

# The *Value* Investor™

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**“I will prepare myself and the opportunity will come.”**

—Abraham Lincoln



When I began my career in the financial services industry in 1968, the market had been going up for 20 years. Investors, even those with small sums of money, had been making great profits. Having just entered the business and with many lessons to learn, I decided to turn to mutual funds as the investment of choice for my clients. At that time, these funds seemed to provide the benefits of diversification and professional management.

Over the next six years, the major U.S. stock indices dropped 45% while the average individual stock dropped more than 70%. During this time (1968 through 1974), the financial markets experienced the worst bear market since the Great Depression. It was during these six difficult years that I learned the lessons that would forever change my thinking about investments, finance, academic theories, Wall Street, and the media!

I learned that Wall Street was a giant marketing machine that offered extensive reports on companies, most of which were written to promote the stock of their investment banking clients, rather than provide independent research for the small investor. This was in direct conflict with many of the investors they were supposed to be serving. Frequently, this conflict compromised and distorted the truth.

Many separate account and mutual fund managers who were held out as experts were bright, but inexperienced and not prepared to manage money in overvalued markets. Oftentimes, these managers got caught up in crowd behavior as they had little conviction in their own beliefs, let alone an investment discipline to follow. In addition, many managers took high risk bets as they

felt tremendous pressure to perform in order to keep their jobs and their clients. As a result, their performance during this challenging period was dismal.

There was, however, one group of investors that seemed to perform extremely well relative to the market. One thing this group had in common was that they were all practitioners of the “Benjamin Graham Value” school of thought. The most successful of these practitioners has been investor Warren Buffett.

In 1974, convinced that I had found an investment philosophy I could believe in, as well as one that stood the test of time, my wife and I founded Century Management. Today, 30 years later, the financial markets have come full circle. After experiencing one of the most extraordinary bull markets in history (1982 to 2000), once again, our country faces tough economic challenges ahead. More importantly, from an investment perspective, equity, fixed income, and real estate markets are all overvalued relative to their intrinsic values.

What is particularly troubling about today’s market is that it has many of the same conditions which existed during the 1968 through 1974 bear market. It is our hope that this report will give you a better understanding of the many financial challenges that our markets face today. We also hope this report will give you additional insights on how we plan on investing your portfolios in the many opportunities which will present themselves in the years ahead.

Sincerely,

A handwritten signature in black ink that reads 'Arnold Van Den Berg'. The signature is written in a cursive style with a large, stylized 'B' at the end.

Arnold Van Den Berg  
President

## Disclosures

The opinions herein are those of Century Management. This report is not intended to convey investment advice or legal, tax, or financial advice. If you wish to become a client of Century Management, you will be required to sign an Investment Advisory Agreement that exclusively governs the relationship between you and Century Management.

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All contents and research in this report have been obtained from sources believed to be reliable, but accuracy and completeness cannot be guaranteed.

Past performance is no guarantee of future results. However, Century Management believes that the significance of long-term records can sometimes be underappreciated.

Century Management is headquartered at 805 Las Cimas Parkway, Suite 430, Austin, Texas, 78746. Telephone is (512) 329-0050 or (800) 664-4888. Fax is (512) 329-0816. Web site is [www.centman.com](http://www.centman.com).

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## Acknowledgements

Written and Edited By: Arnold Van Den Berg, President/Founder, and Scott Van Den Berg, Vice President, CFP®, ChFC.

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## The Purpose for Writing This Report

The scope of this publication is greater than any we have written in our 30-year history. **The purpose in writing this report is to point out that financially speaking, we are living in historic times.** It is extremely unusual for all major asset classes (stocks, bonds, and real estate) to have been bid up to what appears to us as unsustainable levels, all at the same time.

Today, we are seeing market conditions this country has experienced perhaps only four times in the last 80 years. However, each time these similar conditions occurred, they created enormous opportunities for great returns. **Therefore, while we want to point out the financial problems that are worrisome, we also want to prepare you for the future investment opportunities they will create.**

This report points out in great detail many imbalances that currently exist in the market as well as the economy. The way these imbalances will be resolved depends in large part on the way the federal government and the Federal Reserve work through these challenges. By providing you with a general overview of market and economic conditions, along with various future market scenarios, you will have a better idea of what to expect in the years ahead.

As you will see, the depth of this discussion is not just focused on the overvalued markets and the economy, but also on our government's response to them. In this report we will cover:

- General Market Overvaluations (Past and Present)
- The Quality of Earnings
- Debt (Corporate, Consumer, Federal)
- Where We Are in the Market Today
- Four Possible Market Scenarios as We Look Towards the Future
- Conclusion

**While this report provides you with a general perspective and overview of today's market environment, we have not departed from our primary focus of buying individual companies in your portfolios.** We continue to search for individual companies selling between 50% and 70% below their private market value. At this level of discount, stocks provide great opportunities for appreciation as well as reduce the risk caused by the uncertainties.

It is our hope that by reading this report you will gain a greater understanding of the challenges facing our government, economy, and financial markets in the years ahead.

Century Management

Published & Written By: The Century Management Team

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805 Las Cimas Parkway, Suite 430

Austin, Texas 78746

1-800-664-4888 • [www.centman.com](http://www.centman.com)

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## Section I: The Equity Market (Past and Present)

In our 2003 year-end client review, we outlined the history of past market bubbles and the time it took the markets to recover. We also calculated where current fair value was for the market at that time, and we presented several scenarios in which the market overvaluation could be resolved. Ten months later, the markets are up, and many people have been asking, *“Are there any bargains in the market today?”* While we will explain our answer in detail, for those of you who like short and direct answers, there are few bargains in the stock or bond markets today. Although we don’t know when this situation will change, we are very confident that in time the bargains and opportunities will appear.

While there are many different approaches to answering this question in detail, we believe that the **price to sales ratio** is the best and simplest method to use.<sup>(1)</sup> There are three reasons why we like the price to sales ratio as a measurement of value. The **first** reason is for its simplicity. Evaluating a dollar of sales rather than a dollar of earnings eliminates most of the accounting

games. **Second**, sales are the lifeblood of any business. Without sales there can be no earnings. **Third**, there is an enormous amount of historical data which shows what a dollar of sales is worth in any industry as well as in any given interest rate environment. While there are many other measures of value that are put into practice when looking at an individual company, we believe this is a good approach to use when looking at the general market.

To illustrate just how valuable this simple price to sales ratio can be, let us review our April 1999 newsletter. At that time we used the price to sales ratio to demonstrate just how overvalued the market had become *relative to its intrinsic value.*<sup>(2)</sup>

The following is taken from the article “The Outlook for the S&P” in our April 1999 *Value Investor* newsletter.<sup>(3)</sup>

*“Obviously, if an investment does not have the potential to earn a return greater than a tax-free bond, it would suggest that there is not much value. For those people who feel that indexing is an easy way to get a 15% to 20% return over the next 10 years, we believe that the S&P index is going to be a major disappointment. To achieve these types of returns would require an assumption in the growth rate of sales and earnings that the S&P has never achieved in its 80-year history.”*

Chart 1 shows the results of our projected return from the April 1999 study. At that time we projected that if investors bought the S&P 400 index at the beginning of 1999, all they could expect to receive was a compounded return of 3.29% (excluding dividends) over the next 10 years ending December 31, 2008. Unfortunately, in 2002, Standard and Poor’s discontinued the S&P 400 index from future calculations. Therefore, the S&P 500 index<sup>(4)</sup> is the closest index to the S&P 400 that remains available for comparison to our 1999 projection.

September 30, 2004, marks the 5.75 year of this study. While our projection was out-of-sync for the first three years, as the market was voting on what was popular at the time, our projection is now right on track as the market has begun to weigh-intrinsic values. After 5.75 years, we projected a positive compounded return of 0.57% for the S&P 400. Using the S&P 500 as the closest proxy for comparison, it actually returned a negative -1.68% for the same time period (Chart 1).

Chart 1: Summary of CM April 1999 Outlook for S&P		
	CM Projected	Actual
Year	S&P 400 Compounded Return	S&P 500 Compounded Return
1999	-27.93%	19.53%
2000	-11.96%	3.64%
2001	-5.92%	-2.25%
2002	-2.74%	-8.02%
2003	-0.77%	-1.98%
*2004	0.57%	-1.68%
2005	1.53%	*
2006	2.26%	*
2007	2.83%	*
2008	3.29%	*

\*2004 returns are through September 30, 2004. Projected & actual returns exclude dividends

## Chart 2: 1999 CM 10-Year Projection for the S&P 500

Dividends are not included in Chart 2 return numbers. The source of S&P 500 estimated sales, S&P 500 actual price, and actual compounded return data shown is Bloomberg. The 7.5% rate of sales growth (long-term average rounded up) and the 1.25 price to sales multiple assumed are part of the Century Management hypothetical projections. \*Year 2004 return is from 1999 through 9/30/04, as 2004 is not yet complete. Our full six-year projected compounded return from 1999 through 2004 is -1.46%.

	(1)	(2)	(3)	(4)	(5)	(6)
Year	Estimated Sales for S&P 500 Growing at 7.5%	Assume 1.25 Times Sales	Price of S&P 500 on 1-Jan-99	Year-End Closing Price of S&P 500	CM "Projected" Compounded Yearly Return	Actual S&P 500 Compounded Yearly Return
1999	627	784	1,229	1,469	-36.23%	19.53%
2000	674	843	1,229	1,320	-17.20%	3.64%
2001	725	906	1,229	1,148	-9.67%	-2.25%
2002	779	974	1,229	880	-5.66%	-8.02%
2003	837	1,047	1,229	1,112	-3.16%	-1.98%
<b>2004*</b>	<b>900</b>	<b>1,125</b>	<b>1,229</b>	<b>1,115</b>	<b>-1.52%</b>	<b>-1.68%</b>
2005	968	1,210	1,229	-	-0.23%	-
2006	1,040	1,300	1,229	-	0.71%	-
2007	1,118	1,398	1,229	-	1.44%	-
2008	1,202	1,503	1,229	-	2.03%	-

### How to Read Chart 2

**Column 1** shows the estimated sales of the S&P 500 index as of January 1, 1999. The sales increase in this column by 7.5% each year, which is the approximate 40-year average sales growth for the S&P 500 index.

**Column 2** of the chart shows the price to sales ratio of 1.25 (also stated as 125% of sales) at the top of the column. Note the 35-year average price to sales ratio for the S&P 500 is 0.88. However, we wanted to use the highest price to sales ratio in the 35 years prior to 1999 in order to give the market the benefit of doubt. To get the numbers in the boxes for Column 2, multiply the Column 1 figures by 1.25. For example, in 1999 sales for the S&P 500 index were \$627 per share x 1.25 price to sales multiple = \$784. This means that from a fundamental perspective, a price of \$784 per share for the S&P 500 index is all that could be justified.

**Column 3** shows that on January 1, 1999 the S&P 500 index was actually trading at \$1,229 per share.

**Column 4** shows the year-end closing price of the S&P 500.

**Column 5** shows the percentage the S&P 500 price would need to decline from the January 1, 1999 price in order to be in concert with what the fundamentals could justify. After year 1, the returns are compounded (annualized) to give the reader a year-over-year average expected return if the market was to sell at a price that was based on the fundamental analysis provided by this price to sales ratio exercise.

**Column 6** shows the actual results of the past 5.75 years. Notice that in 2004 the market has now weighed the value and our projected numbers are within 0.16% of the actual returns.

For an apples to apples comparison, Chart 2 shows what our projections would have been had we used the S&P 500 for the same period of time that we used in the original study shown in Chart 1. Again, this study confirms our projections were right on track. After 5.75 years the market has weighed the value on this index and shows an actual negative compounded return of -1.68% compared to our projected return of -1.52%. This is a difference of only 0.16% over 5.75 years!

• • •

The S&P 500 is widely followed and is a composite of the 500 largest U.S. companies. While this represents approximately 80% of the U.S. market capitalization,<sup>(5)</sup> there are 9,608<sup>(6)</sup> other publicly traded companies that make up the remaining 20% of the U.S. stock market. Therefore, to give us the most comprehensive benchmark that will include all U.S. stocks, we are going to use the Total Market Price divided by Gross Domestic Product (GDP). This will give us the **price to sales ratio on the entire economy** as opposed to just any one market index as shown on Charts 1 and 2. Since many of the bargains we find are small and mid-sized companies which are not found in the S&P 500, a study of the Total Market Price as a percentage of GDP is more representative of the types of companies that are typically found in your Century Management portfolios.

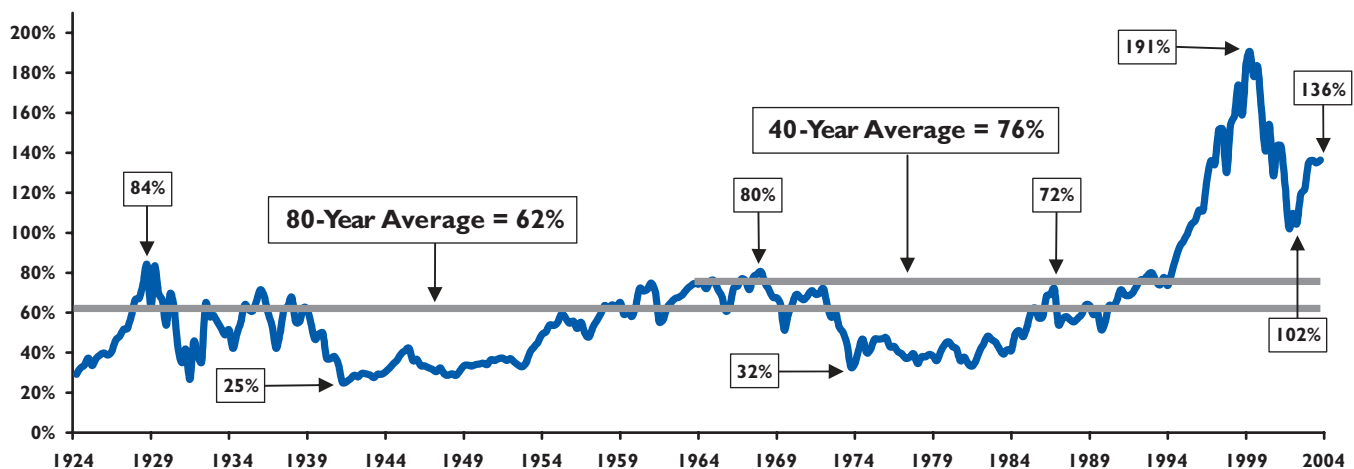
The *Total Market Price*<sup>(7)</sup> is determined by adding the market value of each individual company that trades on the NYSE, AMEX, and NASDAQ stock exchanges. The next step is to divide this by GDP.<sup>(8)</sup> GDP is defined as the total market value of all goods and services produced within the borders of a nation during a specified period. In other words, GDP represents the sales portion of the entire economy.

The Total Market Price as a Percentage of GDP ratio shown on Chart 3 is the 80-year history of the price to sales ratio for the entire economy. This **includes all stocks** from the period March 25, 1925 through September 30, 2004. The highest price to sales ratio was on March 31, 2000 at 191% of sales. The lowest ratio occurred on March 31, 1942 at 25% of sales, and **the 80-year average is 62% of sales** (Chart 4).

As of September 30, 2004, the Total Market Price was \$16.1 trillion and the GDP was \$11.8 trillion. While this ratio peaked in March of 2000 at 191% of GDP, Chart 3 shows that today at 136% of GDP, it is still above the previous total market peaks that occurred in 1929 at 84% of GDP, 1968 at 80% of GDP, and 1987 at 72% of GDP.

By looking at Chart 3, which shows the Total Market Price divided by GDP, the general market is still overvalued today based upon 80 years of history. If all

**Chart 3: Total Market Price as a Percentage of Gross Domestic Product (GDP)**  
(This is a price to sales ratio on the entire economy)



Source: NYSE, NASDAQ, AMEX and Bureau of Economic Analysis, 3/1925-9/2004. Percentages have been rounded to nearest whole number. Total Market Price is determined by adding the total market value (capitalization) of each individual stock on the NYSE, NASDAQ, and AMEX.

#### How the Math Works

\$16.1 trillion Total Market Price divided by \$11.8 trillion GDP = 1.36 times GDP. Another way to say this is the Total Market Price as a Percentage of GDP = 136%. Note throughout this newsletter we are showing this ratio as a Percentage of GDP.



**Chart 4: Total Market Price  
as a Percentage of GDP  
(80 and 40-Year Averages)**

	<b>80 Years 1924-2004</b>	<b>40 Years 1964-2004</b>
High	191%	191%
Low	25%	32%
Median	56%	68%
Average	62%	76%
Avg. 20 Lowest Yrs.	34%	49%
Avg. 20 Highest Yrs.	103%	103%

Source: NYSE, NASDAQ, AMEX and Bureau of Economic Analysis. Percentages rounded to the nearest whole number. Total Market Price is determined by adding the total market value (capitalization) of each individual stock on the NYSE, NASDAQ, and AMEX.

things were equal, this example would give us true insight into just how overvalued this market is relative to other overvalued periods such as 1929, 1968, and 1987. Unfortunately, all things are not equal.

While Chart 3 shows the 80-year history of the Total Market Price as a Percentage of GDP, a more representative period to review would be the most recent 40 years as shown on Chart 4. The reason this period is more representative today is because it eliminates the 20 low years caused by the 1929 depression. However, this period does include the 1966-69 bubble and the 1974 bear market, which was the most severe bear market since the Great Depression. (During this most recent 40-year period, the highest price to sales ratio is 191% of sales, the lowest is 32% of sales, and the 40-year average is 76% of sales). Based on our study of private market values and interest rates, we believe the ratios of the past 40 years are more representative of the price to sales ratio that should be used in today's market environment.

The Total Market Price as a Percentage of GDP analysis serves as an excellent way to take a simple look at the overall valuation of the entire economy. In other words, it gives us the pulse of how cheap or expensive the general market is relative to the current economic environment. However, since it only considers price and sales in its calculation, it leaves off two very important elements from corporate balance sheets: **cash and debt**. Since corporations have varying levels of cash and debt, we need to adjust for these two factors in order to gain a more comprehensive understanding of general market valuations. This adjustment results in the **Enterprise Value to Sales Ratio**.

• • •

What is **Enterprise Value** and why is it an important? Enterprise value allows us to determine what we are truly paying for a company. By taking the price of an individual company, adding the debt and then deducting the cash, we can compare companies that have different financial statements. *(There are several other adjustments professionals make such as adding excess pension, long-term investments and other non-operating assets, but for simplicity sake we are limiting the adjustments here to debt and cash).*

Enterprise Value is important to understand because in the event of a buyout or purchase of a company, an acquirer would have to assume the company's debt, but would be able to utilize the cash for working capital, investment, or the reduction of debt. In addition, Enterprise Value is important because companies have different ways of financing their business. Some companies have no debt, while others have varying amounts. Therefore, analyzing the Enterprise Value of companies allows us to put them on equal footing, regardless of the amount of debt or cash on their balance sheets.

Just like we do with an individual company, we can also calculate Enterprise Value on the total market. We do this by taking the total market price of all companies, then add all corporate debt and subtract all cash and equivalents. Note that there are times when the total market price is not mentioned, which leaves corporate debt minus cash referenced separately as "**Net Debt**" or "**Net Debt Adjustments**".

Using an example of three companies, Chart 5 shows why this **Net Debt** adjustment is so important. Each of the three companies shown has an Enterprise Value of \$120,000,000, \$6,000,000 in earnings and \$10,000,000 in cash. The difference between these three companies is the amount of debt each one has on the balance sheet. Company A has zero debt, Company B has \$30,000,000, and Company C has \$60,000,000.

**Question:** *How do we determine the "equity value" of these three companies when their "enterprise value" is the same, but each has varying levels of debt?*

Herein lies the importance of **Net Debt** adjustments. Once we have added the debt, subtracted the cash, and divided the value by the number of shares outstanding, we find Company A has \$13 of equity per share. However, because Companies B and C each have more "Net Debt" than Company A, their equity value per share is reduced to \$10 and \$7 respectfully.

**Chart 5: Debt and Its Impact on Equity Value**

	(A)	(B)	(C)
<b>Enterprise Value</b>	<b>\$120,000,000</b>	<b>\$120,000,000</b>	<b>\$120,000,000</b>
<i>(Plus +) Debt</i> <i>(Minus -) Cash</i>	\$0 <u>\$10,000,000</u>	<i>(\$30,000,000)</i> <u>\$10,000,000</u>	<i>(\$60,000,000)</i> <u>\$10,000,000</u>
<b>(cash–debt) = Net Debt</b>	<b>+ \$10,000,000</b>	<b>- (\$20,000,000)</b>	<b>- (\$50,000,000)</b>
<b>Equity Value</b>	<b>\$130,000,000</b>	<b>\$100,000,000</b>	<b>\$70,000,000</b>
<i>Divided by Shares Outstanding</i>	10,000,000	10,000,000	10,000,000
<b>Equity Value (Price Per Share)</b>	<b>\$13</b>	<b>\$10</b>	<b>\$7</b>
Company Earnings Per Share	\$0.60	\$0.60	\$0.60
<b>Price to Earnings (P/E) Ratio</b>	<b>22</b>	<b>17</b>	<b>12</b>

Source: Century Management. P/E ratios have been rounded.

**Chart 6: Hypothetical Example of CM Net Debt Adjusted Buy Points and P/E Ratios  
(Continued From Chart 5)**

	(A)	(B)	(C)
<b>Equity Value Per Share</b>	<b>\$13</b>	<b>\$10</b>	<b>\$7</b>
<b>CM 50% Discount Applied</b>	<b>50%</b>	<b>50%</b>	<b>50%</b>
<b>CM Buy Point</b>	<b>\$6.50</b>	<b>\$5.00</b>	<b>\$3.50</b>
Company Earnings Per Share	\$0.60	\$0.60	\$0.60
<b>Effective CM Buy Point P/E Ratio</b>	<b>10.8</b>	<b>8.3</b>	<b>5.8</b>

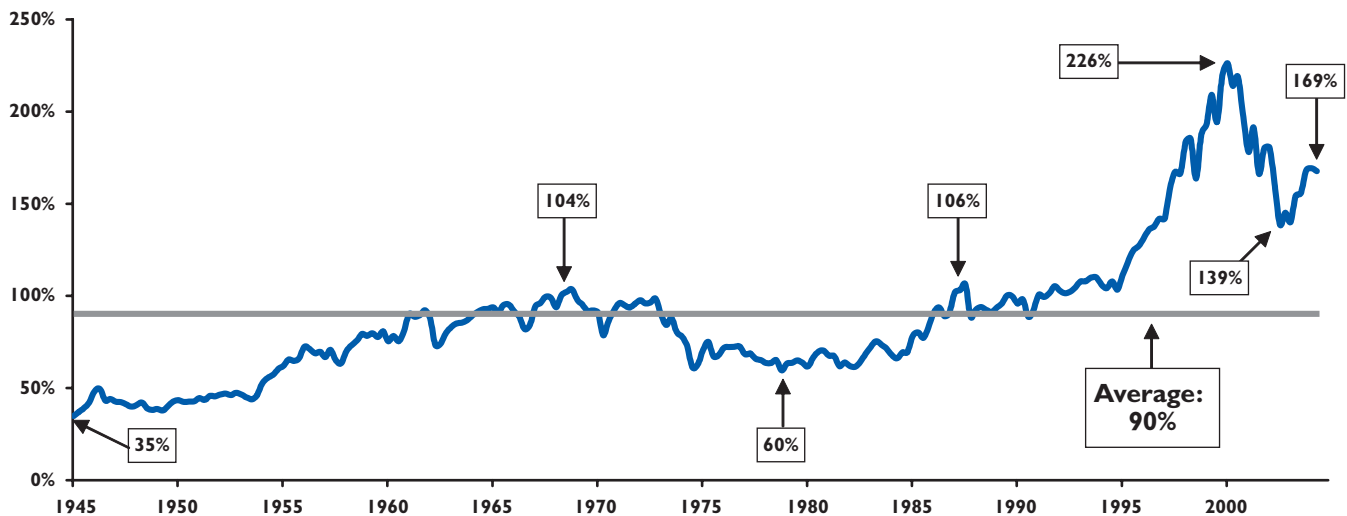
Source: Century Management.

