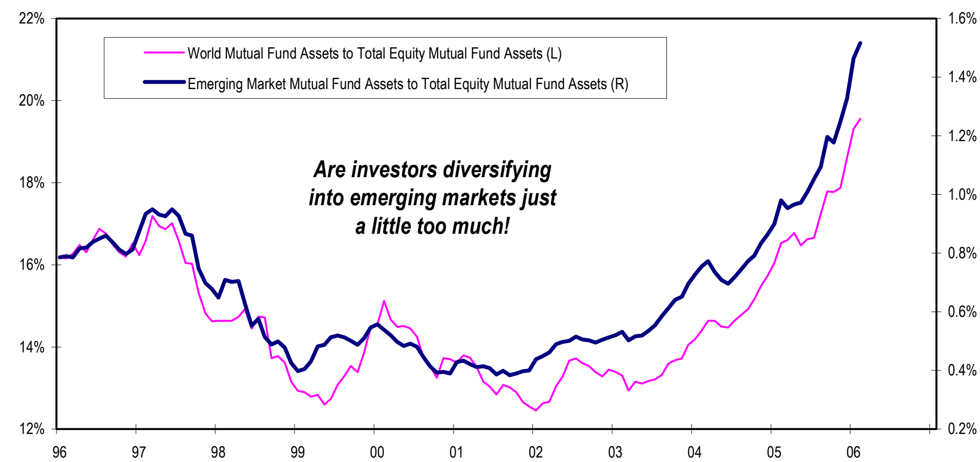
An academic report published by Burton Malkiel and Atanu Saha suggests that average annual returns from 1996 to 2003 for hedge funds could have been as much as 442 basis points lower (9.3% versus 13.7%) if survivorship bias was taken into account. This is somewhat startling if one considers that the average annual return of the S&P 500 over the same period was 9.7%. Some hedge fund statistic providers vehemently refute those results, claiming that their hedge fund return data do not suffer from this bias. Still, the fact that the loosely regulated hedge fund industry reports performance “voluntarily” and that those hedge funds with bad results tend to opt out from time to time, or, worse, permanently, is an important issue that investors need to be aware of, in our view. It is already widely known that hedge funds have high failure rates, generate higher taxes due to frenetic trading, and that fees and manager profit-sharing can together take a big bite out of long-term returns. It is possible that in the case of hedge funds, bubble psychology is once again getting the better of investors’ long-term investment senses. Should too many investors wake up one day and realize that hedge funds really don't beat indexing over the long run, things could get ugly in the hedge fund world.

EMERGING MARKETS

Another investment arena that has been very popular in recent years is the emerging markets. Indeed, we have seen enormous inflows of capital activity into the emerging markets space in recent years. Looking at the number of funds that are strictly dedicated to emerging markets, we identified more than 1,300 such funds when looking on Bloomberg alone!

As the chart below illustrates, in recent years, the amount of capital that has flown into the emerging markets has been noteworthy. In fact, at this point, nearly 1.6% of equity mutual fund assets are directed toward emerging market investments — this is compared to just four years ago, when it was barely 0.5%. About one-quarter of all mutual fund assets are currently directed toward global assets, compared to 15% four years ago.

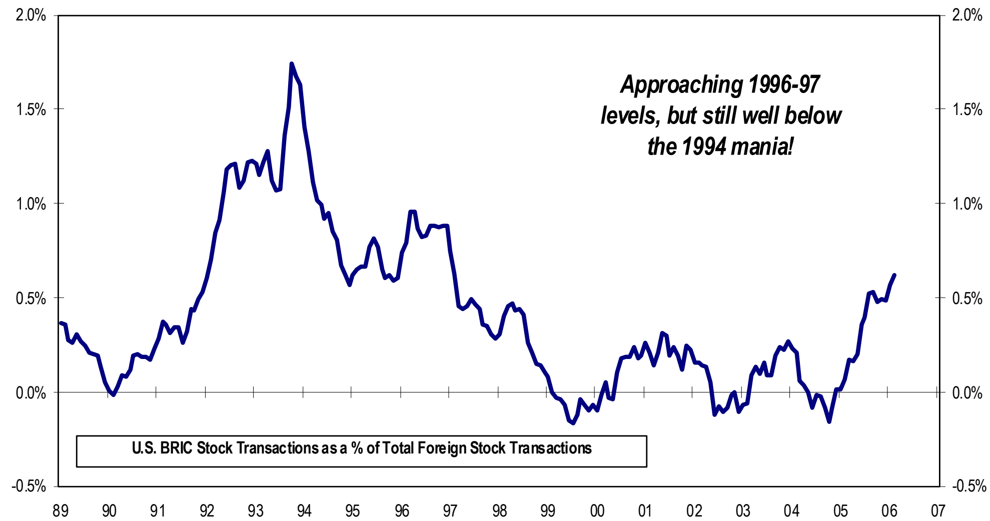
Inflows to Emerging Markets at Decade Highs