Debt also has a tremendous impact on the P/E ratio of each company. The more debt the company has, the less we can afford to pay for the equity when making an investment. This results in a lower P/E ratio. **We can see by this example that if we only used a P/E ratio and did not adjust for the company's cash and debt, we could be dramatically overpaying for the company.** While paying a lower price for the equity in Company B and C helps to adjust for most of the risk attributed to the debt that would have to be assumed, they still carry an element of risk when compared to Company A, as it has **no debt**.

Once the true equity value has been calculated, the next step is to discount that value to arrive at a bargain price. Typically, we buy companies when their market price is selling at 50% to 70% of their "Net Debt" equity value. Assuming a 50% discount, Chart 6 shows we can afford to pay \$6.50 per share for Company A, \$5 per share for Company B, and \$3.50 per share for Company C.

Chart 7 shows the 50-year history of Enterprise Value as a Percentage of GDP. This provides a historical perspective on the entire economy adjusted for the varying amounts of corporate debt and cash. Had debt

**Chart 7: Enterprise Value as a Percentage of GDP**



Source: NYSE, NASDAQ, AMEX, Bureau of Economic Analysis and Federal Reserve, 3/1945-06/2004. Debt data is available starting in 1945 from the Federal Reserve. Enterprise Value = Market Price + Debt - Cash. Total Market Price is determined by adding the total market value (capitalization) of each individual stock on the NYSE, NASDAQ, and AMEX.

and cash as a percentage of sales stayed the same, the Total Market Price to GDP ratio shown on Chart 3 would have been adequate by itself. **However, the Enterprise Value as a percentage of GDP on Chart 7 shows that by adding all the debt to the total market price and then subtracting all the cash, the total overvaluation of the market is even higher than most people are aware of or acknowledge.**

As of September 30, 2004, Chart 3 showed the Total Market Price as a Percentage of GDP to be 136%. Now, because of the debt and cash adjustments, Enterprise Value as a Percentage of GDP is 169%. Compare today's market level to the previous market peaks of 104% of GDP in 1968 and 106% of GDP in 1987 (Chart 7).

One of the most interesting things to point out on Chart 3 is that just prior to the 1987 crash, the Total Market Price as a Percentage of GDP ratio was 72%

versus 80% during the 1968 peak. As the 1987 stock market climbed toward its eventual October peak, analysts and the financial media suggested that at that time the market was not as overvalued as the 1968 market peak.

What these analysts and the media forgot to account for is exactly what they are not accounting for today; **they are not reducing their valuations to reflect the increased debt that companies have assumed.** If one had made the Net Debt adjustments shown on Chart 7 (debt minus cash = net debt), it would have been easy to see that in 1987 the general market was indeed more overvalued than in 1968. In 1987, the Enterprise Value as a Percentage of GDP ratio was 106% compared to 104% in 1968. Therefore, 1987's peak was actually **2% higher** than the 1968 peak when looking at the Net Debt adjustment (Chart 8), **not 8% lower** as the Total Market as a Percentage of GDP ratio would suggest.

**Chart 8: Enterprise Value as a Percentage of GDP Peaks**

Peak Years	1929	1968	1987	2000	Average of Peaks	Today (2004)
1. Total Market Price to GDP	84%	80%	72%	191%	107%	136%
2. Total Market Price + Net Debt to GDP	114%*	104%	106%	226%	138%	169%

Source: NYSE, NASDAQ, AMEX, Bureau of Economic Analysis and Federal Reserve. Note: These numbers have been rounded. \*Century Management has assumed 30% debt in 1929 as part of the 114% total market + net debt to GDP shown. An estimate is required as no official debt records exist for that year. 30% debt is the similar debt level during the 2000 peak.

By having made the adjustments for the varying amounts of debt and cash (Net Debt) throughout Corporate America, we can see by comparison how significantly overvalued the total market is today when compared to previous peaks highlighted on Chart 8, and the historical averages shown on Chart 7. Most importantly, we can clearly see the tremendous impact that debt has on the market overvaluations.

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The purpose of our discussion about the general market is to provide you with the background of the overall economic environment in which we are operating. **In addition, we assure you that our investment philosophy and discipline remain focused on individual companies and not the general market.** However, we do want to point out that when the general market is more expensive, there are fewer bargains to be found. When it is less expensive, there are more bargains to be found. However, not all stocks or sectors hit their peaks and bottoms at the same time. Therein lies our potential to identify pockets of value and individual bargains.

For example, during 1998 through 2000, many small companies and old economy stocks were very cheap relative to their intrinsic values. This was because they were largely ignored by investors who were more interested in crowd-pleasing “new economy” technology stocks rather than the mundane and non-glamorous manufacturers referred to as the “old economy” stocks. This disparity created great pockets of value in what was the most expensive overall market environment relative to intrinsic value in stock market history.

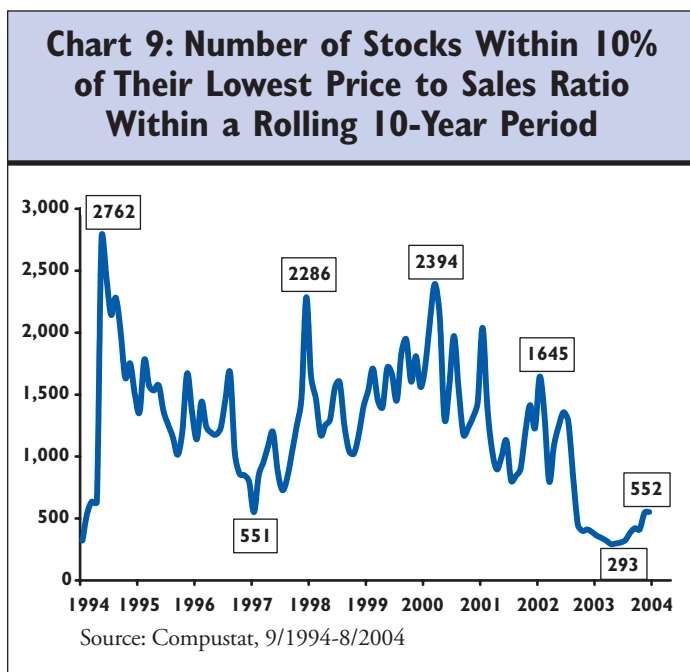
Chart 9 shows the number of stocks out of the total stock universe of 10,108 U.S. companies that were trading within 10% of their lowest price to sales ratios during the past 10 years. Once a company’s price to sales ratio increased 10% above its rolling 10-year low, the company was removed from this universe. For example, if a company’s lowest price to sales ratio in the past 10 years was 40% of sales, this company would have been included in the universe of stocks shown on Chart 9 until it exceeded 44% of sales. (A 10% increase on 40 = 44).

In the third quarter of 2000, the Total Market Price as a Percentage of GDP was selling at 191% of sales, its highest and most expensive level ever (Chart 3). Yet there were still 2,394 stocks trading in the market that were within 10% of their lowest price to sales ratios as measured during this 10-year period (Chart 9). The majority of these stocks were small to mid-sized companies that were cyclical or considered to be in the “old economy”. **In other words, in the most expensive market in history, these 2,394 stocks potentially represented great pockets of value.**

In October 2002, at the bottom of the market, we became very bullish and had the typical Century Management client portfolio more than 80% invested in equities and bonds.<sup>(9)</sup> During this time there were 1,645 stocks out of the total stock universe that were trading within 10% of their rolling 10-year low price to sales ratios. This is almost one-third fewer stocks than met this criteria during the year 2000. The point is that in the bottom of 2002, the average stock was more expensive than in the year 2000, when the Total Market (led by technology stocks and a few large company stocks) traded at its highest price ever.

Today, the Total Market is selling at 136% of GDP, which is down more than 28% from its peak in 2000. What is truly amazing is that even with this discount, there are only 552 companies that are trading within 10% of their lowest price to sales ratios. **This means that only 5.5% of all U.S. publicly traded companies are currently selling at their low price to sales ratios as compared to 23.7% in 2000 and 16.3% in 2002.**<sup>(10)</sup>

It is important to mention that today’s 552 companies meeting this low price to sales ratio criteria is an improvement from the 10-year low of only 293 companies in December 2003. While this has almost doubled over the past nine months, it still has a long way to go. This should give you some indication as to why it has been difficult for us to find individual companies worthy of investment this past year.



It has been our experience that before the overall market environment will show an increasing number of values, the universe of stocks selling within 10% of their low price to sales ratios within a rolling 10-year period will need to be expanded from 552 to at least 1,200 companies. Therefore, unlike the pockets of value we found during 1998 through 2000 (when the general market was at its highest valuation in history) and in the second half of 2002, we can find few individual stocks and no sectors in the market today that are at those bargain levels.

It is important to understand that there are many other fundamental evaluations and criteria to be

considered before final investment decisions can be made, as **the price to sales ratio is only one metric**. Therefore, while Chart 9 shows 552 cheap stocks when using the price to sales ratio, most of these companies did not meet the other necessary fundamental criteria to be considered a true bargain. For example, many of these 552 companies had poor balance sheets, little operating history, and were extremely small in size. Again, the study on Chart 9 is simply one macro point of view we are using for general illustrative purposes so that we can show you the type of market environment we are operating in.

## Section II: The Quality of Earnings

Despite the overvaluation as demonstrated by the Total Market Price as a Percentage of GDP ratio, the price plus debt minus cash (Enterprise Value) as a Percentage of GDP ratio, and the recent study of low price to sales ratio stocks, we continue to hear Wall Street analysts and the media talk about how reasonably priced the market is. Using the S&P 500 as a proxy for the market, the reason it appears to be fairly priced is that on a projected operating earnings basis, it is selling at 18.18 times earnings (S&P 500 price of 1185 divided by **projected earnings** of \$65.19 = 18.18 P/E). However, on a trailing P/E basis, the S&P 500 is selling at 20.95 times operating earnings (S&P 500 price of 1185 divided by **current earnings** of \$56.56 = 20.95 trailing P/E).<sup>(11)</sup>

The problem we have with the projected earnings number for the S&P 500 is that it is based on today's peak after-tax profit margins and extrapolates these peak margins as if they are sustainable. If we look at the after-tax profit margin history for the total market found on Chart 10, we can see that after-tax margins have averaged 5.56% of GDP for the past 75 years. Simply stated, for every one dollar in sales, the average company makes just over a nickel in after-tax profits. As of March 31, 2004, after-tax profit margins were 7.92% of GDP. This was the highest after-tax profit margin seen in over 75 years. Only in 1929 were after-tax profits higher, when they peaked at 9.07% of GDP.

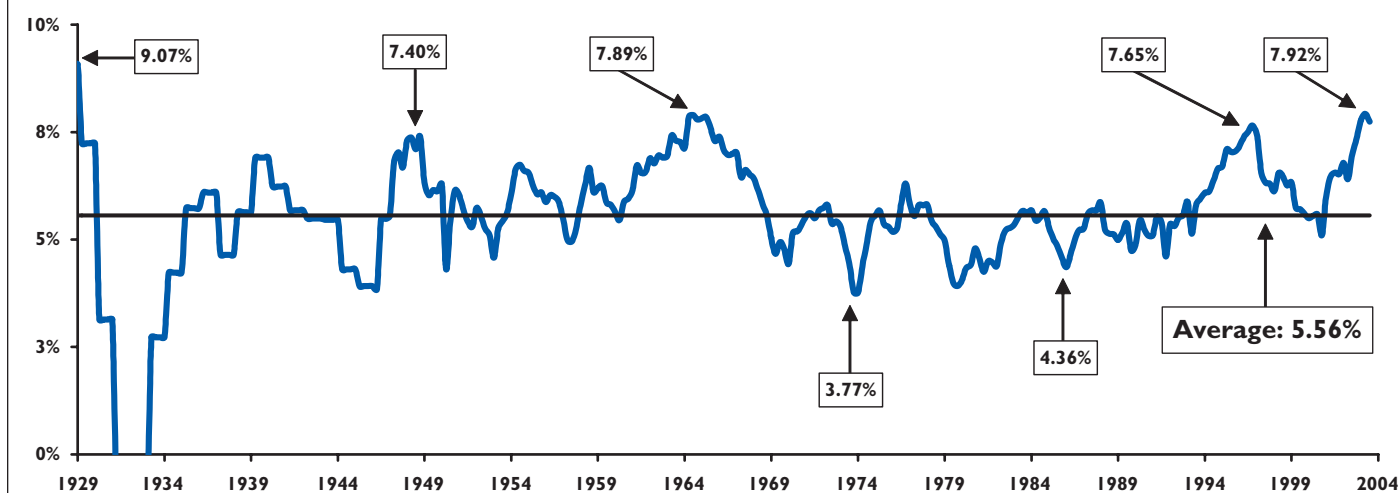
Other than 2004, there have been only four periods where after-tax profit margins were higher than 7% of GDP: 1929, 1949, 1965, and 1997. At these peak

levels, it took just 2.5 years on average for the after-tax profit margins to decline over 30%. At that point, the decline equaled the 75-year average after-tax profit margin of 5.56% of GDP. Therefore, in reviewing the past 75 years of history, one has to ask the following question: ***How long can the 7.92% after-tax profit margin on the total market, the second highest peak in 75-years, be sustained?***

The following are just some of the reasons why high profit margins are difficult to sustain for long periods of time:

1. Higher profit margins typically draw more competitors, both foreign and domestic. Over time, competition will force prices to drop.
2. Labor will eventually ask for more wages and benefits, especially unions.
3. As interest rates go up, the cost of borrowing increases.
4. The cost of goods such as commodities and raw materials needed to produce products may rise (this is currently happening in dramatic fashion).
5. Debt-burdened consumers may not be able to continually spend at high levels. This will force companies to offer lower prices, discounts, and incentives.
6. Higher tax rates by federal, state, city and local governments will eventually weigh-in.

**Chart 10: After-Tax Corporate Profits as a Percentage of GDP  
(75 Years)**



Source: Bureau of Economic Analysis, December 1929 thru June 2004

Even with this information, many analysts and members of the financial media say that this time things are different; high profit margins are here to stay. The U.S. has made great gains in efficiency and productivity and is in a new economic paradigm. Furthermore, some even suggest that today's peak profit margins are not only sustainable, but rather at a new plateau and could go even higher.

We have heard this "new era" thinking before. On October 15, 1929, Irving Fischer of Yale University, one of the most noted economists of his time, said that "stocks have reached what looks like a permanently high plateau." Nine days later, the Dow began a long steep plunge that stripped the market of 40% of its value within three weeks and continued downward with few interruptions. This went on until 1932 when the Dow finally hit bottom at \$41.20. What followed was not permanent prosperity, but rather the worst depression in our country's history.

We believe these record profits and profit margins are not the result of this so-called robust economy. This economy still has not recovered 1.66 million private sector non-farm jobs lost since its peak in February 2001. If we add in the government sector, the number of jobs lost and still not recovered is lowered to 940,000.<sup>(12)</sup> **On the contrary, the record profit margins have reached these levels due to a combination of increased productivity, 45-year low interest rates, and unusually low tax rates and benefits that are either a "one-time" occurrence or not likely to be sustainable over the long-run.**

## Century Management's View on Earnings

There are several factors that contribute to the overstatement of earnings. Using the S&P 500 as a proxy for the market, the following example will demonstrate what causes corporate earnings to be overstated. Among them are stock options, pension plans, low tax rates, managed earnings, and the current interest rate environment.

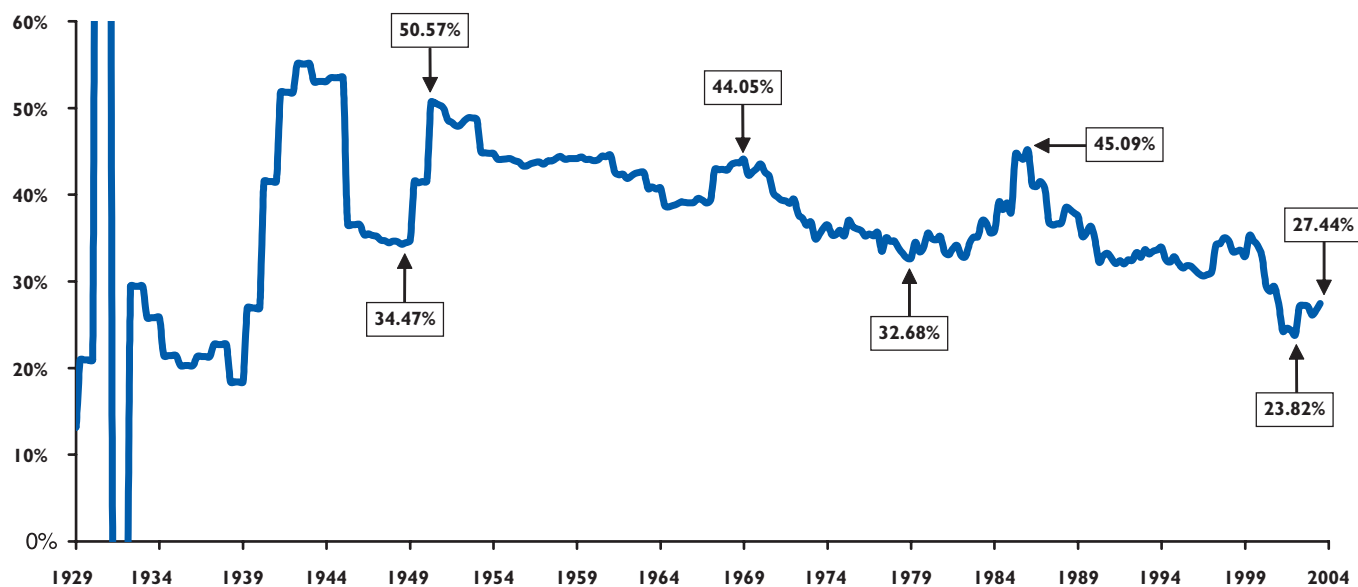
### Stock Option Accounting

This year (2004) the Financial Accounting Standards Board (FASB) succumbed again to political pressure by watering down and delaying its commitment to treat stock options as an expense. Therefore, public companies will continue to deduct stock options as an expense on their tax returns, but not on their public financial statements which are reported to shareholders. In the five-year period between 1998 through 2002, the after-tax cost of stock options on the S&P 500 companies totaled \$159 billion.<sup>(13)</sup> However, these after-tax costs never showed up as an expense on companies' financial statements. **This represented approximately 10% of the \$1.581 trillion in the S&P 500's reported earnings for the same period.**

### Pension Accounting

During 1998 and 1999, as the stock market entered its manic stage, hitting new highs on a regular basis, companies were able to reduce their payroll expenses by the amount the actual pension plan returns exceeded the "expected" returns. The expected return is a figure used

**Chart 11: Effective Corporate Tax Rates  
(March 1929 through June 2004)**



Source: Bureau of Economic Analysis, December 1929 thru June 2004

by pension plan actuaries to calculate future retirement benefits for plan participants. Stated differently, it calculates the future financial obligations of the company. For example, if the plan achieved a 15% return and the actuarial expected return was only 6%, the 9% difference (15%-6% = 9%) could be used by the company as a substitute for its required annual plan contributions and counted as corporate profits. In other words, companies did not have to make cash contributions to their pension plans if the returns were high enough. Since the companies incurred little or no pension expense due to the high stock market returns of the late 1990's, their earnings per share increased.

For the years 2000 through 2002, companies found themselves in the exact opposite position. During this period, the market significantly underperformed its recent and long-term historical averages. Most importantly, these returns were well below the expected returns anticipated by pension plan actuaries. Collectively, corporate pension plans became significantly underfunded into the billions of dollars. However, the rules for taking losses are different than the rules for taking gains. If a pension plan's return is less than the actuarial expected return, the company does not have to take the entire loss in one year. Accounting rules allow a company to amortize a loss over a period of thirty years, due to underperformance. Spreading the loss over thirty years helps keep the earnings per share higher than if that loss had to be taken in one year.

There are many estimates that are part of the calculation used to determine the total amount of the true loss. Therefore, it is very difficult to put a "hard number" on it. However, if a conservative amount is used, the loss that is being amortized over 30 years by major companies is well in excess of **\$100 billion**.<sup>(14)</sup> **Conservatively, this totals 6% of the total earnings for the S&P 500.**

### Corporate Taxes

Chart 11 shows that over the last several years the effective tax rate for companies was substantially less than the standard corporate tax rate schedule.<sup>(15)</sup> Once again, an issue that contributed to a lower taxable income versus income reported to shareholders was stock options. Additionally, companies were allowed a one-time special depreciation expense of 50% on capital equipment. **This one-time "bonus" depreciation expires at the end of 2004 and is in part responsible for approximately 4% of the S&P 500 earnings.**<sup>(16)</sup>

### Managed Earnings

There is a large inventory of "tools" that companies can use to manage their earnings. However, some of these "tools" are questionable and others are clearly fraudulent. We read about these abuses in the financial press daily. For the purpose of this analysis, we are going to assume that at least 3% of the earnings reported by

**Chart 12: CM Summary of Estimated Overstatement of S&P 500 Operating Earnings**

Stock Options	10%
Pension Plans	6%
Tax Deferrals	4%
Managed Earnings	3%
Total overstatement on past earnings	<b>23%</b>
CM estimated impact of higher interest rates on future earnings	<b>10%</b>
<b>Total</b>	<b>33%</b>

S&P 500 companies are due to overstatements caused by the management of these earnings. Nevertheless, with more than \$274 billion in bankruptcies related to accounting fraud in recent years and billions more in the restatement of prior period earnings that have been publicly reported, **we believe that 3% is a conservative figure.**<sup>(17)</sup>

### Low Interest Rate Environment

Over the last 10 years corporate debt has doubled and now exceeds \$5 trillion dollars. However, over the past 18 months interest rates have been near 45-year lows. Therefore, the interest expense on corporate debt has been at a corresponding low of 1.86% of sales with the average AAA interest rate at 4.5%. If AAA interest rates rise back to their historical average of 6.5%,<sup>(18)</sup> the interest expense will eventually increase to an estimated 2.65% of sales. With approximately 40% of corporate debt tied to adjustable rates, if interest rates rise, the interest expense companies must pay will also rise. The difference in interest expense between the estimated 2.65% and the current 1.86% of sales is 0.8%. **This difference alone represents another 10% of the S&P 500 earnings.**

### S&P 500 Core Earnings

For those of you who would like an independent appraisal of the overstatement in the corporate earnings we have just discussed, one is available for your review at Standard & Poor's titled "Measures of Corporate Earnings" (Revised May 14, 2002).<sup>(19)</sup> While we strongly encourage you to go on-line to read their entire 15-page report, the following are some of the highlights.

The Standard & Poor's report begins, "Over the last decade, intensifying pressure to meet Wall Street earnings expectations led more and more companies to introduce new and different earnings measures and reporting approaches. At the same time, many members of the investment community expressed concern that earnings reports are becoming harder to understand, more difficult to compare across companies, and less useful to analysts and investors. A number of recent-high profile bankruptcies and accounting investigations have renewed investors' concerns about the reliability of corporate reporting."

As a result of investors' dissatisfaction regarding the quality of earnings, Standard and Poor's found it necessary to create a category of earnings that deducts all of the questionable accounting practices to bring uniformity and clarity to earnings analyses and forecasts. To make sure this set of earnings would represent and measure true corporate earnings at the highest level of quality, Standard and Poor's put together a blue ribbon panel. This group consisted of securities and accounting analysts, portfolio managers, corporate executives, academic researchers, and other investment professionals, including Warren Buffett. Their insights, comments and recommendations have lead Standard and Poor's to calculate a new category of earnings. This new category is called **Core Earnings**.

Below is the description of three types of earnings now measured by Standard and Poor's:

- **Operating Earnings:** "This measure focuses on the earnings from a company's principal operations, with the goal of making the numbers comparable across different time periods. Operating earnings are usually considered to be as reported earnings with some charges reversed to exclude corporate or one-time expenses. Despite the lack of any generally accepted definition, operating earnings are increasingly popular in corporate reports. The use of this measure seems to come from internal management controls used when a business unit manager is not responsible for managing corporate-level costs."
- **As Reported Earnings:** This is the broadest definition of the three. It includes "all charges except those related to discontinued operations, the impact of cumulative accounting changes, and extraordinary items, as defined by GAAP." It is the "traditional earnings measure and has a long history."
- **Core Earnings:** This measure refers to the "after-tax earnings generated from a corporation's principal



**Chart 13: S&P 500 Earnings**

Annual EPS	Operating Earnings Per Share	As Reported (GAAP) Earnings Per Share	Core Earnings Per Share	Difference Between Operating Earnings & Core Earnings Per Share
FY 2005 Estimated	72.02	61.70		
FY 2004 Estimated	65.19	58.71	55.11	15.46%
FY 2003 Estimated	54.69	48.74	45.79	16.27%
FY 2002 Preliminary	46.04	27.59	23.66	48.61%
FY 2001 FINAL	38.85	24.69	16.00	58.82%
<b>FY 2000 FINAL</b>	<b>56.13</b>	<b>50.00</b>	<b>38.86</b>	<b>30.77%</b>
FY 1999 FINAL	51.68	48.17	39.91	22.77%
FY 1998 FINAL	44.27	37.71	30.61	30.86%
FY 1997 FINAL	44.01	39.72	35.31	19.77%
FY 1996 FINAL	40.63	38.73	35.90	11.64%
<b>Average of 8 Years</b>	<b>\$47.04</b>	<b>\$39.42</b>	<b>\$33.26</b>	<b>29.94%</b>

Source: Standard and Poor's.

business or businesses. Since there is a general understanding of what is included in reported earnings, the definition of Core Earnings begins with reported earnings and then makes a series of adjustments... Core Earnings focus on a company's ongoing operations. They should include all the revenues and costs associated with those operations and exclude revenues or costs that arise in other parts of the business." In other words, **core earnings** are the **real operating earnings** of a company that have been adjusted for stock options, pension costs, tax deferrals, restructuring charges from ongoing operations, and purchased research and development expenses.

Core earnings specifically EXCLUDES goodwill impairment charges, gains or losses from asset sales, pension gains, unrealized gains or losses from hedging activities, merger and acquisition related expenses, litigation settlements, and costs related to financing activities. "While these revenues or expenses are important and may be significant, they are not representative of the company's core operations."

Chart 13 shows the differences between these three types of earnings from 1996 to the present. Over the past eight years, the difference between operating

earnings and core earnings has been 29.94%. When we consider that the core earnings make no adjustments for the higher interest expense and higher tax rates that corporations are likely to face over the next few years, the Standard and Poor's core earnings will likely come closer to the 33% overstatement of operating earnings that we project over the next few years.

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On Chart 13, in FY 2000, the difference between operating earnings of \$56.13 per share and core earnings of \$38.86 is 30.77%. This should give you an indication of why the market went as high as it did in 2000. Analysts were focusing on operating earnings instead of core earnings. If being more than 30% off was not a large enough departure from reality, the projected earnings on Wall Street for the S&P 500 in 2000 were \$64 per share.<sup>(20)</sup> This \$64 projection was more than 65% above the \$38.86 in core earnings. Now you can see why listening to most Wall Street analysts, financial media, and market forecasters who use anything but core earnings can get you into trouble!

Chart 14 shows what the difference in fair value for the S&P 500 would be if we use a 20 P/E multiple on 2004 projected operating earnings of \$65 versus a 20 P/E multiple on projected core earnings of \$55.

**Chart 14: S&P 500: 2004 Projected Operating Versus Core Earnings**

Earnings Type	P/E		2004 Projected Earnings		Fair Value for S&P 500	Current Value for S&P 500		Percentage Return to Projected Fair Value
Operating	20	x	\$65	=	1300	1185	=	9.7%
Core	20	x	\$55	=	1100	1185	=	-7.2%

Source: Bloomberg and Standard and Poor's

If interest rates increase and tax code or tax rates change (they always do), we can expect to see a reduction in the \$65 of projected operating earnings for the S&P 500. When this occurs, the after-tax profit margins will also be reduced. Chart 15 shows the corresponding impact on P/E multiples as profit margins regress back to their long-term average of 5.5%.

In Chart 15, Column 1 shows, the S&P 500 index was priced at 1185, current sales were \$754 per share and the profit margin was 8.6%. For 2004, I/B/E/S (Thomson Financial) projects operating earnings for the S&P 500 to be \$65.19 and the P/E to be 18.18. While the after-tax profit margin in March 2004 was the second highest on record at 7.92%, Column 1 suggests that projected operating earnings will occur with profit margins increasing to 8.6%. This is just 0.47% off the all-time high of 9.07% in 1929.

Instead of profit margins continuing to expand, we believe it is more likely that the profit margins will start regressing back to their long-term average of 5.5%. However, this regression will probably take some time.

Therefore, rather than show profit margins dropping to 5.5% all at once, Column 4 (Chart 15) shows what would happen if these projected earnings were reduced by approximately 9% (from \$65.19 down to \$59.36).<sup>(21)</sup> This decline would lower the after-tax profit margin to 7.0%, the projected earnings to \$59.36 per share, and the P/E ratio would increase to 19.96 assuming today's price of 1185. **As you can see, profit margins do not have to decline by much in order to have a significant impact on the value of the market.**

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By applying this same regressing profit margin analysis to the Total Market Price as a Percentage GDP ratio (Chart 3) instead of the S&P 500 (Chart 15), we can double check the overvaluation of the total market. When we divide the Total Market Price to Percentage of GDP ratio of 136% by today's total market profit margin of 8%, we get a P/E of 17 (Chart 16). However, if we divide the Total Market Price as a Percentage of GDP ratio of 136% by the 75-year average profit margin of 5.5%, the P/E goes up to 24.73.

**Chart 15: The Impact of Profit Margins on S&P 500 Operating Earnings and P/E Ratio**

S&P 500	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Price	1185	1185	1185	1185	1185	1185	1185	1185	1185
Sales	754	848	848	848	848	848	848	848	848
Profit Margin	8.6%	8.0%	7.5%	7.0%	6.5%	6.0%	5.5%	5.0%	4.5%
Projected Earnings	\$65.19	\$67.84	\$63.60	\$59.36	\$55.12	\$50.88	\$46.64	\$42.40	\$38.16
P/E	18.18	17.47	18.63	19.96	21.50	23.29	25.41	27.95	31.05

Source: Bloomberg and Century Management. Chart assumes no adjustment in price. The \$65.19 in earnings in Column 1 is the 2004 projected operating earnings by I/B/E/S for the S&P 500. Column 1 also shows trailing sales of \$754 per share. For Columns 2 through 8, we assumed a 4% annualized growth rate on trailing sales of \$754 for 3 years and therefore show \$848 in sales. Formulas: Sales times profit margin = earnings. Price divided by earnings = P/E. Note from 1999-2003 (5 years) the S&P 500 compounded sales growth was 3.07% and from 1985-2003 (20 years) compounded sales growth was 4.9%. Since this chart is only giving a hypothetical 3-year example, we felt 4% sales growth for the S&P 500 was a fair estimate. 1185 was the closing price on the S&P 500 as of November 15, 2004.

If today's 8% profit margin declines to the 75-year average of 5.5%, it will cause earnings to decline 30%. As mentioned in the scenario found on Chart 15, regressing back to 5.5% profit margins could take some time. We believe this will happen somewhere in the next 2 to 5 years. However, regardless of how long it takes to adjust, Chart 16 shows that without an adjustment in price as the profit margins decline, P/E multiples go up, thus suggesting that the total market, like the S&P 500, is expensive relative to its 75-year average profit margins.

Moreover, while the total market may appear to be reasonably priced today at 17 times earnings, it is based upon record earnings and profit margins that have been equaled but never sustained over 75 years of history. When margins decline to more sustainable levels, the true P/E on the market will be closer to 25 or 26, rather than the 17 that it is trading at today.<sup>(22)</sup>

The price to sales ratio study we have shared with you confirms the importance of two principles that were taught by Benjamin Graham, the "Father of Security Analysis". **First**, always use a business approach. In his 1934 book *Security Analysis*, Graham taught that when buying a stock, which is a fractional share of a business, you should only use a methodology that is applied when buying a business. Amazingly, after 70 years from this book's original printing, people still need to be reminded of this!

Today, many people still use computer generated asset allocation models, chart patterns, volume studies, presidential election cycles and just pure psychological and emotional guesswork to decide what companies to buy or sell in their portfolios. Would you buy or sell your house based on who is going to be the next president of the United States?

If we always look at a stock or the stock market collectively as if it were an individual business instead of a casino, we will put the odds in our favor and greatly

reduce our risk of losing money. This is the difference between investing and speculating. Investors recognize that the private market (or intrinsic) value of a business rarely fluctuates more than 50% from one extreme to another. Speculators, however, are all too willing to buy stocks at prices that dramatically exceed their private market (intrinsic) values at any given time.

During panics, these same speculators sell stocks far below their private market values, thus producing the bargains that create tremendous values. As an example, just look at the Total Market Price as a Percentage of GDP (sales) ratio on Chart 3. During the past 80 years the Total Market Price as a Percentage of GDP ratio has been as high as 191% of sales (June 2000). However, the average of the 20 lowest years has been 35% of sales, and the lowest one-year was 25% of sales back in March 1942 (Chart 4). As you can see, when panic sets in, the market can get very cheap!

During the market bubble of 1999 to early 2000, speculators often bought stocks at prices that exceeded 10 to 15 times the true intrinsic values of the companies they were buying. As an example, on March 24, 2000, the NASDAQ 100, which represents the 100 largest companies in the NASDAQ, sold at 1159% of sales! When we compare this to the Total Market Price as a Percentage of GDP ratio's 40-year average of 76% of sales, we can see the NASDAQ 100 was selling for 15.25 times the average of the Total Market.<sup>(23)</sup> This is like paying \$4,575,000 for a home in a neighborhood where the average selling price is \$300,000 ( $\$300,000 \times 15.25 = \$4,575,000$ ).

The compulsion to gamble with one's life savings was not a one-time phenomenon exclusive to the 1999 / 2000 bubble. It continues even today. Once again, investors and institutions are speculating that today's 45-year low interest rates, low inflation, low tax rates, and historically high profit margins are going to proceed uninterrupted into the future. Many of these investors

**Chart 16: The Impact of Profit Margins on Total Market P/E**

<b>Total Market Price to GDP Ratio</b>	136%	136%	136%	136%	136%	136%	136%	136%
<b>Profit Margin</b>	<b>8.0%</b>	<b>7.5%</b>	<b>7.0%</b>	<b>6.5%</b>	<b>6.0%</b>	<b>5.5%</b>	<b>5.0%</b>	<b>4.5%</b>
<b>Total Market P/E</b>	17.00	18.13	19.43	20.92	22.67	24.73	27.20	30.22

Source: Century Management. For this example we are assuming no growth in GDP. Therefore, the 136% Total Market Price to GDP ratio remains the same in all columns. This example simply highlights that declining profit margins will increase the P/E ratio of the total market. Note: 136% of sales can also be stated as 1.36 **times** sales. Price to GDP ratio has been rounded.

continue to disregard business valuations, buying stocks and bonds in this market regardless of price. Until this type of speculation has been wrung out of the market place, like the technology stock day traders from 2000 through 2002, it will be difficult to find true values.

The **second** principle the price to sales study confirms is that “in the short run, the market is a voting machine and in the long-run it is a weighing machine.” (Benjamin Graham). As seen in the first three years of our April 1999 study on Chart 1, investors were voting in the market on what was popular. They were voting for a few large companies and a host of technology stocks. Because the popular vote for these over priced securities was so great at that time, it put the market’s price three years ahead of our projected price, which was already very optimistic.

However, after 5.75 years, our study shows that some investors in the market have begun to weigh intrinsic

values and prices have declined. While our 1999 study is proving to be accurate, we assumed that the market would continue to be priced for perfection to give it the benefit of doubt. In other words, our most optimistic scenario for the market that projected a decline is now right on target, and yet the market is still not cheap! Had we used the long-term average sales growth rate and price to sales ratio to be conservative, instead of peak assumptions, our projection for the market would be even lower today.

The price to sales ratio is an easy way to get a bearing on what the general market is worth at any given time, including what it could be worth in the future. However, it is not to be used for individual stock analysis by itself. This is just one of many methods of valuation used in our detailed individual company analysis, although the others are no more difficult to use or understand.

## Section III: Debt

*“When we are living on this much borrowed money, we are also living on borrowed time.”*

—Former Federal Reserve Chairman Paul Volker

What makes today’s economic environment and market overvaluation different from any other time in our country’s history since the great depression era is **debt**. The three areas of debt we will discuss are:

**1. Corporate Debt:** Even though Corporate America is in the best shape of the three, in absolute dollars corporate debt is near record levels. While cash on the balance sheets has been improving since 2001, corporate debt remains well above its long-term average when compared to GDP.

**2. Consumer Debt:** Today, the consumer, who represents 70% of the economy, is more leveraged than ever before. As a percentage of GDP, total consumer debt has climbed to its highest level on record. The consumer is tapped out!

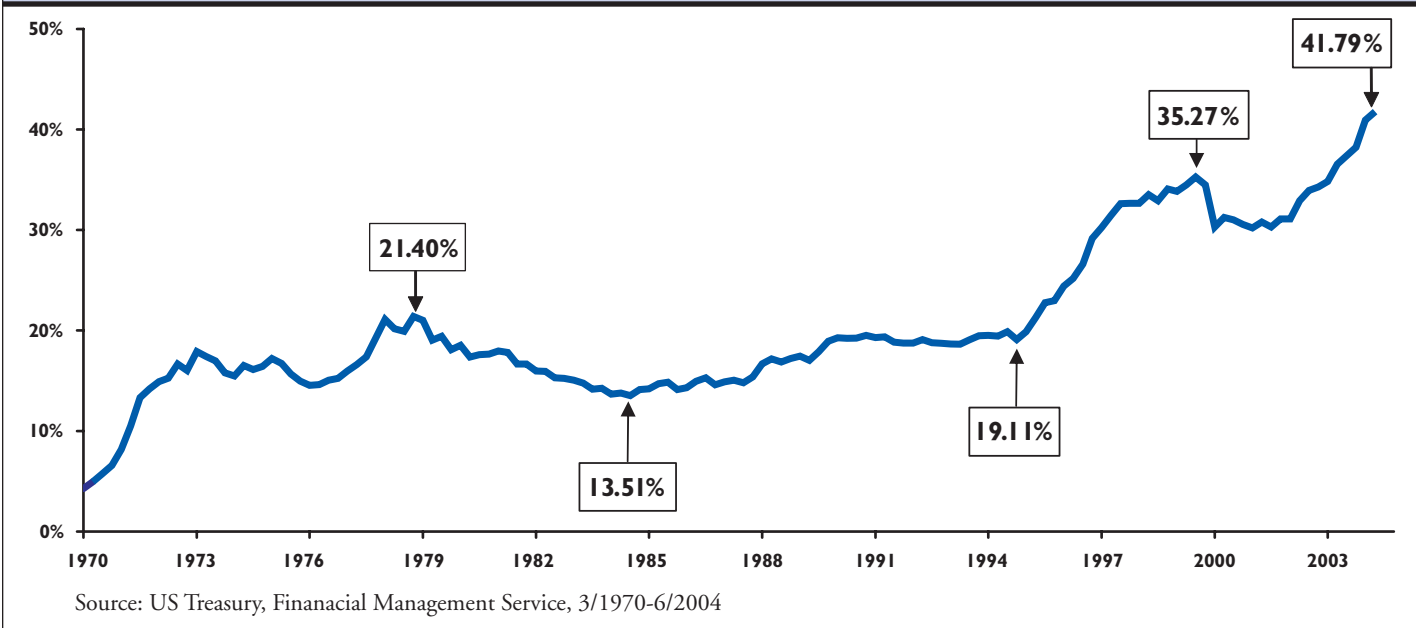
**3. Federal Debt:** The federal government has accumulated more debt as a percentage of GDP than any other time in our country’s history, when you include the unfunded pension liability (Medicare

and Social Security). If this is not addressed in the near future, it will cause an increase in interest rates as well as inflation.

Without question, debt is the most serious and troubling aspect of today’s economy and overvaluation of the stock market. To complicate matters further, 41.79% of the total federal debt that is owned by the public is owned by foreigners, led by Japan, China, and England (Chart 17).

Today’s debt levels highlight the lack of fiscal and monetary leadership and personal responsibility that have taken place throughout corporations, consumers, and the federal government. Our purpose for bringing this debt crisis to your attention is to provide you with the facts on debt. Most analysts and financial writers do not address debt properly when analyzing risk in the stock market. There are warning signs of historical proportion all around us that show we are facing major challenges throughout our entire capital markets. Although these issues are real and hard hitting, very few people seem to be paying attention or expressing concern. While knowing the facts will not change the situation by itself, it will give you a chance to prepare psychologically and financially for

**Chart 17: Percentage of Total Federal Debt Owned by the Public That is Held by Foreign Investors**

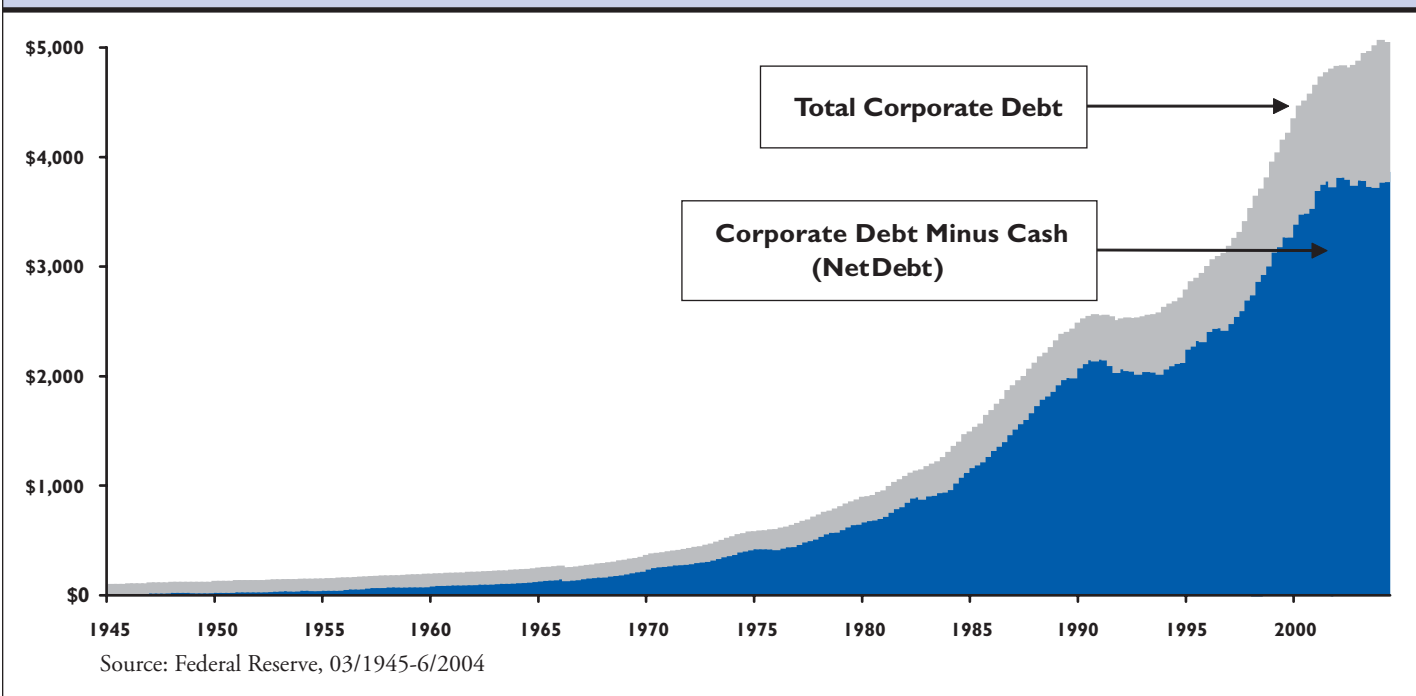


the market corrections and/or adjustments that are likely to occur as a result of this debt, sometime in the not too distant future.