Source: Bear, Stearns & Co. Inc.

The popularity of emerging market investing has given rise to its own thematic investment grouping, called "BRIC" funds, which focus primarily on investment opportunities arising in Brazil, Russia, India, and China — hence, "BRIC." The graph below suggest that U.S. foreign stock investors increased their trading quite significantly over the past year. In fact, the region's popularity has reached levels last seen since the 1996-97 speculative periods. While trading activity is still far below that of the 1994 emerging markets bubble, the history of emerging market investing would suggest that the road to economic prosperity is always marked by its share of potholes. Over the past 20 years, emerging markets have endured the majority of the world's financial crises and suffered some of its most spectacular equity market declines. When it comes to emerging markets, it is usually *not different this time*.

Are Investors About Ready to Run into a BRIC Wall?



Note: BRIC = Brazil, Russia, India & China.

Source: Treasury Department; Bear, Stearns & Co. Inc.

Opportunities of the Government Type

HOMELAND SECURITY

Since 9/11, the U.S. has dramatically increased spending on homeland security. This spending frenzy has clearly already benefited a large number of companies whose business involves security offerings. While the idea of "Armageddon" portfolios is certainly nothing new, we do think that these stocks will continue to see interest as threats of terrorism linger and budgets are often stretched for security provisions. Below, we offer a list of funds dedicated to homeland security stocks that we were able to track down.

Homeland Security Funds

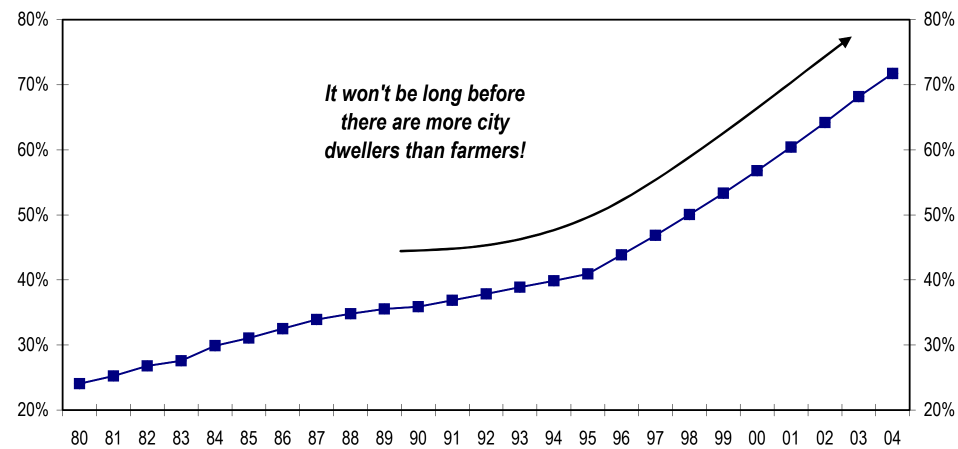
Fund Name	Ticker	Description
Ancora Homeland Security Fund	ANHCX	Open-end investment fund with objective of high total return. The Fund invests in companies in a group of related industries that provide products or services intended to prevent physical attacks against citizens or natural disasters.
Claymore Securities 238 - Homeland Defense Portfolio - Series 1	CHLDAX	Unit Investment Trust. Termination Date: 8/1/07; Distribution: Semi-annually; Distribution Type: Reinvest
First Trust 1023 - Homeland Security Portfolio Series	FHOMJX	Unit Investment Trust. Termination Date: 7/26/10; Distribution Frequency: Semi-annually; Distribution Type: Cash
First Trust 1047 - Aerospace Defense & Hopeland Security Portfolio	FADHSX	Unit Investment Trust. Termination Date: 9/25/07; Distribution Frequency: Semi-annually; Distribution Type: Cash
First Trust 1097 - Hopeland Security Portfolio - Series 2	FTHSJX	Unit Investment Trust. Termination Date: 1/18/11; Distribution Frequency: Semi-annually; Distribution Type: Cash
PowerShares Aerospace & Defense Portfolio	PPA	Exchange-traded Fund that seeks investment results that correspond to the price and yield of the SPADE Defense Index. The Fund invests assets in common stocks of companies involved in the development, manufacturing, operations and support of U.S. defense, homeland security & aerospace operations.