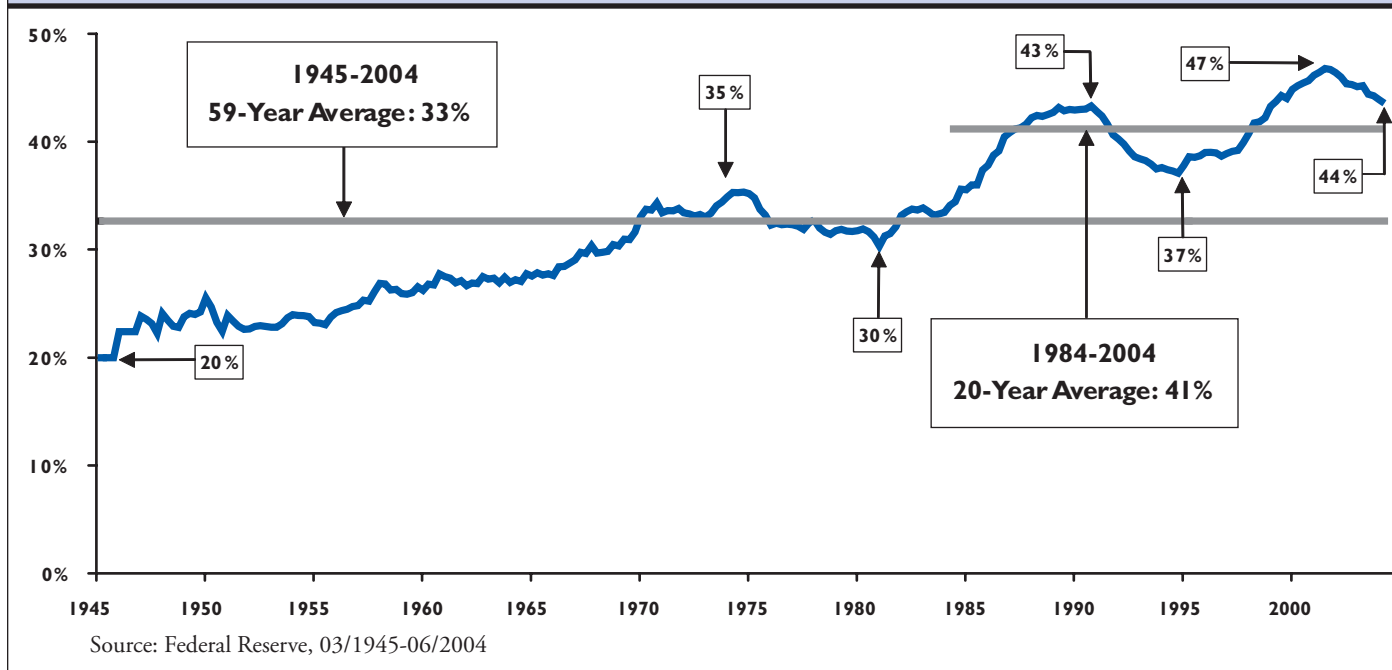
Why is debt such a problem? **First**, the more debt one takes on the more risk one assumes. The reason being that if the entire debt or monthly debt payments can not be repaid, especially in difficult times, there is a greater chance of loss than there would be if the debt

did not exist. **Second**, the more debt one has, the fewer discretionary dollars and options there are available for savings, investment, consumption, or the ability to handle financial mishaps or unforeseen events. **Third**, as interest rates increase, monthly debt service payments increase. This reduces the free cash flow available for additional savings, investment, or debt repayment. **Fourth**, debt (leverage) accelerates the increase and

**Chart 18: Total Corporate Debt and Corporate Net Debt (Excludes Financial Companies)**



**Chart 19: Total Corporate Debt as a Percentage of GDP  
(Excludes Financial Companies)**



decrease in the value of assets. **The excess level of debt that has built up in all corners of the market makes today's debt considerably different from the past.**

## Corporate Debt

During the past year, we have read many articles that point out how corporations have improved their balance sheets by adding more cash through the sale of stock and by cutting expenses through layoffs and plant closings. The claim being made by many is that corporate balance sheets are better than ever. What these articles fail to mention is that while cash holdings have improved in recent years, the debt on the balance sheets has grown as well.

Chart 18 shows the 59-year history of the corporate debt of non-financial companies<sup>(24)</sup> in absolute dollars. Over the last 10 years these non-financial corporations have increased their debt from \$2.6 trillion on June 30, 1994, to \$5 trillion on June 30, 2004. This can be seen on Chart 18 with the arrow pointing to "Total Corporate Debt". However, when cash on the balance sheet is netted against corporate debt, the debt is reduced to \$3.8 trillion. This can be seen on Chart 18 with the arrow pointing to "Corporate Debt Minus Cash". Therefore, because cash on the balance sheet has continued to improve since 2001, net corporate debt has effectively remained unchanged at the \$3.8 trillion level. However, even after adjusting for the cash, in absolute dollars, net debt is still near record levels.

Another way to view corporate debt is to compare it to GDP. This will give us a historical perspective relative

to the economy so that we can draw a more meaningful comparison from one time to another. Chart 19 shows the Total Non-Financial Corporate Debt vs. GDP **before** deducting cash. As of June 30, 2004, the 59-year average is 33% of GDP, the past 20-year average is 41% of GDP, and the peak was September 30, 2001 at 47% of GDP. Today it is 44% of GDP.

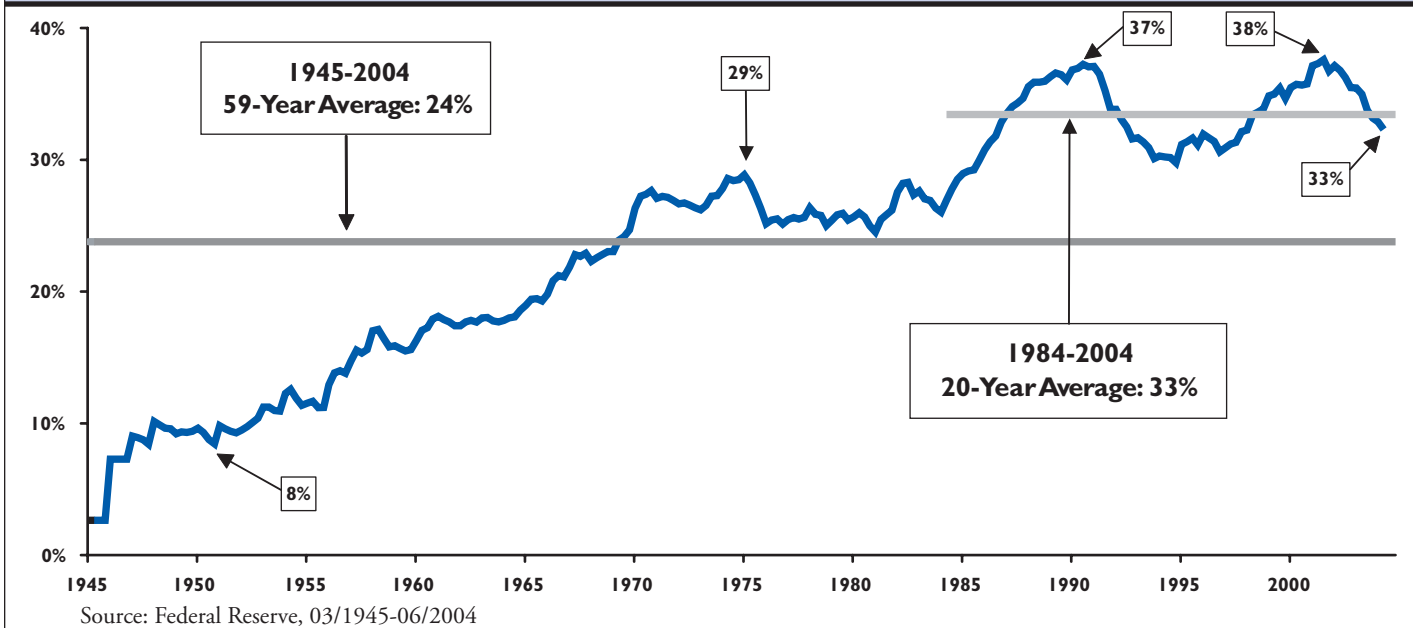
Chart 20 shows that when cash is deducted from debt, the remaining debt is reduced. This Net Debt percentage is lower for each of the same periods shown in the previous chart. As of June 30, 2004, the 59-year average is 24% of GDP, the past 20-year average is 33% of GDP, the peak was September 30, 2001 at 38% of GDP, and today it is 33% of GDP.

Today's high net debt levels remain significant when you add it to an already inflated market price. As we will demonstrate, while net of cash corporate debt levels are in much better shape when compared to the consumer debt and federal debt levels, they have only improved slightly from their 2001 peak, and remain above their 59-year average when compared to GDP. While these high debt levels and payments have been easy to service given today's low interest rate environment, this may not continue to be the case if interest rates rise in the future.

## Consumer Debt

The consumer is a very important part of the economy. Consumer spending has been responsible for 64.33% of all economic activity during the past 50 years. The 50-year low point was in March 1967 when consumer

**Chart 20: Total Corporate Net Debt as a Percentage of GDP  
(Excludes Financial Companies)**



spending dropped to 60.57% of GDP, while the high point was in March 2003 at 70.82% of GDP (Chart 21).

From 1964 through 1992 (29 years), consumer spending comfortably ranged between 60.5% and 65% of GDP. Beginning in January 1993, consumer spending habits began to increase and made a steady climb surpassing 70% of GDP in December 2001 where it remains today.

The expanding role the consumer has played in the economy has not been without a price. In the process of generating the highest economic activity on record, consumers have financed greater portions of their goods and services than ever before. Not surprisingly, the increased financing of consumer spending habits can be directly tied to the drastic lowering of interest rates by the Federal Reserve.

#### Federal Funds Rate

The rate of interest on overnight loans of excess reserves made among commercial banks. Because the Federal Reserve has significant control over the availability of federal funds, the rate is considered an important indicator of Federal Reserve monetary policy and the future direction of other interest rates. < <http://www.federalreserve.gov>>.

Between January and December 2001, the Fed aggressively dropped its Fed Funds rate from 6% to 1.8% to stimulate the economy. Rates then continued their decline going below 1% in 2003 and early 2004. After reaching a low of 0.97% on February 3, 2004, the Fed Funds rate stands at 2% as of November 11, 2004. This is still far below the 6% level in January 2001.

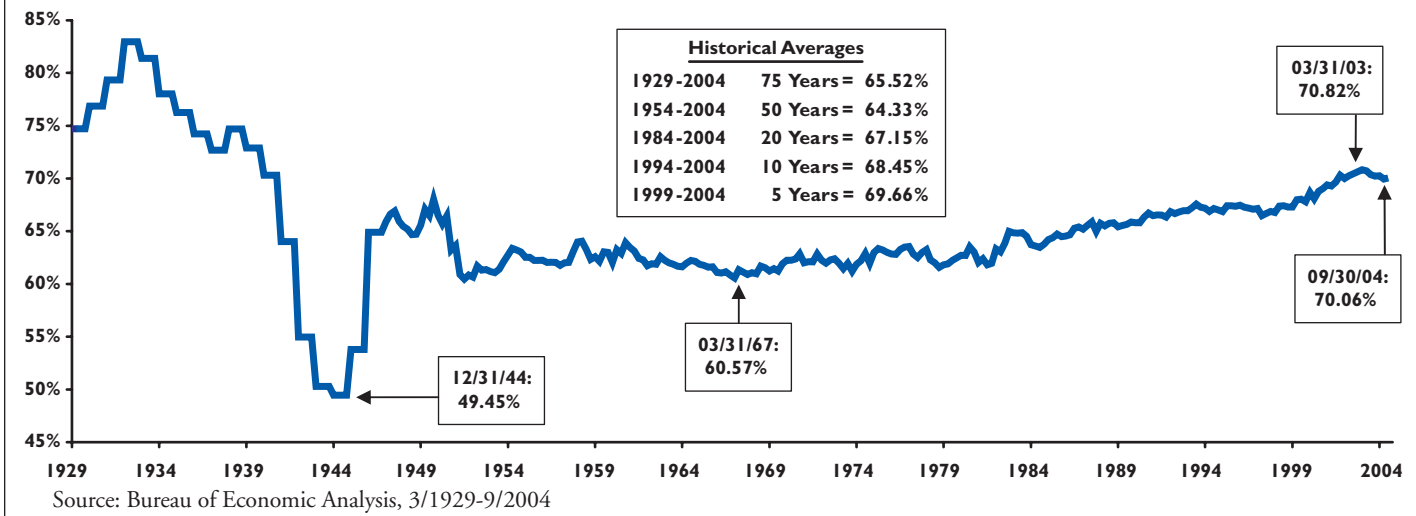
Record low interest rates have created temptations too irresistible for most consumers to pass up. Accordingly, the consumer has been spending like never before. In the process, they have accumulated the highest levels of debt on record! Chart 22 shows that consumer debt has increased sharply from 13% of GDP in 1945 to an all-time high of 83% of GDP as of June 30, 2004. Even as recent as December 1994, consumer debt was only 63% of GDP.

Chart 23 converts Chart 22's percentages into dollars. Over the last 20 years consumer debt has increased from \$1.83 trillion in June, 1984 to an all-time high of \$9.67 trillion in June of 2004. However, from December 31, 1994 to June 30, 2004, consumer debt has increased \$5.12 trillion dollars.

**The greatest economic expansion this country has ever seen has been fueled by the consumer using borrowed money.** For the consumer, this means they have borrowed from the future, thus leaving themselves fewer options as to how much discretionary income they will have and where they will be able to spend it. Eventually, this debt will need to be repaid, at the very least, on a monthly basis.

The primary measure of American household debt, as used by the Federal Reserve to provide a view of the financial health of the overall consumer sector, is the quarterly debt service ratio (DSR). The DSR measures the share of disposable income committed by households for paying interest and principal on their debt. When the DSR is high, households have less money available to purchase goods or services. In addition,

**Chart 21: Consumer Spending as a Percentage of GDP  
(Percentage of All Economic Activity)**



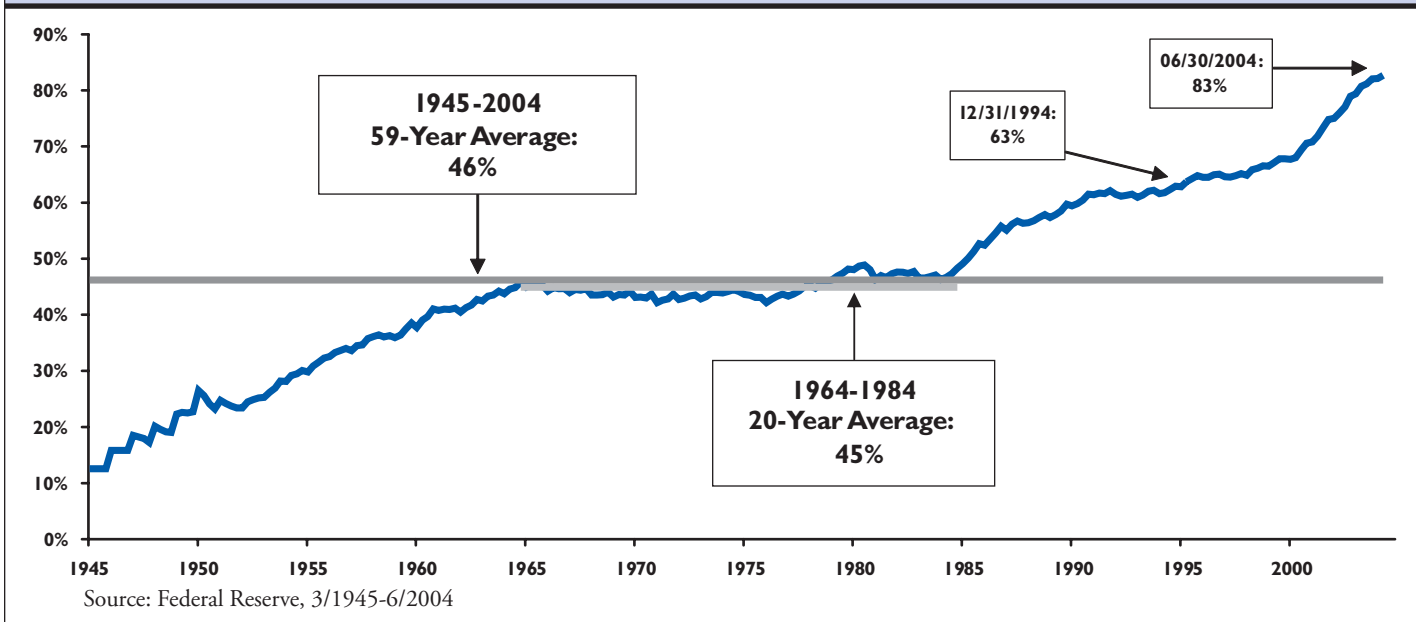
households with a high DSR are more likely to default on their obligations when they suffer adversities such as job loss or illness. Chart 24 points out that on June 30, 2004, the household DSR was near a record high, standing at 13.10% of disposable income. Bear in mind this is at a time when interest rates have been at a 45-year low.

Debt payments are not the only financial obligations of households. The Federal Reserve also calculates a more general financial obligations ratio (FOR). This measure incorporates additional recurring household expenses such as rent on properties not owned (such as apartments), auto leases, homeowners insurance and property taxes that might be subtracted from the

uncommitted income available to households. Chart 25 shows that on June 30, 2004, the Federal Reserve's FOR was also near peak levels at 18.12% of disposable income. What will happen if interest rates go up? Answer: Spending will slow.

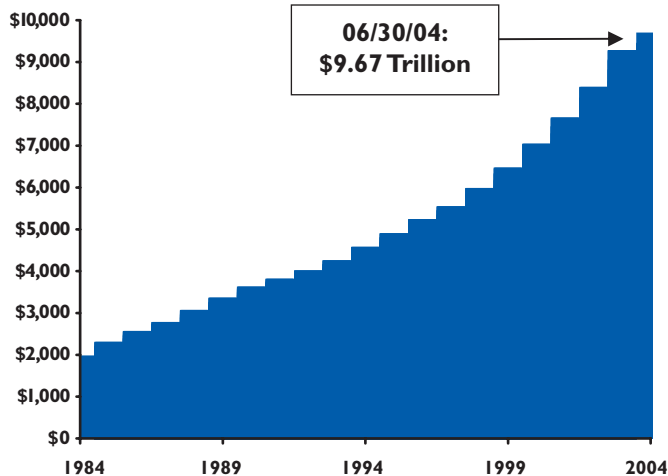
For the economy to continue growing at the current pace, the consumer needs to continue spending at these record levels. Otherwise, corporations and the government will need to increase their spending. By itself, consumer spending does not necessarily present a major problem since consumers are all too willing to spend. The difficulty for consumers will be their ability to demonstrate that they can continue to take-on or

**Chart 22: Consumer Debt as a Percentage of GDP**





**Chart 23: Consumer Debt in Dollars from 1984 Through 2004**



Source: Federal Reserve, 12/1984-6/2004, Left Axis in Billions. 06/30/04 \$9,670 Billion is \$9.67 Trillion

assume more debt. In light of these facts, we believe this will not be an easy task for today's heavily leveraged consumer to accomplish. Their will is strong, but their balance sheets are weak.

An example of this spending challenge can be seen in auto sales. "U.S. car makers have had to push vehicle incentives ever higher, increasing rebates to \$3,385 per vehicle up from \$1,540 in 2001. Yet industrywide sales are projected to be lower in 2004 than in 2001...it is getting harder and harder to find that next marginal buyer," says J.D. Power & Associates chief researcher Robert Schnorbus.<sup>(25)</sup>

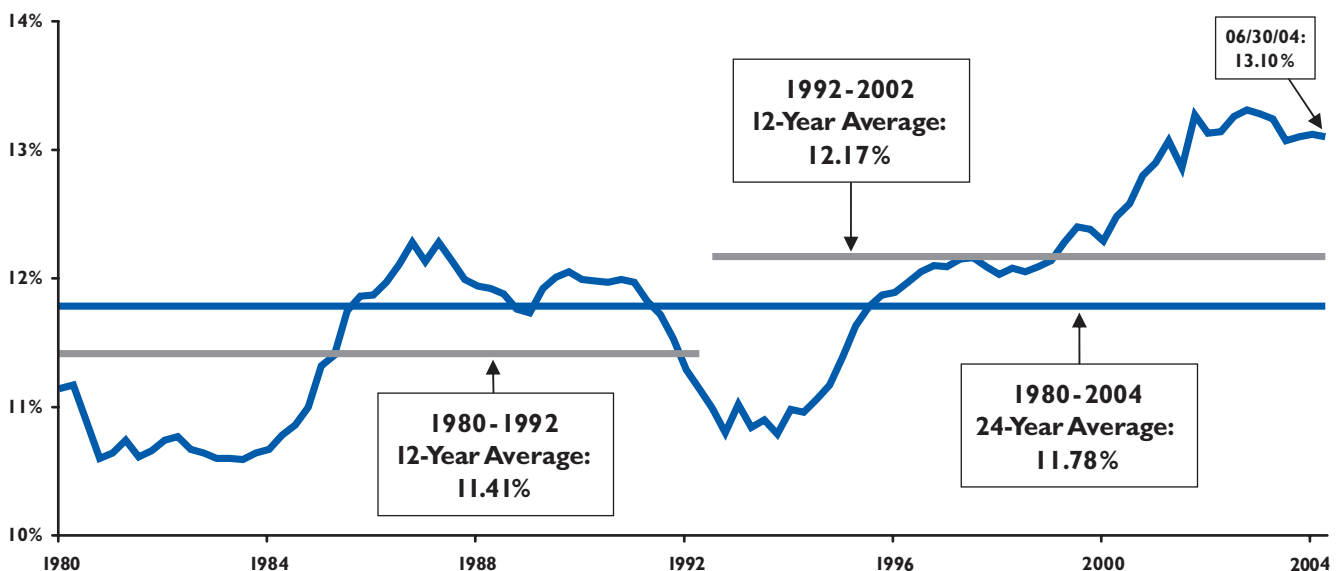
Today, the consumer is responsible for more than 70% of all economic activity. This has required spending at a feverish pace (Chart 26). At this level it does not appear that the odds are in the economy's favor that consumers will continue this level of spending or that they can significantly increase this percentage over the long-run. In addition, consumers must now begin addressing the amount of their consumption that has been financed, as it is at record levels.

While it is true that consumers can continue to rollover and extend debt payments for many years into the future and in theory, never have to pay the debt back, the problem will arise when the debt has to be renewed at higher and higher interest rates. At some point, many consumers will not be able to afford the monthly interest on their debt (home mortgages, car loans, credit cards, school loans, etc).

When consumers can no longer afford their monthly debt payments, they will have less disposable income to buy additional goods and services. This is the very spending that is needed to grow the economy in a healthy and productive manner. That is why consumer spending, as a percentage of the economy, will eventually have to regress back to the historical average of 64% to 65% of GDP. **When it does, it will translate into slower growth or possible contraction in corporate earnings, as well as declining profit margins to historical norms and more sustainable levels.**

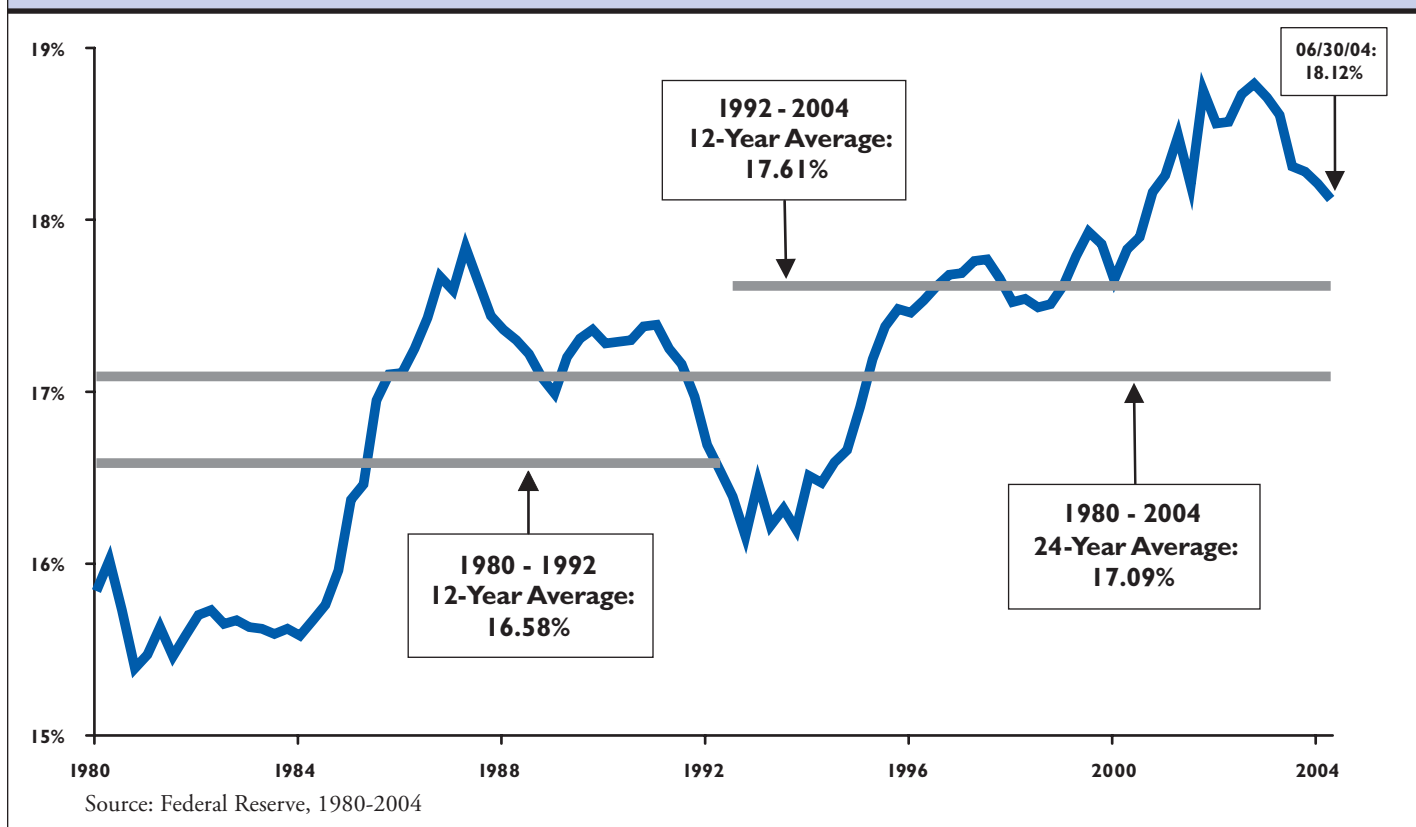
Chart 26 breaks down the Gross Domestic Product (the economy) over the past 75 years, 54 years, and today. As of September 30, 2004, consumption is at 70.06% of GDP. This is up significantly from the long-term averages

**Chart 24: Household Debt Service as a Percentage of Disposable Income (DSR)**



Source: Federal Reserve, 1980-2004

**Chart 25: Financial Obligation Ratio as a Percentage of Disposable Income (FOR)**



of 65.52% and 64.17% respectfully. Government spending as a percentage of GDP is actually down to 18.63% from the 54-year average of 20.55%. Private investment has stayed approximately the same at 16.62% as compared to its 54-year average of 16.07%. However, the big difference among these categories appears in exports and imports.

While the long-term 54 and 75-year averages for exports and imports remain close, as of September 30, 2004, there has been a dramatic change. Exports are now 53% higher than the 75-year average. However,

imports have grown even faster and are now 121% higher than the 75-year average, thus highlighting the consumer's appetite for imported goods. This accelerated growth in imports is the reason our trade deficit is 5% of GDP, the highest percentage on record. We can see that each of these components of GDP is at or near peak levels. If they are not sustained at these peak levels, the economy will slow and could possibly even decline.

Compare our comments so far regarding the consumer with concluding remarks from Federal Reserve

**Chart 26: Gross Domestic Product (GDP) Breakdown as of September 30, 2004**

	9/30/04 Today	Average Since 1929 (75 Years Average)	Average Since 1950 (54 Year Average)
+ Consumption	70.06%	65.52%	64.17%
+ Government	18.63%	20.56%	20.55%
+ Private Investment	16.62%	14.29%	16.07%
+ Exports	10.07%	6.57%	7.44%
- Imports	-15.39%	-6.95%	-8.24%
= Total GDP	100.00%	100.00%	100.00%

Chairman, Alan Greenspan. When addressing the National Association of Credit Unions on February 23, 2004, Mr. Greenspan said,

*"In evaluating household debt burdens, one must remember that debt-to-income ratios have been rising for at least a half century. With household assets rising as well, the ratio of net worth to income is currently somewhat higher than its long-run average. So long as financial intermediation continues to expand, both household debt and assets are likely to rise faster than income. Without an examination of what is happening to both assets and liabilities, it is difficult to ascertain the true burden of debt service. Overall, the household sector seems to be in good shape, and much of the apparent increase in the household sector's debt ratios over the past decade reflects factors that do not suggest increasing household financial stress. And, in fact, during the past two years, debt service ratios have been stable."* <sup>(26)</sup>

We have a few questions for Mr. Greenspan regarding his concluding thoughts:

1. Is it not worrisome enough that debt-to-income ratios have been rising for at least half a century?
2. What if household income does not increase faster than household debt?
3. What if household income declines?
4. What if assets decline but debt remains?

5. Is it really that difficult to assess the debt burden on consumers if markets decline?

6. Can households with peak and unsustainable debt ratios be called stable?

7. If households are so stable, why is personal bankruptcy at an all-time high?

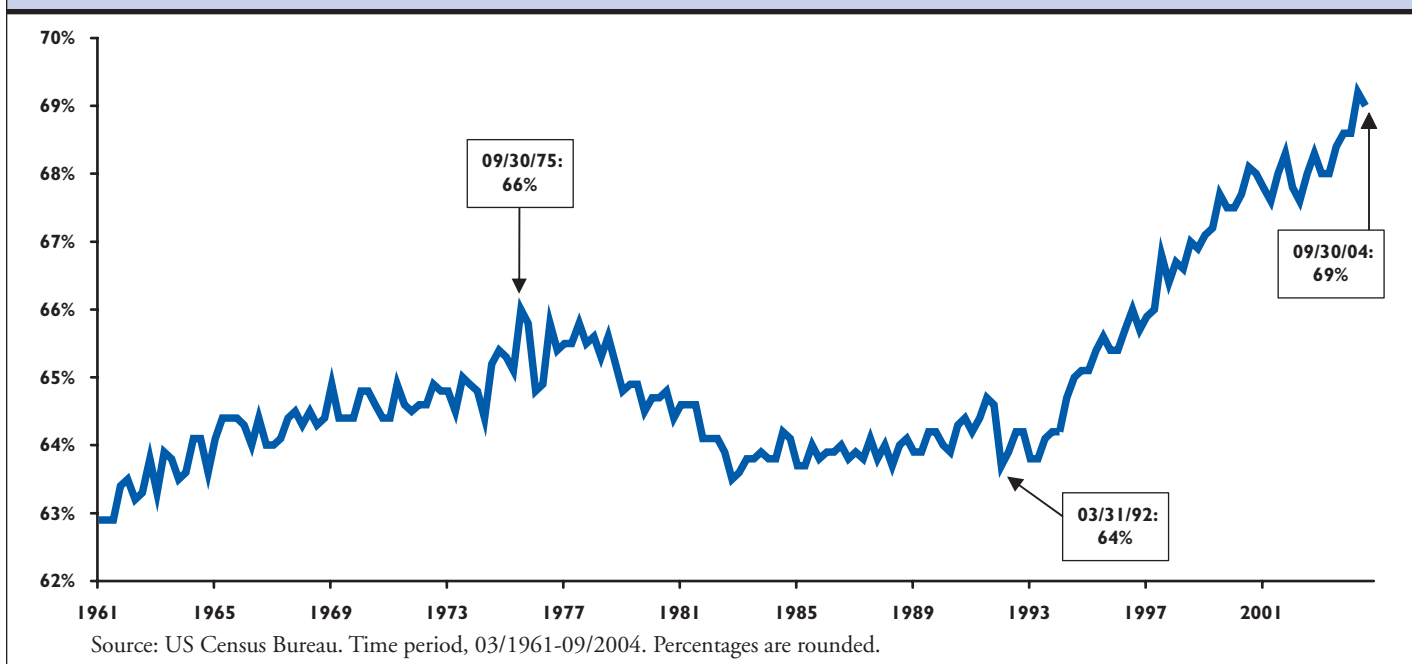
After having reviewed the facts for yourself regarding consumer debt in absolute dollars, in percentages versus disposable income, and the Federal Reserve's own statistical debt ratio data, we will leave it up to you to decide whether the Fed Chairman's concluding remarks best represent the facts.

## The Consumer and Real Estate

Real estate is another area which has played a major role in the growth of the economy over the past few years, as well as the growth in consumer (mortgage) debt.

- **First**, rising prices of single family homes have helped to offset some of the losses many incurred during the stock market decline from 2000 through 2002.
- **Second**, rising home prices have allowed consumers primary residences to serve as ATM machines, putting cash into the pockets of many would-be consumers.
- **Third**, with the lowest interest rates seen since 1958, many homeowners have taken the opportunity to refinance their homes in order to lower their

Chart 27: Home Ownership Rates



monthly payments, consolidate bills, or finance home improvements. In 2003, the Mortgage Bankers Association reported that approximately 70% of all loans that were originated were refinances.

- **Fourth**, 45-year low interest rates have helped consumers purchase homes at record levels. As of June 30, 2004, home ownership in the United States reached an all-time high, with 69% of U.S. households now owning their own homes (Chart 27). The increasing home ownership rate is due in part to the expansion of the secondary mortgage market, a significant liberalization in underwriting standards used to qualify new borrowers,<sup>(27)</sup> and lower interest rates.

While lower mortgage payments and record high home ownership are two positive outcomes of lower interest rates, these lower rates have also provided the incentive for people to borrow more money. The National Association of Realtors® reports that on June 30, 2004, the median price for existing single family homes hit an all-time high of \$191,000. Their preliminary median price for October 2004 is \$187,500. The October 2004 U.S. Census<sup>(28)</sup> reports that the median and average sales prices for new single family homes sold in the U.S. were \$221,800 and \$286,700 respectfully. These too are all-time highs.

Real estate, like stocks and bonds, appears to be overvalued. Nationwide from 1980 through September 30, 2004 (24.75 years), U.S. home prices appreciated

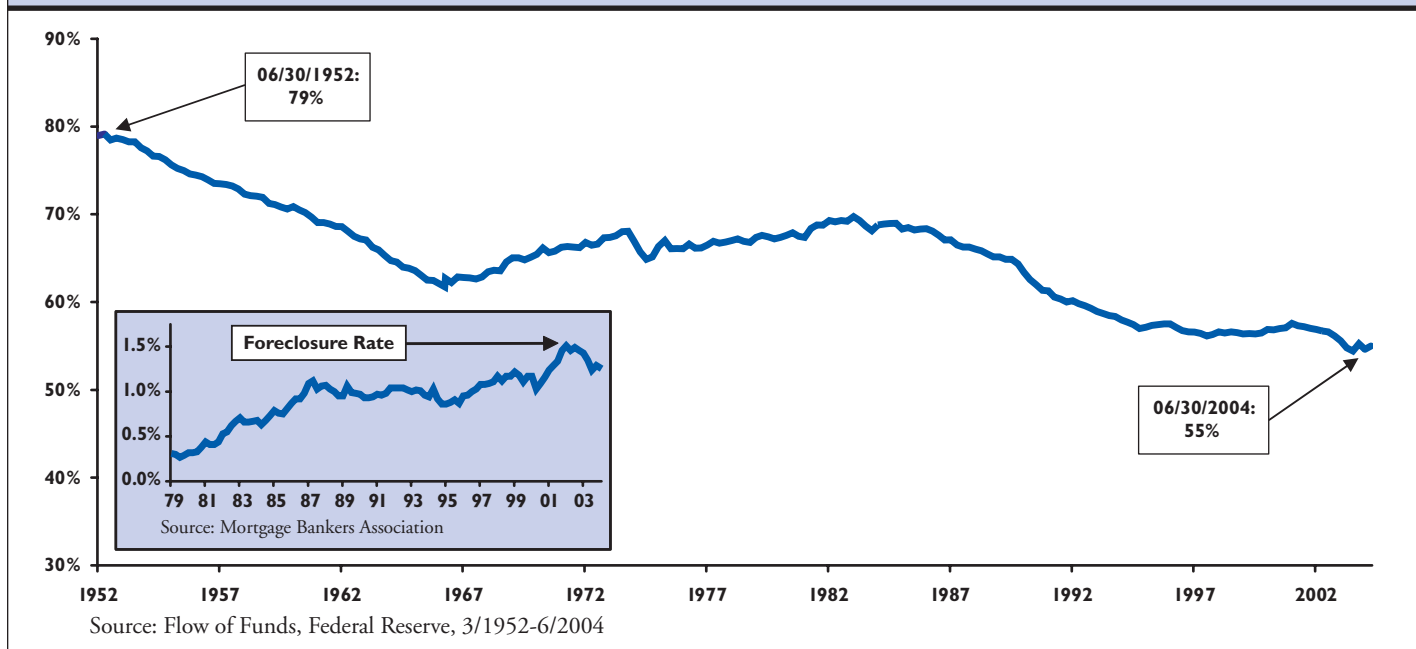
4.99% annually. However, in the last 5 years ending September 30, 2004, the U.S. housing market, which was fueled by historically low interest rates, appreciated 8.22% annually. This is 65% higher than the 24.75 year average.<sup>(29)</sup>

“From third quarter 2003 through third quarter 2004 alone, the average U.S. home appreciated 12.97%. The growth in house prices over the past year surpasses any increase in 25 years,” said Armando Falcon, Jr., Director of the Office of Federal Housing Enterprise Oversight (OFHEO). “The increase is particularly steep when compared to the price of non-housing goods and services,” said Patrick Lawler, OFHEO Chief Economist. “House prices grew 12.97% percent in the past year, while other goods and services as measured by the Consumer Price Index grew 2.68%.”<sup>(30)</sup>

One would think that with all the recent appreciation in home prices and lower monthly payments, consumers would be increasing their equity and net worth. Just the opposite is true. Over the past 5 years (1999-2003), the net worth of Americans grew just 5%, or 0.92% annualized. However, in real terms, if we deduct inflation from this number, net worth actually declined.<sup>(31)</sup> Notably, while real estate has appreciated, its gains have been offset by losses in the stock market. In addition, many homeowners have borrowed equity from their homes at record levels in order to purchase more expensive homes and to continue their aggressive spending habits.

According to Freddie Mac, homeowners with prime conventional loans cashed out about \$83 billion in 2001,

**Chart 28: National Homeowners' Equity as a Percentage of Total Home Values (Includes Homeowners With and Without Mortgages)**



\$111 billion in 2002, and \$147 billion in 2003. The total of \$341 billion dwarfs the next highest three-year level of \$103 billion posted in 1998-2000.<sup>(32)</sup> As a result, **homeowners' equity has declined 16.6% as a percentage of total home values since 1975, while home prices rose 388% during that same period (Chart 28).**

In 1954, when the Federal Funds rates (Chart 58) were between 0.80% and 1.28%, just as they have been this past year, on a nationwide basis homeowners' equity was 77% of total home values. This was just off its June 30, 1952 peak of 79%. Since then, the 52-year average home equity has been 67% of total home values. As of June 30, 2004, it hit a 52-year low of 55%.<sup>(33)</sup> This means on a nationwide basis mortgages have gone from as little as 21% of the total home values in 1952, to as much as 45% of total home values today.<sup>(34)</sup> Instead of equity increasing as a percentage of rising home values, mortgages have more than doubled as a percentage of the total values (Chart 28).

While we have shown that equity has declined as a percentage of total home values, even as home prices have risen, we do not believe this tells the full story. There are approximately 77,194,000 homeowners in the U.S. Of this amount, 61% or 47,104,000 of them have a mortgage. The remaining 39% or 30,090,000 homeowners do not have a mortgage; their homes are paid in full.<sup>(35)</sup> Therefore, to include these mortgage-free homeowners in a study that determines homeowners equity with those that do have a mortgage distorts the results.

Chart 29 shows homeowners' equity as a percentage of the total median home price. This only includes homeowners that currently have a mortgage and specifically excludes those homeowners without a mortgage. The results are quite different than those found on Chart 28. Home equity as a percentage of total home values is greatly reduced from 55% (Chart 28) to 19% (Chart 29).<sup>(36)</sup> In other words, the average homeowner with a mortgage currently has a mortgage equaling 81% of the property value.<sup>(37)</sup>

Also highlighted on Chart 29 are the effects of the 1986 Tax Reform Act and decreasing interest rates on the size of home mortgages relative to total home values. Prior to 1986, interest on consumer debt (such as credit cards and car loans) was tax deductible. After the passage of the 1986 Tax Reform Act, this was no longer the case for consumers. Therefore, many began switching more and more consumer debt to their home mortgages as it remained the only consumer interest that was, and still is, tax deductible. (The 1986 Tax Reform Act was phased in through 1990. While this Tax Act did change the rules on the total amount of mortgage interest

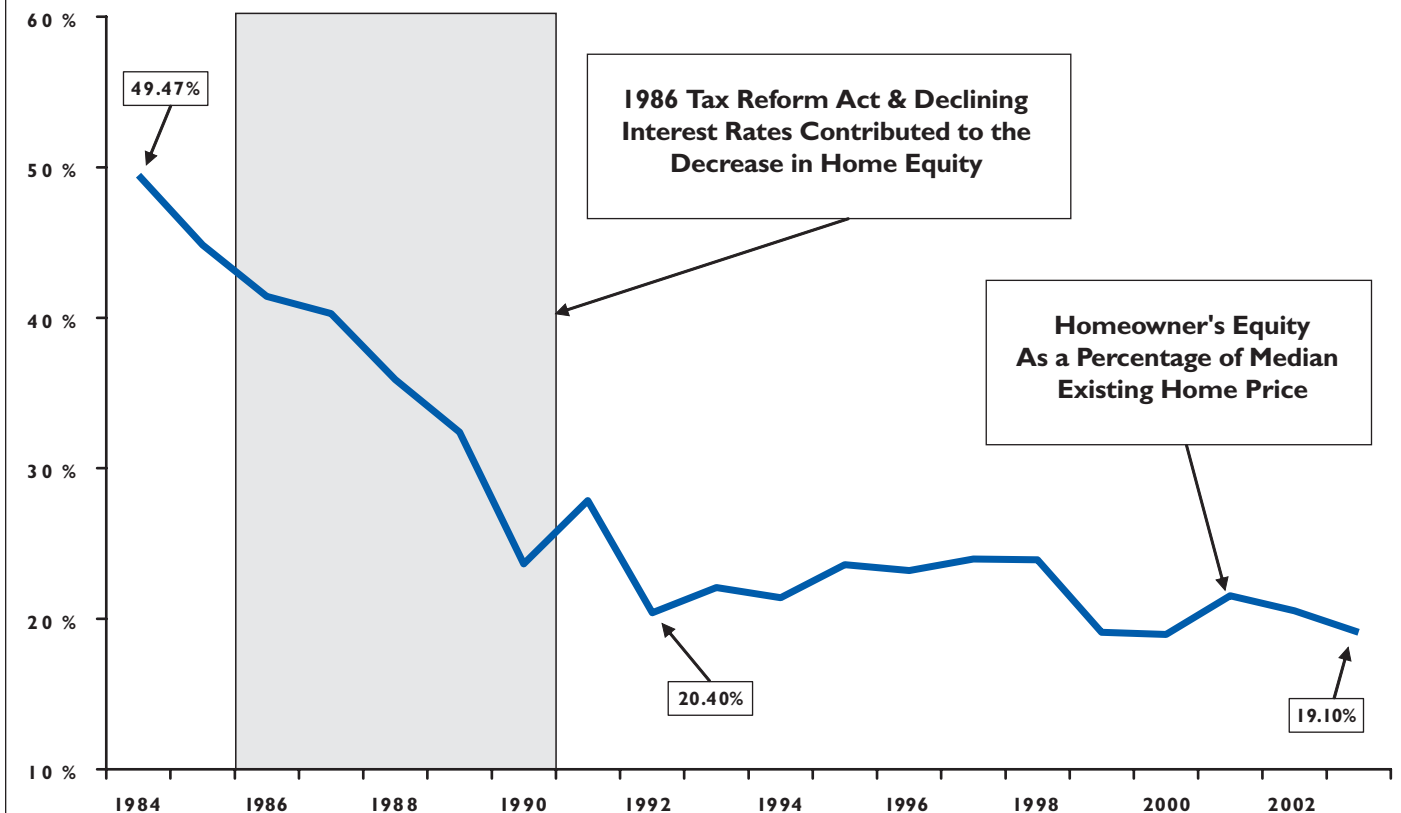
homeowners could deduct, interest is still generally deductible up to the first \$1 million of mortgage debt and \$100,000 of home equity debt).

In addition, fixed interest rates on conventional 30-year mortgages which had reached a high of 18.63% on October 9, 1981, and remained above 13% through May of 1985, finally began to decline. During 1986 through 1990, conventional 30-year mortgage rates fluctuated between 9% and 11%. This provided the perfect opportunity for many homeowners to refinance higher interest mortgages and lower their monthly payments, as well as consolidate consumer debt into tax-deductible home mortgages.

The total mortgage debt taken out by consumers from 1952 through June 2004 is approximately \$7 trillion. However, as we look closer at the past 2.5 years, we see a group of consumers whom we believe to be "at risk" when it comes to maintaining their home equity and ownership. The following statistics highlight why we believe an "at risk" group exists:

- During 2002 through June 30, 2004, there were \$1.78 trillion single family home mortgages that were originated. Approximately 20% or \$355 billion were to buyers whose down payments were between 0% and 10% of the purchase price.<sup>(38)</sup> In addition, there were \$3.8 trillion in mortgages that were refinanced.<sup>(39)</sup>
- In 1990, sub-prime mortgages were less than 1% of the new purchase mortgage market.<sup>(40)</sup> In 2002 and 2003, 6% of new purchase mortgages and 10% of refinance mortgages that were originated were considered sub-prime loans. Sub-prime borrowers tend to possess one or more of the following characteristics: put little or nothing down, have either bad credit or no credit, have higher expense ratios (including debt payments), cannot verify income or assets, and / or whose purpose of the loan or property type is not considered standard. Oftentimes sub-prime loans are zero down loans, interest-only financing, or home equity loans as high as 125% of the home's appraised value.
- With fewer qualified buyers available, lenders have been looking to less qualified buyers, as well as relaxing credit standards to help keep the home buying momentum going. This can be seen from 1994 through 2003, as the average annual growth rate of sub-prime mortgage obligations has been 25%, compared to total mortgage obligation growth of 17.6% during the same period. At the

**Chart 29: National Homeowners' Equity as a Percentage of Median Home Prices  
(Only Includes Homeowners With Mortgages)**



Source: Mortgage Debt from Flow of Funds, Federal Reserve, 1984-2003. Percent of Households with Mortgages from Bureau of Labor Statistics. Median Existing Home Price from National Association of Realtors ([www.realtor.org](http://www.realtor.org))

end of 2003, 5.4% or \$385 billion of the total \$7.078 trillion outstanding mortgages were sub-prime.<sup>(41)</sup> Sub-prime loans carry more risk. At the end of 2003, the foreclosure rate on sub-prime loans topped 5.63%. In comparison, the foreclosure rate on prime quality conventional loans was only 0.55%.<sup>(42)</sup> Blended together, as of December 2003, the national foreclosure rate on all home mortgages was 1.27% (Chart 28). **It is important to remember that this high foreclosure rate for sub-prime loans is taking place during an economic recovery!**

- On average, during 2002 and 2003, 19% of the conventional mortgages used adjustable interest rates, even though interest rates are at 45-year lows.<sup>(43)</sup>
- Real estate speculators are growing in numbers. Investors accounted for 8% of mortgages used to purchase homes in the first eight months of 2004. This is up from 7.5% in 2003 and 5.7% in 2000. It is the largest investor share since 1986.<sup>(44)</sup> As an example, in Miami, speculators account for as much as 80% of the pre-construction purchases of luxury condominium units.<sup>(45)</sup>

- Twenty percent of borrowers in the lower quintile qualified for home mortgages without verifying income. Instead, they use what's called "stated income without verification".<sup>(46)</sup> In other words, lenders accept whatever income amount borrowers tell them without any further confirmation. While this program has been around for the past ten years, it is dramatically increasing in its popularity and scope. This is just one example of the continued liberalization of loan underwriting standards.