Source: Bloomberg; Bear, Stearns & Co. Inc.

CHINA: A GOVERNMENT-DRIVEN BUBBLE BREWING?

China is another example of a government-driven bubble. It is an interesting case in bubble history in that the worst of the bubble is not occurring in a specific asset class. Typically, a bubble environment revolves around and makes itself most evident in a specific asset class such as real estate, commodities, and/or claims on property (stocks, bonds, etc.). As the asset rises in value, risk tolerances ease on both the demand (investor) and supply (financial intermediary) sides of the fence, and oftentimes creates a self-fulfilling prophesy that persists until a greater fool no longer can be found.

China Demographics: Urban Dwellers as a Percentage of Rural Dwellers



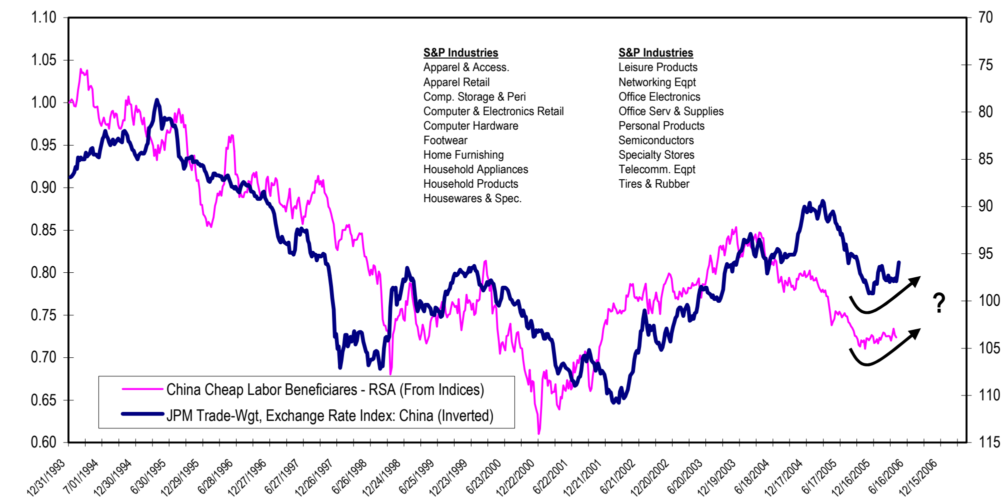
Source: China National Bureau of Statistics; Bear, Stearns & Co. Inc.

That is not to say that there is no evidence of a bubble environment in China, but only that this bubble does not fit the typical mold. The China bubble is being generated from outside of the country due to unavoidable factors within the country. China's overriding need to provide the basic necessities of both employment and shelter to the swelling ranks of the rural underclass that are entering its cities creates the need for government policies that keep China's economy moving and that ward off the potential for a major civil problem. At the center of it all is the Yuan peg.

The ample supply of cheap labor and the currently undervalued Yuan have kept the China export engine churning away, drawing a wave of foreign funds toward China. Viewed from this angle, China itself is the bubble. Investment and speculative money flows into the country, and the Chinese government either sterilizes it or recycles it into foreign bonds. The whole process is an increasing challenge for the Chinese government and places a growing strain upon the financial system. To sop up the flow of Yuan that is entering China from the outside, the government issues bonds to the banking system. To maintain the peg against a wave of foreign investors looking to buy into China, the government is exchanging Yuan for foreign currencies that inevitably end up in foreign bonds such as U.S. Treasuries and government agency securities — a likely contributing factor to the so called "Greenspan Conundrum." So, in this case, the avalanche of incoming funds that so often accompanies an asset-style bubble is instead inflating an entire country and creating financial dislocations around the world.