- From 1993 through 2003, annual moving rates have averaged 15.48%.<sup>(47)</sup> This suggests that on a nationwide basis, the average home is owned approximately seven years. Therefore, while many homeowners today are enjoying the benefits of lower interest rates and payments on their current homes, this may not be the case in the coming years if interest rates rise and homeowners choose or are forced to move.

- According to the Bureau of Labor Statistics, consumers spending between 30% and 49% of income on housing are considered moderately cost-burdened. Consumers spending greater than 50% of

their income on housing are considered severely cost-burdened. As of 2003, while interest rates have come down to 45-year lows, the average homeowner has increased the amount he spends on housing costs to 33% of income, which is up from 30% in 1993.<sup>(48)</sup> If interest rates rise and household income remains the same or is lowered, for those on adjustable rate mortgages, housing costs as a percentage of total household income is likely to continue to increase.

- The typical selling cost of a home is 8% (6% real estate commission + 2% other closing costs). Therefore, most homeowners' net equity is actually reduced by this amount the day they close escrow on their homes. However, in the case of sub-prime transactions, net equity may be eliminated altogether.<sup>(49)</sup>

In summary, if we add together the sub-prime loans of \$385 billion and conventional loans with adjustable rate mortgages of \$1.34 trillion, they total \$1.73 trillion. This represents more than 24% of the total \$7.078 trillion in mortgages that are still outstanding. While there is some overlapping, this percentage does not include the 15% of mortgages taken out by real estate

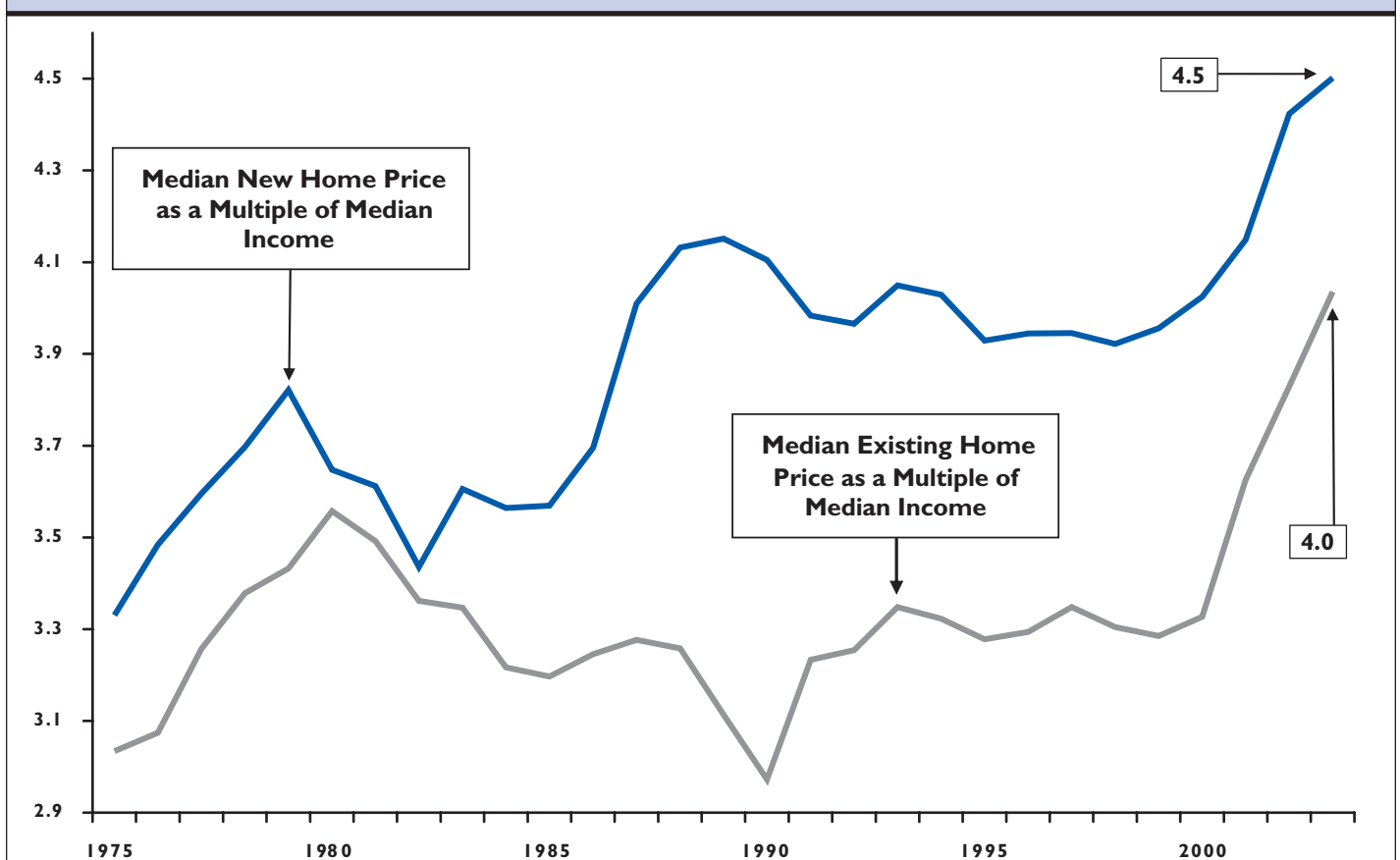
speculators in 2003 and 2004. Nor does this percentage include the 15.48% of homeowners who will move each year and eventually face higher interest rates, whether fixed or adjustable, when they do move. Therefore we believe this **“at risk”** group ranges between 15% and 25% of all households.

*“Most worrisome are the many homeowners with scant savings who are spending half or more of their incomes on housing, along with the growing share of sub-prime borrowers who are by definition more likely to default. If the recovery stalls, these owners will be at a substantially higher risk of losing their homes,”*

(2004 State of the Nation's Housing report by the Joint Center for Housing Studies of Harvard University).

Furthermore, if real estate was to decline or interest rates were to move up over the next few years, many of the homeowners in this “at risk” group may find they owe more on their mortgages than their homes are actually worth. In addition, they may find that they are no longer able to afford their monthly payments. While this may

**Chart 30: Home Prices as a Multiple of Median Household Income**



Source: National Association of Realtors, US Census, 1975-2003, Federal Reserve.

not cause everyone to lose sleep, property owners in markets that are extremely overvalued could be dramatically affected. This will be particularly true for many who have bought second and third homes as investments.

**Moreover, if monthly home payments rise due to increasing interest rates and the income of consumers does not go up at the same pace, consumers will become limited in how much they can afford to borrow and eventually spend on the purchase of a new home.** This in turn could force many sellers to lower their selling prices in order to find qualified buyers. This may be especially true for those who need to sell their homes in a very short period of time.

Real estate, like every other investment, has its highs and lows. Today, while some sectors of the U.S. housing market are more overvalued than others, nationally speaking, the U.S. housing market is at a level which it hasn't experienced in at least 30 years. We have found that one of the best ways to measure the housing sector is to measure the affordability of the typical consumer. To arrive at this affordability multiple, we divide the median home price by the median household income.

Chart 30 shows the median price for a **new** home is now 4.5 times the median household income. This is 15% above the 28-year average of 3.9 times. The median price for an **existing** home is 4 times the median household income. This is more than 21% above the 28-year average of 3.3 times. With home prices increasing to levels that are stretching what the typical consumer can afford, it is not too hard to envision various regions and many local markets correcting in the future.

• • •

We have shown that home prices are at record levels both in terms of their median price as well as a multiple of median household income. Going forward, if interest rates start to rise, these record housing prices are likely to level off or possibly even decline. The reason for this is that many consumers looking to buy their first homes, upgrade their homes, or those needing to move for any number of reasons, might not be able to afford the same size loan if the monthly payments were to increase due to higher interest rates. As a result, many homebuyers will find their only choice is to take out smaller loans so that their monthly house payments do not increase.

Therefore, unless buyers can increase their down payments so that even with a smaller loan they can afford record level home prices (which is not very probable based on the current savings rate), home prices most likely will decline. Chart 31 shows the effects of higher interest rates on loan amounts which in-turn affect home prices if interest rates were to increase.

Just as with overvalued equities, the housing market is also subject to market corrections in order to bring fundamentals (prices as a multiple of income) back in line with historical norms. These corrections can take place in one of three ways. **First**, the residential real estate market can decline bringing market values back into equilibrium with median household income ratios. **Second**, there could be an extended period of time when little or no appreciation takes place. This will allow fundamentals (median household income) to catch up to the current price. Third, there could be a combination of the two.

**Chart 31: Effects of Higher Interest Rates on Loan Amounts**

<b>Principal &amp; Interest Monthly Payment</b>	<b>Interest Rate</b>	<b>Loan Amount Borrower Can Afford Given the Interest Rate to Keep Payment the Same</b>	<b>Percentage Decline From the \$177,440 Loan Amount That the Borrower Can Afford If Interest Rates Rise</b>
\$953	5%	\$177,440	
\$953	6%	\$158,952	-10.42%
\$953	7%	\$143,243	-19.27%
\$953	8%	\$129,878	-26.80%
\$953	9%	\$118,440	-33.25%

The U.S. Census shows the all-time high median price for a new single family home was \$221,800 in October 2004. For this example we assume a buyer put 20% down or \$44,360. The remaining amount was financed using a 30-year fixed rate loan. Interest rates are shown in the second column above. Monthly payments do not include taxes or insurance.



**Chart 32: Single Family Home Declines by Region and Years Needed to Recover**

Location	Peak	Bottom	Percentage Decline From Peak	Years Needed to Make New Sustained High	Years Needed to Make New Sustained High Adjusted for Inflation
Pacific	1991	1994	-7%	7	10
Middle Atlantic	1989	1991	-2%	3	14
New England	1989	1994	-12%	10	14
South Atlantic	n/a	n/a	n/a	No Regional Declines Since 1975	n/a
Mountain	1986	1988	-2%	4	9
West North Central	1980	1982	-3%	3	Never Recovered
East North Central	1980	1982	-5%	3	16
East South Central	n/a	n/a	n/a	No Regional Declines Since 1975	n/a
West South Central	1983	1988	-12%	11	Never Recovered
<b>Average</b>			<b>-6%</b>	<b>6 Years</b>	<b>13 Years</b>

Source: Office of Federal Housing Oversight (OFHEO) House Price Index.  
 Note: Some regions like the South Atlantic and Middle Atlantic had long periods of flat or very little return.

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While the U.S. has never had a national real estate decline (all regions declining at the same time), there have been numerous regions, states, and cities that have been greatly affected at one time or another. When declines take place, they can range from moderate to severe. Equally important is the time it takes for these markets to recover in absolute dollars as well as dollars adjusted for inflation.

The U.S. Census breaks the country down into nine regions.<sup>(50)</sup> Chart 32 shows that only two of the nine regions have avoided market declines since 1975. They are the South Atlantic and East South Central regions. Chart 32 also shows that two of the regions have experienced declines greater than 12%. They are the New England and West South Central regions. On average, when these regions experienced a market decline, they went down 6% from their peaks. Additionally, it took an average of six years to get back to the previous high in absolute dollars, and 13 years if we adjust the dollars for inflation. This analysis does not suggest one way or the other whether or not the previous market peaks were justified. It simply points out the percentage market decline that was experienced on a regional basis and how long it took to recover. **Once again, the price you pay determines your return!**

Real estate is very location specific. Chart 33 takes a closer view of 15 major cities and surrounding areas within these regions. Of these 15 cities, four have experienced market declines of 19% or more. They are Austin-Round Rock, Texas, Houston-Baytown-Sugar Land, Texas, Los Angeles-Long Beach-Santa Ana, California, and Oxnard-Thousand Oaks-Ventura, California.

However, when these 15 markets declined they went down on average 14% from their peaks and took nine years to recover the absolute dollars that had been lost. If we adjust the dollars for inflation, the average recovery time took 13 years. Moreover, three cities never fully recovered back to their previous peaks if we use dollars that have been adjusted for inflation. They are Austin-Round Rock, Texas, Dallas-Fort Worth-Arlington, Texas, and Houston-Baytown-Sugar Land, Texas.

While a real estate correction might not happen simultaneously on a national basis (although it is possible), we have seen many regions, states, cities, and neighborhoods experience a decline at one time or another. Chart 34 illustrates what could happen to homeowners' equity should a real estate decline take place. In this example we assume the June 30, 2004, existing median home price of \$191,000 and an 80% loan to value. Columns 2 through 5 show the market value (price) declining a hypothetical 5%, 10%, 15%,

**Chart 33: Single Family Home Declines by City and Years Needed to Recover**

Location	Peak	Bottom	Percentage Decline From Peak	Years Needed to Make New Sustained High	Years Needed to Make New Sustained High Adjusted for Inflation
Atlantic City, NJ	1989	1993	-5%	8	14
Austin-Round Rock, TX	1986	1989	-27%	8	Never
Boston-Cambridge-Quincy, MA-NH	1989	1990	-11%	8	11
Bridgeport-Stamford-Norwalk, CT	1988	1993	-12%	12	17
Dallas-Fort Worth-Arlington, TX	1986	1989	-11%	11	Never
Eugene-Springfield, OR	1981	1982	-16%	7	14
Honolulu, HI	1994	1998	-18%	9	10
Houston-Baytown-Sugar Land, TX	1983	1987	-21%	15	Never
Los Angeles-Long Beach-Santa Anna, CA	1990	1996	-20%	10	13
New York-Northern New Jersey-Long Island	1989	1990	-10%	10	15
Oxnard-Thousand Oaks-Ventura, CA	1989	1993	-19%	11	14
Phoenix-Mesa-Scottsdale, AZ	1987	1989	-6%	6	14
Poughkeepsie-Newburg-Middletown, NY	1988	1993	-10%	11	16
San Diego-Carlsbad-San Marcos, CA	1990	1995	-11%	8	11
San Jose-Sunnyvale-Santa Clara, CA	1989	1993	-11%	8	11
<b>Average</b>			<b>-14%</b>	<b>9 Years</b>	<b>13 Years</b>

Source: Office of Federal Housing Oversight (OFHEO) House Price Index.

Note: Some regions like the South Atlantic and Middle Atlantic had long periods of flat or very little return.

and 20% from today's value. Notice that while the market value declines in each column, the mortgage balance stays the same since it would not be affected by the change in property values. The mortgage only goes down when payments are made.

Since this example shows a home with a mortgage as opposed to a home that is paid in full, the decline in the equity will be magnified relative to the decline in property value. **This is due to leverage. Columns 2 through 5 show the percentage equity decline for the homeowner is five times greater than the percentage market decline.** For example, in column 2, the 25% decline in equity is five times greater than the 5% decline in market value. By the time you get to a 20% decline in property value shown in column 5, the equity is completely depleted. In other words, the 20% market decline

is equal to 100% of the equity. **Leverage makes the good times better and the bad times worse!**

Chart 35 summarizes median household income, median home prices, and total mortgages outstanding for the past 28 years. While median household income has risen 4.75% annually over the past 28 years, new and existing home prices have risen faster at 5.89% and 5.83% annually. With home prices rising at a faster pace than income, housing has become less affordable for the consumer.

However, in order to achieve the American dream of owning a home, consumers have borrowed more than ever before. During the past 28 years, total mortgages outstanding have risen 10.23% annually, more than twice the 4.75% annualized growth rate in median household income. This has added considerably to the overall debt

**Chart 34: Hypothetical Home Equity During Market Decline**

	(1)	(2)	(3)	(4)	(5)
Median Priced Existing Home	\$191,000	\$191,000	\$191,000	\$191,000	\$191,000
<b>What if Real Estate Values Decline</b>	<b>Today</b>	<b>-5%</b>	<b>-10%</b>	<b>-15%</b>	<b>-20%</b>
Real Estate Value After Market Decline	\$191,000	\$181,450	\$171,900	\$162,350	\$152,800
<i>(minus) Hypothetical 80% Mortgage</i>	\$152,800	\$152,800	\$152,800	\$152,800	\$152,800
<b>= Total Household Equity</b>	<b>\$38,200</b>	<b>\$28,650</b>	<b>\$19,100</b>	<b>\$9,550</b>	<b>\$0</b>
<b>Equity Decline as a Percentage Due to Real Estate Market Value Decline</b>		<b>-25%</b>	<b>-50%</b>	<b>-75%</b>	<b>-100%</b>

National Association of Realtors reported that June 30, 2004 the median priced existing home sold for \$191,000. In this example we are assuming that "today" this homeowner has 20% equity (\$38,200).

of the consumer. In the last four years alone, total outstanding mortgages have increased 11% annually. This is more than seven times the 1.57% annualized growth rate in median household income.

In summary, for the past 28 years mortgage debt has grown 10.23% annually and has contributed 73% or \$7.078 trillion out of the total \$9.670 trillion in total consumer debt outstanding.

### The Consumer Savings Rate

Another area of concern for consumers is their ability to save. Chart 36 shows the savings rate over the past 45 years.

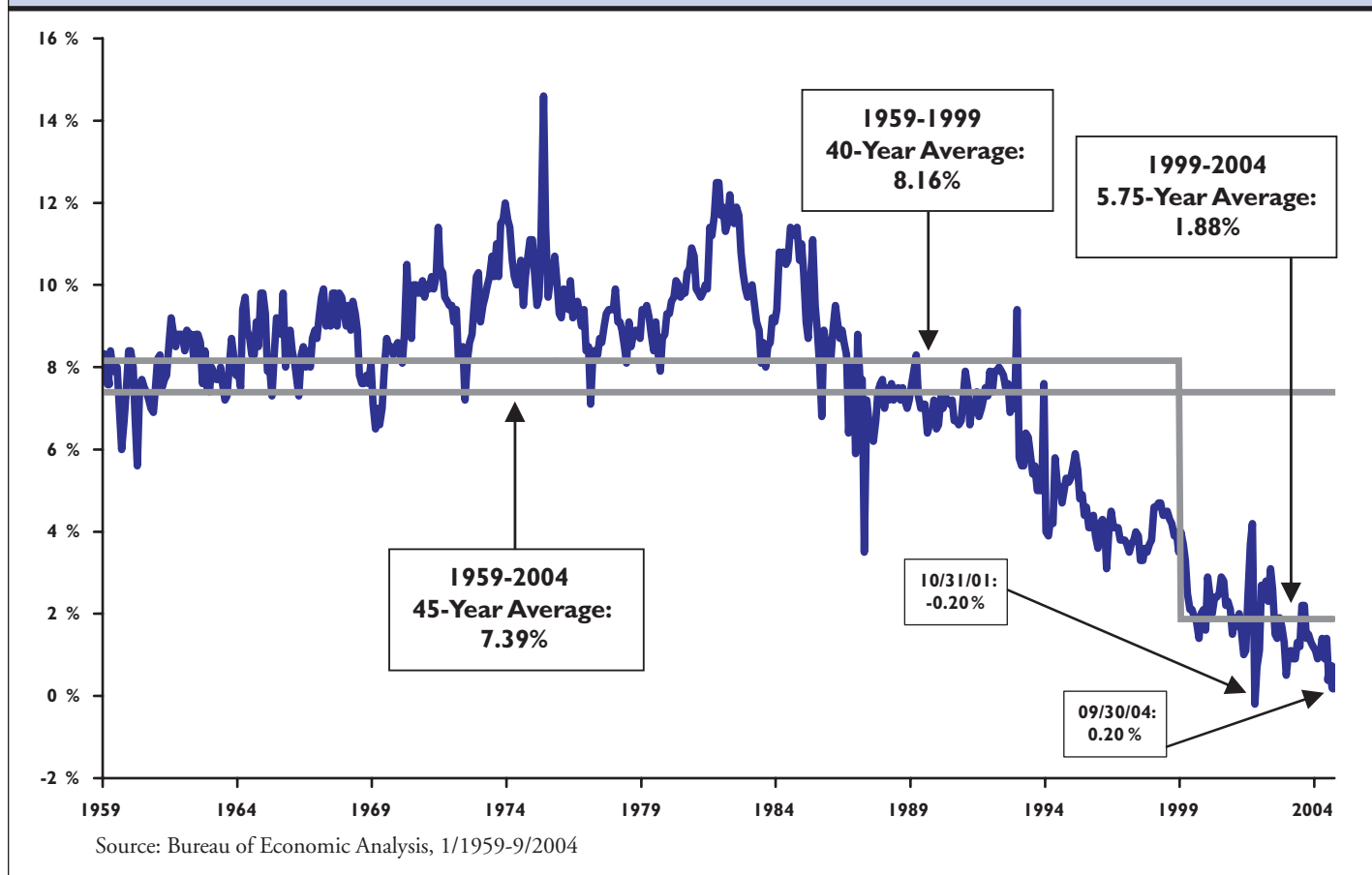
We frequently read articles that incorrectly describe what constitutes the personal savings rate. Many writers and industry professionals like to suggest that because consumers invest in pensions, 401(k)'s, and homes, these investments then lower the amount of money that would have otherwise gone into passbook savings and checking accounts. They erroneously conclude that the savings rate is distorted and is really not as bad as it appears. It is important to understand that such a description of the personal savings rate is incorrect.

The data used to calculate the personal savings rate (Chart 36) is taken directly from the Federal Reserve

**Chart 35: 28-Year Summary of Income, Home Prices, and Mortgages**

Year	Median Household Income	Median New House Price	Median Existing House Price	Total Mortgages Outstanding (Billions)
1975	\$11,800	\$39,300	\$35,800	\$477
1980	\$17,710	\$64,600	\$63,000	\$962
1985	\$23,618	\$84,300	\$75,500	\$1,524
1990	\$29,943	\$122,900	\$89,000	\$2,620
1995	\$34,076	\$133,900	\$111,700	\$3,478
2000	\$41,990	\$169,000	\$139,700	\$5,205
2003	\$43,318	\$195,000	\$174,800	\$7,283
Total 28 Years	267.10%	396.18%	388.27%	1427.07%
28 Years Annualized	4.75%	5.89%	5.83%	10.23%
<b>Last 4 Years Annualized</b>	<b>1.57%</b>	<b>4.91%</b>	<b>6.93%</b>	<b>11.06%</b>

### Chart 36: Personal Savings Rate



Board of Governor's website.<sup>(51)</sup> The correct description for the personal savings rate includes the following: all savings accounts, checking accounts, money market funds, all securities, all fixed income, mutual funds, life insurance reserves, pension fund reserves, 401(k)'s, residential fixed investments, and other miscellaneous assets. Subtracted from these savings vehicles are all non-farm mortgage debt, other mortgage debt, policy loans, security credit, consumer credit, and other liabilities. In other words, the savings rate includes all savings vehicles minus all the corresponding debt.