The chart below depicts a number of the industries that we think could continue to benefit from the increase in production from China. As such, these are some industry groups that investors may want to keep in mind when thinking of ways to benefit from China's labor demographics.

Beneficiaries of China's Labor Demographics



Source: FactSet Research Systems; Bear, Stearns & Co. Inc.

Conclusions

Ideally, investors will come away from this report with a better understanding of why asset bubbles occur and how best to profit from speculative episodes. While it is naturally much easier to identify asset bubbles after the fact, our work is designed to equip investors with tools to identify bubble-prone environments before they occur.

What's more, as we have now illustrated, bubbles are serial in nature. Oftentimes, the catalyst for the next round in a serial episode is the winding down of an earlier bubble. Indeed, the conclusion of one bubble often triggers a broader economic slowdown, which eventually results in the Fed injecting more stimulus to lift the economy again. When easy credit becomes available again, speculation appears, and the next opportunities arise. As such, when signs that a bubble is winding down become apparent, it is a good time to think of where the next prospects will occur.

With the most recent asset bubble (real estate) appearing to be winding down, we have attempted to share some areas we think could be beneficiaries of the next speculative wave. When it comes to life-changing bubbles, the opportunities are endless. One prospect that we believe is still very much in its infancy is nanotechnology. If it continues to drastically improve the way different industries grow and conduct their business, nanotechnology will truly be a life-altering phenomenon. As computers and technological processes become smaller and smaller, opportunities should continue to blossom exponentially.

As for thematic bubbles, we can envision a number of different themes garnering more attention in the future — from medical treatments to emerging markets. These will likely be event driven, so they are more difficult to predict. Still, it is not difficult to imagine specific themes gaining visibility should a particular event take center stage. The same is true of government-driven bubbles, as these, too, tend to be event driven. Further homeland security initiatives could easily lead to a surge in security-related stocks.

Finally, the scarcity bubble we think could be quite rewarding for investors down the road is the energy complex. However, unlike a number of pundits who think energy-related opportunities are currently optimal, we believe that the energy sector could experience a cyclical slowdown in the coming years and that the real energy opportunity is still a few years away. Indeed, we think the recent outperformance of energy stocks marks a pre-mania period and these stocks are in a comparable phase to technology stocks in 1996. Remember, tech stocks had outperformed the market significantly for the prior three years (1993-96). In 1996, after the stocks had appreciated 100% relative to the market and valuations appeared stretched, the economy slowed, causing tech stocks to pull back. In fact, the tech sector saw a major correction between 1996 and 1998 — the true bubble episode didn't begin until 1999. We would advise investors to keep this scenario in mind when it comes to energy stocks. If the economy slows like it did in 1996, the true bubble scenario for energy may be a ways off. When the scarcity bubble eventually kicks into gear, segments of the energy complex, such as alternative fuels, could experience a wild ride. In the meantime, we encourage investors to use this time to fasten their seatbelts and prepare for phase two of the post-Internet, post-real estate episode!

[i] Edward Chancellor, *Devil Take the Hindmost,* p. 189.

[ii] Ned Davis, *The Triumph of Contrarian Investing*, p. 36.

[iii] Ibid.; p. 35.

[iv] Ibid.

[v] Homer Hoyt, *One Hundred Years of Land Values in Chicago*, p.101.

[vi] John M. Berry, "Home Prices Won't Directly Affect Fed Rates," Bloomberg News, April 7, 2005.

[vii] Peter Conley, CNBC.com, April 1, 2004, www.moneycentral.msn.com/content/CNBCTV/Articles/StockPicks/P79917.asp

Addendum

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Underperform (U) — Stock is projected to underperform analyst's industry coverage universe over the next 12 months.

<u>Ratings for Sectors (vs. regional broader market index)</u>
Market Overweight (MO) — Expect the industry to perform better than the primary market index for the region (S&P 500 in the U.S.) over the next 12 months.
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Addendum

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