From January 1959 through September 2004 (45.75 years), the personal saving rate averaged 7.39% of disposable (after-tax) income (Chart 36). In other words, on average, consumers have been saving \$7.39 out of every \$100 of disposable income since 1959. However, these long-term numbers do not accurately account for what is happening today. From 1959 through 1999, the first 40 years of our study, the personal savings rate averaged 8.16% of disposable income. Yet over the last 5.75 years (January 1999 through September 2004), the savings rate averaged just 1.88%. As of September 2004, it is a paltry 0.2%! This means that in September 2004, the average

consumer was saving only \$0.20 out of every \$100 of disposable income.

In May 1975, during a period of high interest rates, the personal savings rate reached a peak at 14.6% of disposable income and continued to remain at high levels hitting 12.2% of disposable income as late as April 1982. Amazingly, in May/June 1975, the country was at the bottom of the last major bear market. This was a time when stocks were available at tremendous bargains. In addition, the total credit market debt (all debt) was only \$2.48 trillion, representing 155% of GDP.<sup>(52)</sup>

Today, almost 30 years later, the country finds itself in the opposite position. After hitting an all-time low personal savings rate of -0.2% in October 2001, today's savings rate has improved only marginally to 0.2%. This is still well below the long-term average.

Currently, the general market is still trading at peak levels relative to fundamentals. In addition, the total credit market debt outstanding is now \$35.18 trillion or 302% of GDP. This increase in the total credit market debt is more than 14 times the 1975 level of \$2.48 trillion. When comparing today to 1975, we can see that there is a direct correlation to a low personal savings

rate, the amount of debt that is outstanding, and the level of interest rates.

Nevertheless, there are some people in the financial press who suggest that this low savings rate is not a problem because the net worth of Americans is on the rise. They suggest that if the net worth of Americans is increasing due to the appreciation of their assets, this makes up for the low savings rate. Thus there is no need for concern! This is fuzzy thinking.

First, even if public assets were increasing due to appreciation, it does not solve the problem of needing to provide additional cash for new investments. These new investments are the driving force behind the long-term growth of the economy. We showed that private investment, which is generated from consumer and corporate savings, totals 16.62% of the economy (Chart 26). Therefore, without an increase in savings, this private investment and the economy will eventually slow.

Furthermore, what happens if assets decline or stay flat? As an example, in the years 2000 through 2002, the net worth of Americans declined a total of -6.48%, or -2.21% on an annualized basis. This reduction in net worth reduces the amount of money for new investments even further. If we expand this study to a look at the past 5 years (1999-2003), the net worth of Americans only grew a total of 5%, or 0.92% annualized. However, in real terms, if we deduct inflation from this number, net worth actually declined.<sup>(53)</sup>

For those of you who are worried about missing out on a major bull market, we are just wondering where all the air for the next balloon (bull market) is going to come from! The Federal Funds rate of 2% is

still near historic lows. Total credit market debt levels have risen to \$35.18 trillion, or 302% of GDP, which is more than 14 times the 1975 percentage. The personal savings rate is near a record low at 0.2% compared to 14.6% in 1975.

In addition, U.S. home equity levels as a percentage of total home values have dropped from 79% to a record low 55% of total home values, and down to 19% of the median home price if we exclude homeowners without mortgages, as consumers have taken on bigger mortgages and withdrawn cash through home equity loans. After reviewing these facts, we have but one question: *How much longer can the Federal Reserve persuade consumers with low interest rates to handcuff themselves with debt in order to finance economic activity?*

## Federal Debt

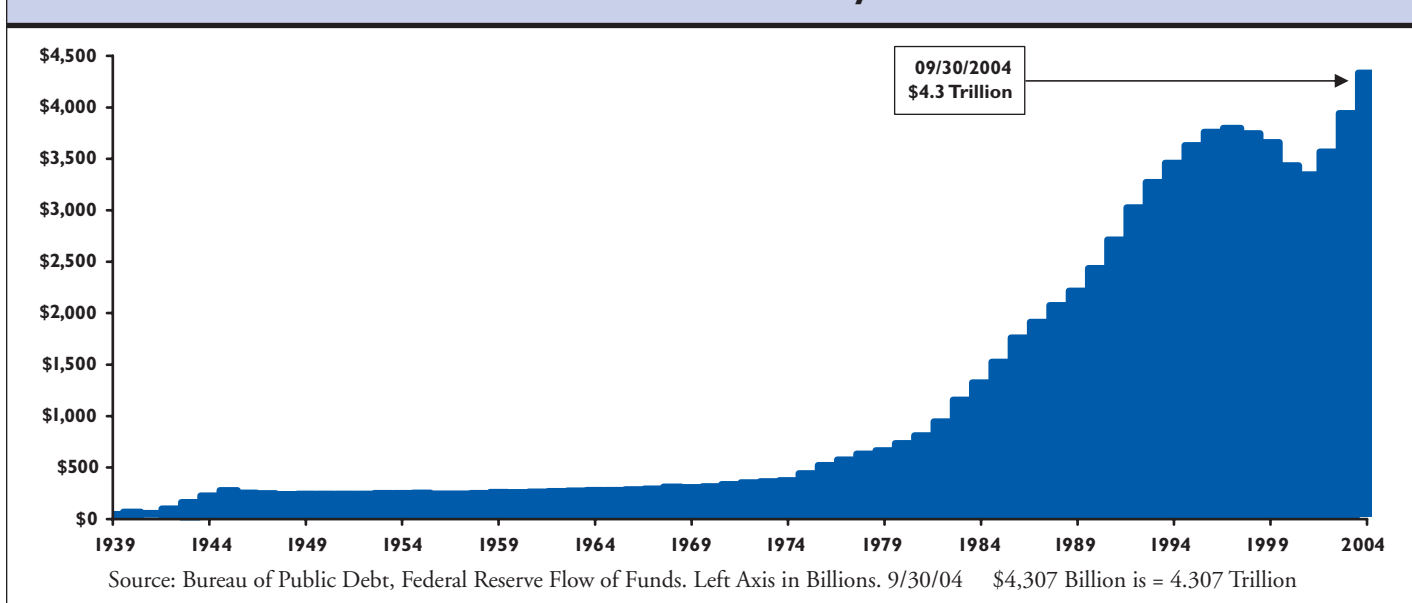
*“The budget should be balanced, the Treasury should be refilled, public debt should be reduced, the arrogance of officialdom should be tempered and controlled, and the assistance to foreign lands should be curtailed lest Rome become bankrupt.”*

—Marcus Tullius Cicero (106-43 B.C.)

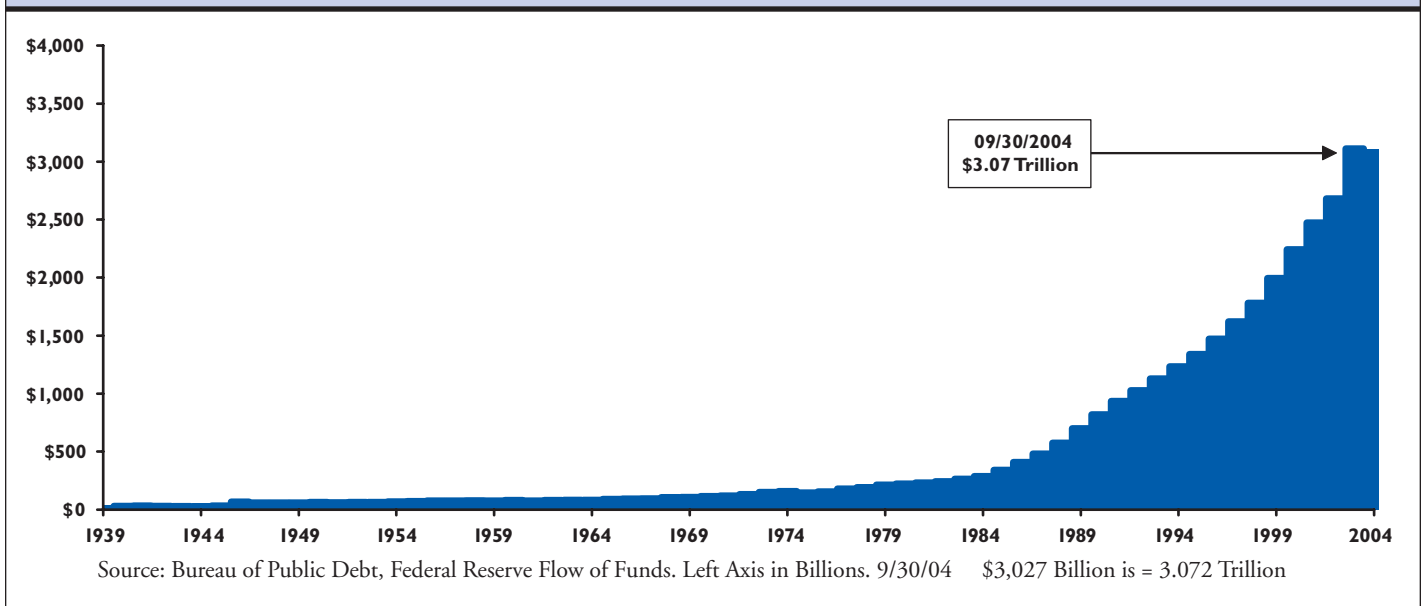
## Federal Debt Held by the Public

The federal debt today is the highest it has been in our nation’s history. According to the Bureau of Public Debt and the Federal Reserve, the outstanding federal debt held by the public stands at \$4.3 trillion (Chart 37). This is debt that has been sold to the public in the form of Treasury bills, notes, and bonds. Typically, when the

**Chart 37: Federal Debt Held by the Public**



### Chart 38: Intra-Agency Governmental Debt



federal debt is reported in the media, it is the federal debt held by the public that is being quoted.

Regarding debt that is held by the public, foreigners continue to play a larger role than they had in the past. In 1984, foreigners owned just 13.51% of the federal debt held by the public (Chart 17). By 1994, this percentage grew to 19.11%. As of June 30, 2004, foreigners own 41.79%, or \$1.8 trillion of the \$4.3 trillion in debt held by the public.

While this has been helpful in fueling the bull market and keeping interest rates low, it does have some serious drawbacks. The danger in having foreigners own such a disproportionate share of our country's federal debt is that at some point into the future they may lose confidence in holding our debt. If foreigners lose confidence in the U.S. dollar or creditworthiness, they may decide to discontinue their purchasing of more federal debt. The following are just a few of the events that may trigger this loss of confidence:

- The U.S. dollar declines
- The U.S. budget deficit increases
- The U.S. trade deficit increases
- The U.S. adopts protectionist policies
- The U.S. does not fix its current fiscal situation

In addition to avoiding the purchase of new federal debt, foreigners may also sell some of the debt they already own. Regardless of the action they may take, either one would depress bond prices and in turn increase interest rates.

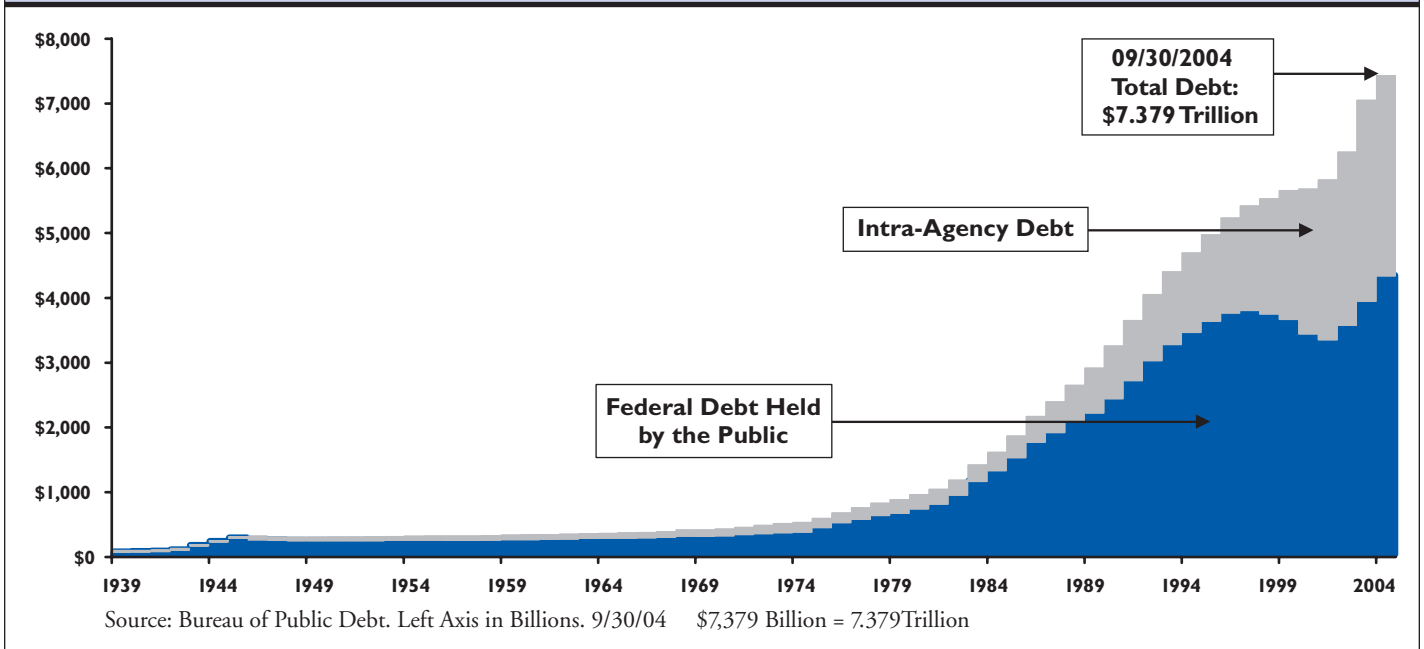
Equally as important to foreigners purchasing U.S. debt is their increased investment in U.S. equities. Again, should foreigners lose confidence in the U.S. dollar or creditworthiness, they may decide to discontinue investing in U.S. equities or even begin to sell existing holdings. Should this be the case, it too would put downward pressure on the U.S. equity markets.

#### Intra-Agency Debt

There is more federal debt than what is held by the public. This second component is called intra-agency debt, which amounts to \$3.07 trillion (Chart 38). Intra-agency debt is generally not discussed at great length in the media or by government officials as many do not think of intra-agency debt as debt. Intra-agency debt is basically the government borrowing from itself. As people pay taxes designed to cover Medicare and Social Security, the receipts go into a dedicated trust fund. With a large baby boomer population paying into this trust fund over the years, it has been running a surplus. In other words, more has been coming in from tax receipts than going out in benefit payments.

This surplus, as with any pension fund, is supposed to be set aside to pay for future benefit obligations that have been promised by the government for Medicare and Social Security benefits. However, in order to balance the budget, the government has conveniently "borrowed" money from this trust fund and used it to pay for the general expenses of running the government, thereby leaving the dedicated trust fund with an IOU. These IOU's then fall into the category of intra-agency debt. What seems to get overlooked is that even though the

**Chart 39: Total Federal Debt Outstanding  
(Debt Held by Public + Intra-Agency Debt)**



government has borrowed from itself, it must still make good on the promised benefits to those who have contributed. The problem will arise when money coming in from tax receipts is no longer sufficient to cover the benefits being paid and the surplus is depleted to zero.

In 2008, the first wave of baby boomers will become eligible for Social Security. This will continue through 2030, as the 65+ age group will more than double to 70 million, thereby adding to the list of eligible recipients to collect on their promised benefits. Since the Medicare and Social Security trust fund now holds an IOU, the money to pay for these benefits will need to come from the government's general fund. However, with no surplus in the government's general fund, the government will need to create a larger deficit or borrow more money from the public to pay for these benefits. Either way, the money is owed and must be re-paid. **When the debt that is held by the public is added to the intra-agency debt, the total debt is \$7.379 trillion (Chart 39).**

### Present Value of Future Benefit Obligations

*"Truth is not only violated by falsehood;  
it may be outraged by silence."*

—Henri-Frederic Amiel (1821-1881)

The third section of the federal debt is the most dramatic. This debt includes the present value of all future Medicare and Social Security benefits that have been

promised. This is commonly referred to as the unfunded pension liability. The government will be paying this out over the next 75 years minus the money that comes in from taxes. **All totaled, the present value of future benefits the government owes is \$26.858 trillion (Chart 40, Row A).**

For corporations in America, the law states that money must be set aside to cover their promised benefit obligations. However, the same rules do not apply to the government. Furthermore, in addition to leaving an IOU for the trust fund surplus borrowed (intra-agency debt), the government also left an IOU for all the future benefits that will be owed, as nothing has been set aside. **Combine all three sections of the federal debt (held by the public (\$4.3) + intra-agency (\$3.07) + future benefit obligations (\$26.858) and the total monies owed now comes to \$34.23 trillion!**

The amount of federal debt today is a very serious problem. In addition to the debt itself, lack of governance and oversight surrounding the U.S. government's financial statements, as well as the inadequate accounting surrounding unfunded pension liabilities that are used to pay for Medicare and Social Security, are also huge problems. Over the past few years, many steps have been taken to clean up the abuses throughout Corporate America. The most sweeping legislation took place on July 30, 2002, when the U.S. Congress passed the Sarbanes-Oxley Act which now holds corporate executives accountable for their financial practices and corporate governance.

Unfortunately, the United States government's financial statements are only accountable to Congress. They are not subject to the governing laws under the Sarbanes-Oxley Act which Congress passed. Talk about the fox guarding the hen house! If the Sarbanes-Oxley Act was to be applied to the U.S. government budget, there would be many government officials going to jail. To give you an example of the lack of governance and oversight being applied to the U.S. budget and its consolidated financial statements and why we are concerned, we have listed a few disclosures and footnotes from the auditors at the Government Accounting Office (GAO).

Before reading the disclosures and footnotes, we would like to point out the following. While we studied the 2003 U.S. Budget<sup>(54)</sup> and read the 2003 Economic Report of the President,<sup>(55)</sup> we came to the conclusion that the gross accounting abuses, as written by the auditors, have been going on for at least 35 years. Both Republicans and Democrats are guilty of these abuses because they happened in all administrations. However, one positive thing that can be said for President Bush's administration is that this is the first time that all of the disclosures and footnotes on the consolidated financial statements have been put into a report for the public to view in such detail. Listed below are just a few of the abuses that are now in print in the footnotes of the report.

### **Government Financial Statement Disclosures**

"Our report on the U.S. government's consolidated financial statements for the fiscal years 2003 and 2002 is enclosed. As in the 6 previous fiscal years, certain material weaknesses in internal control and in selected accounting and reporting practices resulted in conditions that continued to prevent us from being able to provide the Congress and American citizens an opinion as to whether the consolidated financial statements of the U.S. government are fairly stated in conformity with U.S. Generally Accepted Accounting Principles." (David M. Walker, Comptroller General of the United States, General Accounting Office Report DTD February 27, 2004, page 29).

"There are three primary reasons why the consolidated financial statements remained unauditible for the fiscal year 2003: (1) serious financial management problems at the Department of Defense (DOD), (2) the federal government's inability to account for billions of dollars of transactions between federal government entities, and (3) the federal government's ineffective process for preparing the consolidated financial statements." Added in

footnote: "The Department of Defense (DOD) is at high risk: The Government Accounting Office identifies the DOD at high risk due to either their greater vulnerabilities to waste, fraud, abuse, and mismanagement or major challenges associated with their economy, efficiency, or effectiveness" (David M. Walker, Comptroller General of the United States, General Accounting Office Report DTD February 27, 2004, page 32).

"To date, none of the military services or major Department of Defense components has passed the test of an independent financial audit because of pervasive weaknesses in financial management systems, operations, and controls" (David M. Walker, Comptroller General of the United States, General Accounting Office Report DTD February 27, 2004, page 33).

"The Administration has launched a major effort to eliminate erroneous payments- in other words, payments the Government makes in error. In most instances, such payments are overpayments. However, in all cases, taxpayers are shortchanged. Information we have today tells us that for programs with nearly \$1 trillion in annual payments, erroneous payments exceed \$35 billion annually" (2003 Financial Report of the United States Government, Management's Discussion and Analysis (Systems, Controls, and Legal Compliance...Eliminating Erroneous Payments) Page 26). (CM note: Only the U.S. government can overpay \$35 billion dollars and still manage to shortchange everybody).

Footnote 15: "This report included 44 recommendations to address weaknesses we identified. It also included recommendations related to 16 disclosure areas that are required by GAAP. We recommended that the 16 disclosures that are not included in the consolidated financial statements either be included or that the rationale for their exclusion be documented" (David M. Walker, Comptroller General of the United States, General Accounting Office Report DTD February 20, 2004, page 43).

"Because of the federal government's inability to demonstrate the reliability of significant portions of the accompanying fiscal years 2003 and 2002, the U.S. government's consolidated financial statements and limitations on the scope of our work related to the preparation of the consolidated financial statements, and management and legal



**Chart 40: Overall Perspective on U.S. Budget**

Overall Perspective		2003			2002			Difference
(In Billions of Dollars)	Balance Sheet	Additional Responsibilities	Combined Accounts		Balance Sheet	Additional Responsibilities	Combined Accounts	In Combined Accounts
<b>Assets</b>								
Inventory, cash	\$361	-	\$361		\$334	-	\$334	\$27
Property, plant & equipment	\$658	-	\$658		\$325	\$616	\$941	(\$283)
Loans receivable	\$221	-	\$221		\$219	-	\$219	\$2
Other	\$154	-	\$154		\$119	-	\$119	\$35
<b>Total Assets</b>	<b>\$1,394</b>	<b>-</b>	<b>\$1,394</b>		<b>\$997</b>	<b>\$616</b>	<b>\$1,613</b>	<b>(\$219)</b>
<b>Liabilities &amp; Net Responsibilities</b>								
Social Insurance								
Medicare (Parts A&B)	-	(\$15,006)	(\$15,006)		-	(\$12,896)	(\$12,896)	(\$2,110)
Social Security (OASDI)	-	(\$11,742)	(\$11,742)		-	(\$11,215)	(\$11,215)	(\$527)
Other (Railroad Retirement)	-	(\$110)	(\$110)		-	(\$38)	(\$38)	(\$72)
<b>(A) Subtotal, Social Insurance</b>	<b>-</b>	<b>(\$26,858)</b>	<b>(\$26,858)</b>	<b>(A)</b>	<b>-</b>	<b>(\$24,149)</b>	<b>(\$24,149)</b>	<b>(\$2,709)</b>
<b>(B) Fed. Empl. &amp; veterans pensions/benefits</b>	<b>(\$3,880)</b>	<b>-</b>	<b>(\$3,880)</b>	<b>(B)</b>	<b>(\$3,589)</b>	<b>-</b>	<b>(\$3,589)</b>	<b>(\$291)</b>
Federal debt held by the public	(\$3,945)	-	(\$3,945)		(\$3,573)	-	(\$3,573)	(\$372)
Other liabilities	(\$674)	-	(\$674)		(\$654)	-	(\$654)	(\$20)
Other responsibilities	-	(\$862)	(\$862)		-	(\$771)	(\$771)	(\$91)
<b>Total Liabilities &amp; Net Responsibilities</b>	<b>(\$8,499)</b>	<b>(\$27,720)</b>	<b>(\$36,219)</b>		<b>(\$7,816)</b>	<b>(\$24,920)</b>	<b>(\$32,736)</b>	<b>(\$3,483)</b>
<b>Balance (Total Assets minus Total Liabilities &amp; Net Responsibilities)</b>	<b>(\$7,105)</b>	<b>(\$27,720)</b>	<b>(\$34,825)</b>		<b>(\$6,819)</b>	<b>(\$24,304)</b>	<b>(\$31,123)</b>	<b>(\$3,702)</b>
<b>Rows A +B From Above</b>								
<b>*** Subtotal, Social Insurance + Fed. Empl &amp; Veterans Pensions</b>			<b>(\$30,738)</b>				<b>(\$27,738)</b>	<b>(\$3,000)</b>

Source: 2003 Financial Report of the United States Government (Discussion and Analysis / Overall Perspective) page 12 and Fiscal Year 2004 Analytical Perspectives, page 37, Defense Fixed Reproducible Capital, Nonfinancial Assets  
 Note: Overall details may not add to total due to rounding.

representations, all of which are discussed below, we are unable to, and we do not, express an opinion on such financial statements” (David M. Walker, Comptroller General of the United States, General Accounting Office Report DTD February 20, 2004, page 39)

As you can see, there are serious problems in the accounting of the U.S. Budget. However, it is always reassuring that government officials such as Federal Reserve Chairman Greenspan and Secretary of the Treasury Snow see these government problems in a much more positive light than the auditors. For example, Secretary of the

Treasury John W. Snow had this to say when introducing the U.S. Budget for 2003, “While much has been accomplished, much more remains to be done. Our efforts are well underway to eliminate the significant weaknesses cited by the auditors concerning the report’s data and process” (A Message from the Secretary of the Treasury, John W. Snow, February 2004, Regarding the Fiscal 2003 U.S. Budget).

To get an overall perspective of all the assets and liabilities of the U.S. government, we need to review its balance sheet (Chart 40). Our goal in showing the balance sheet is to make you aware of how the real budget deficit is being hidden from the public and to prepare you for the changes that are soon to come.

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In the year 2003, the government spent \$374 billion more than they received in tax revenues (Chart 41). This shortfall is referred to as a budget deficit. While this is a big number, the government increased its liabilities by \$3.7 trillion, in just one year (Chart 40 listed under combined accounts from \$31.123 trillion in 2002 to \$34.825 trillion in 2003 = \$3.7 trillion). How did the government add \$3.7 trillion in debt on its balance sheet and only show a loss of \$374 billion on its income statement?

The answer is that the majority of the increase in liabilities was due to an increase in unfunded pension liabilities of \$3 trillion, which is not amortized or expensed on an annual basis. The unfunded pension liability consists of Medicare, Social Security, and Railroad Retirement Benefits. These are obligations that the U.S. Government has promised to fund.

Under GAAP accounting rules, corporations that have unfunded pension liabilities are required to take a charge against their earnings as well as set reserves for future pension obligations to retired employees. Unlike Corporate America, the U.S. Government has not taken a charge against earnings or put any money aside for its unfunded pension liability. To make matters worse, our government has borrowed money that should have been set aside for reserves and used it for current expenses.

In addition, **the U.S. Budget does not provide a schedule for the proper amortization of its unfunded pension liabilities.** It is, however, mentioned in the footnotes of the budget that the unfunded pension liability is being amortized over 75 years. While the U.S. Government has not been able to come up with the proper amortization for these future pension obligations, we asked pension consultant, Peter Zebot, President

**Chart 41: CM Pro-Forma of the 2003 Summary of the United States Government Budget**

<b>Century Management Pro-Forma Budget for U.S.</b>			
			(1)
<i>(In Billions)</i>	<b>2003 Official Unified Budget Under Cash Basis Accounting</b>	<b>2003 Official Unified Budget Under Accrual Basis Accounting</b>	<b>2003 Official Unified Budget Under Accrual Basis Accounting Plus Annual Unfunded Pension Liabilities</b>
<b>Total Revenue</b>	<b>\$1,796</b>	<b>\$1,796</b>	<b>\$1,796</b>
Less General Cost of Government	(\$2,170)	(\$2,170)	(\$2,170)
Less Additional Accrual		(\$291)	(\$291)
Less Annual Unfunded Pension Liabilities			(\$1,540)
<b>Budget Deficit</b>	<b>(\$374)</b>	<b>(\$665)</b>	<b>(\$2,205)</b>

Source: Century Management, 2003 U.S. Budget, PMZ Consultants

The following footnote comes from the U.S. General Accounting Office and is found on Page 12 of the 2003 US Government Financial Report (U.S. Budget): (1) The social insurance present value amounts are based on 75-year actuarial projections of scheduled benefits and legislated taxes for current participants. These costs amount to: \$15 trillion for Medicare + \$11.74 trillion for Social Security + \$862 billion for Other Retirement + \$110 billion for Railroad Retirement = \$27.72 trillion

**These items are not recorded on the balance sheet** because current accounting standards (GAAP) do not permit it. FASB is reviewing this area and if it determines that it is proper to record these items, we will do so. A more detailed discussion of these projections and the future outlook for Social Security and Medicare is found in the Stewardship Information section.

of PMZ Pension Consultants in Aliso Viejo, California, to see if they could provide the answer for us. They did it in less than 30 minutes.<sup>(56)</sup>

Political complexity, of which both political parties are guilty, is the reason for the improper amortization of future pension obligations, not the complexity of formula or accounting difficulties. Politicians have simply failed to figure out how to tell a whole generation of people who are about to retire, an additional 33 million over the next 25 years (bringing the total expected retirees to 70 million by the year 2030), that there is no way they are ever going to get all that was promised to them over their many working years.

The unfunded pension liability is going to cost \$1.54 trillion (\$1,540,313,793,000) per year.<sup>(57)</sup> If the U.S. Government was to show this amount as an annual expense, the annual budget deficit would go from \$665 billion to over \$2.2 trillion (\$1,540,313,793,000 + \$665,000,000 = \$2.2 trillion)! When we add the total cost to run the government of \$2.461 trillion with the annual cost of Medicare and Social Security of \$1.540 trillion, the true cost of running the government is \$4.001 trillion. When comparing this real cost to the \$1.796 trillion in total revenue that the government collects, you can see that the government is short \$2.205 trillion (Chart 41).

In other words, if the government was to include the already known annual costs of funding the expanding benefits of Medicare and Social Security, there would literally be no money left in the budget to run the government, since Medicare and Social Security alone require over 77% of all the revenue the government takes in through tax collection. Note: This does not include the new Medicare Prescription Drug Bill voted into action in 2003. This drug entitlement will cost an additional \$534 billion over the next 10 years. However, the present value of the program's long-term unfunded liabilities over the next 75 years could be as much as \$8.1 trillion.<sup>(58)</sup>

Unless there are major changes to Medicare and Social Security in the form of reduced benefits, higher

taxes, and postponing the eligible start date to receive benefits, there is no way that the promised benefits will be paid. Period! There is no optimistic economic growth scenario that even politicians could dream up to solve this problem. Changes are inevitable as today's situation is obviously unsustainable. When the public and the world become aware of this, it will have serious implications for the U.S. dollar and the financial markets.

To quote the U.S. General Accounting Office, **"The federal government's gross debt as of September 2003 was about \$7 trillion, or about \$24,000 for every man, woman, and child in the country. However, that number excludes such items as the gap between promised and funded Social Security and Medicare commitments and veterans health care benefits commitments provided through the Department of Veterans Affairs. If these items are factored in, the current dollar burden for every American rises to well over \$100,000.** In addition, the new Medicare prescription drug benefit will add thousands more to that tab" (David M. Walker, Comptroller General of the United States, General Accounting Office Report DTD February 27, 2004, page 34).

### Debt Summary

In summary, corporate debt, while high, is improving. However, consumer and federal debt are at record levels and very troubling. These debt levels would be of even greater concern if a financial mishap was to occur, as there would be fewer options available to prevent the economy from declining. To continue on this path of high or increasing debt is simply unsustainable over the long-run. Nevertheless, even with this debt and the economic challenges ahead, the biggest problem for investors is the overvaluation of equities. If the market was priced to discount these problems, the risk for investors would not be as great as it is today. While many of today's economic problems can be resolved over time, we believe the market's price will eventually discount these concerns, thereby creating great opportunity for investors.

## Section IV: Where We Are Today

Although there are very few bargains in the market today, and we don't know when they will appear, we remain confident that over time opportunities will present themselves. During this past year we have given you this very same answer in our one-on-one client reviews, as well as in our 2003 comprehensive year-end review. Yet a number of clients have responded to us saying, "Every time I ask you if you see any bargains in the market you seem to say the same thing." This type of thinking reminds us of the man who meets with his Pastor and says, "I have been going to this church for ten years and you keep teaching the Ten Commandments; don't you have any fresh or new material?"

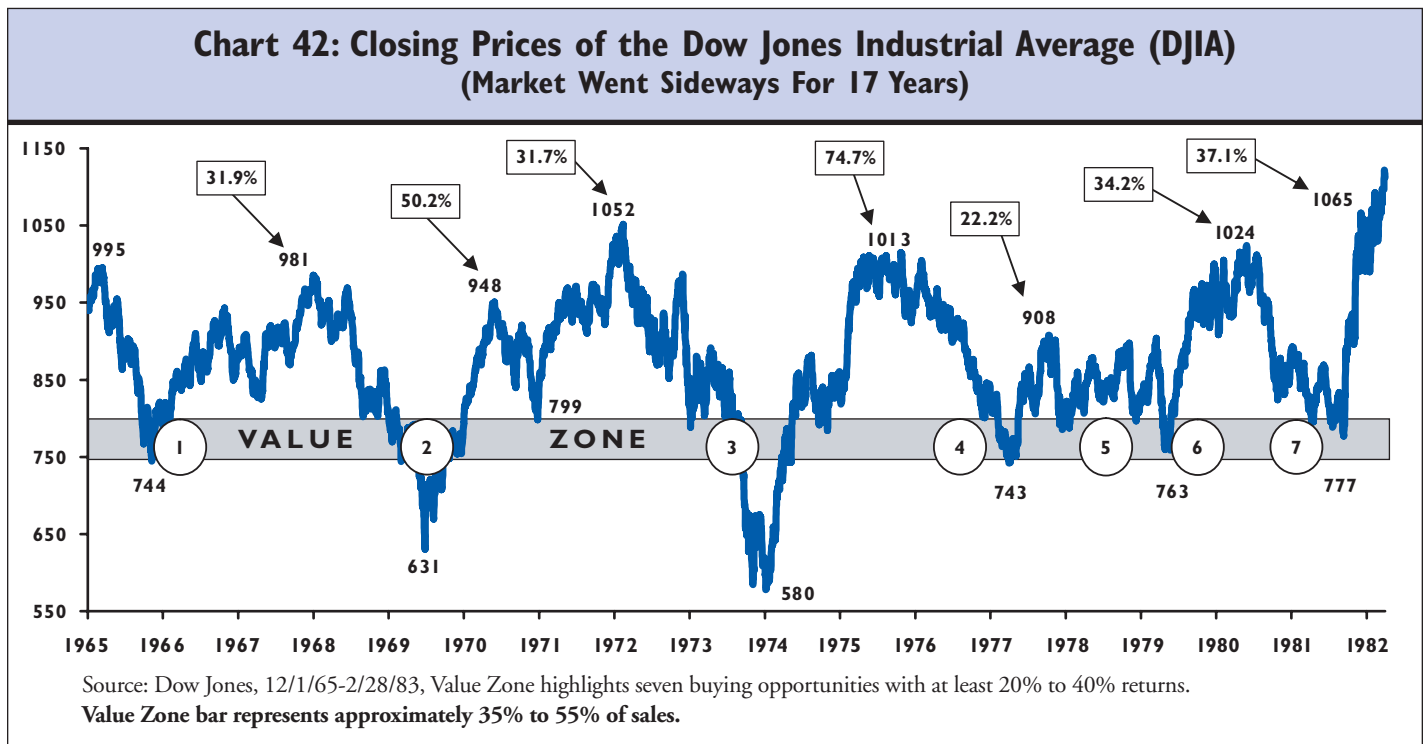
Truth is timeless; it does not change. The fact that the general market is overvalued and consequently offers very few bargains hasn't changed either. As long as the Total Market Price as a Percentage of GDP ratio is at 136% of sales, when the 40 year-average is 76% and the 80-year average is 62% (Charts 3 & 4), the general market is overvalued. Period!

It does not matter how many times people ask the question; asking the question does not change the values. The only time we will change our answer is when the price of the general market or a sector of the market comes down to bargain levels so that *individual stocks* become cheap, or the fundamentals of the market and individual companies go up. No matter how many

times you ask a mathematician what 2+2 is, the answer will always be 4. However, there are many people such as accountants, Wall Street analysts, economists and politicians who will frequently give you a different answer, or at least tell you what you want to hear.

The bottom line is that U.S. equity markets must continue to unwind the excess debt, overcapacity, and overvaluation that built up during one of the greatest bubbles this country has ever known, as well as grow its fundamentals. Nevertheless, we are encouraged that some of the excesses have been worked off. Just ask yourself how many of your neighbors are day trading technology stocks today compared to three years ago? However, our enthusiasm is somewhat tempered in that we are seeing this same type of thinking in the real estate market today.

Our 2003 client review showed various markets throughout history that went to great excess and then took many years to recover once the unwinding process began. As a U.S. example, we illustrated that if you owned a DJIA index fund from 1965 through 1982, it only provided an annualized return of 0.45%, excluding dividends. Drawing a line from the 1965 peak to 1982, it took approximately 17 years to finally recover before making a new high (Chart 42), thus beginning the greatest bull market in history (1982-2000).



Investors who adhered to the “buy and hold forever” strategy, as well as those who believed that buying an index was the only way to go regardless of the fundamentals, made virtually no money during that period. However, for those investors who bought and sold individual stocks based on fundamentals, discipline, and value, there were numerous opportunities to make great profits during this same period. Chart 42 shows at least seven such opportunities where investors stood to make at least 20% to 40% returns had they bought in the value zone.

We also highlighted Japan’s Nikkei 225 index as a more recent example. The Nikkei 225 index in Japan peaked on December 29, 1989 at 38,916 (Chart 43). At that time investors thought that this index could only go one way...up! Others had the mind-set that if they just bought the broad market through an index, they would be diversified and guaranteed to make money with the notion that stocks always go up over the long-run. The mistake in the thinking on both of these accounts is that investors forgot the most important lesson of investing: **The PRICE you pay for an investment determines your return, not how fully invested you are!**

After hitting a bottom of 7,831 on April 30, 2003, the Nikkei 225 is still down 72.18% from its peak after 14.75 years, with a price of 10,824 as of September 30, 2004. This translates into a negative compounded annual return of -8.31% over 14.75 years.

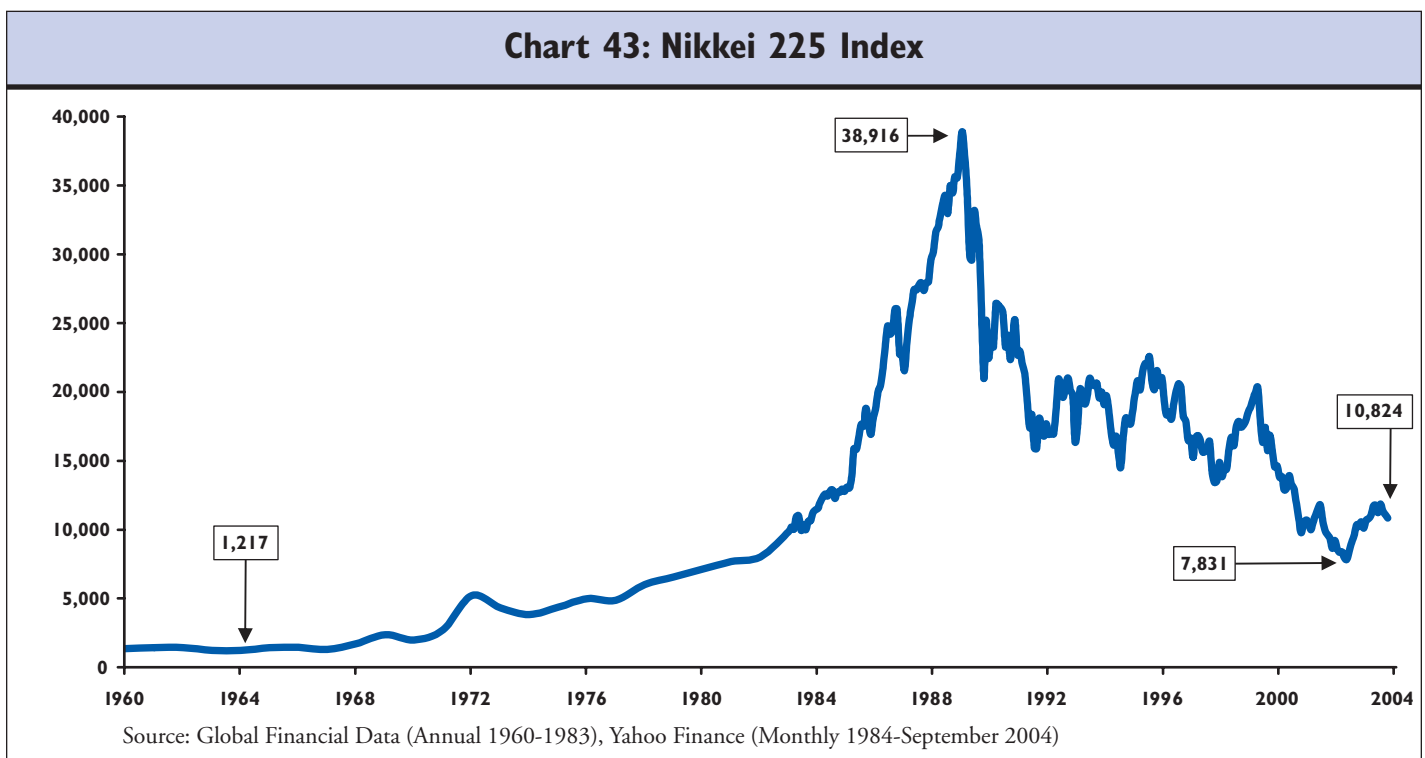
Regardless of whether you are buying stocks, bonds, real estate, or a private business, the price you pay will

ultimately determine your return! The charts we have shown thus far demonstrate what happens when you own over-priced stocks and pay no attention to valuations. You can’t make money as a wholesaler if you have to pay retail. You can’t even make money as a retailer paying retail!

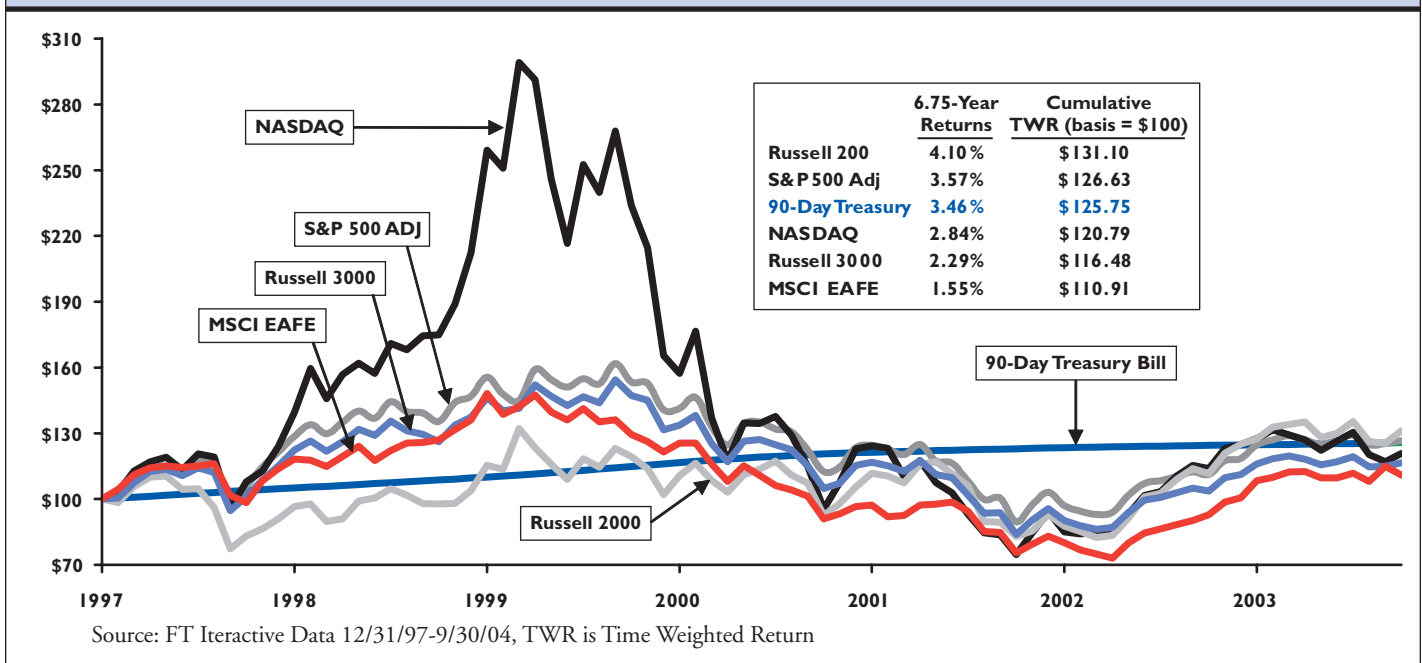
If an investment is not available at the right price, i.e. at bargain levels, it is better to hold cash regardless of its yield, instead of over-paying for an investment that could take years to break even or worse yet, *lose your principal*. However, holding cash for most people is contrary to conventional wisdom. Most people feel that it is impossible to time the market and therefore, they should be fully invested at all times; otherwise they risk missing out on the opportunity to have a great return.

Chart 44 shows that while you cannot time the market, if it’s not a value, it doesn’t always pay to be in it. Furthermore, it shows that on an annualized basis for the past 6.75 years, the U.S. 90-Day Treasury bill (cash equivalent) had an annualized return of 3.46%. This outperformed the NASDAQ, the Russell 3000, and the Morgan Stanley Europe, Asia, Far East (MSCI EAFE) indices. Only the S&P 500 and the Russell 2000 outperformed the 90-Day Treasury bill during this period. However, if we were to deduct the 0.2% management fees associated with owning an index fund, the 90-Day Treasury bill would have outperformed the S&P 500 as well.

While cash, as represented by the 90-Day Treasury bill, has outperformed these indices for the past 6.75 years, this is not the first time. Cash also outperformed



**Chart 44: Cash Outperforms When Equity Markets are Overvalued**



the market for 15 years, from 1966 through 1981 (Chart 45). In addition, the U.S. 90-Day Treasury bill has outperformed the Nikkei 225 index (Chart 43) for the past 14.75 years.

In every great fallacy there is a kernel of truth with a big lie wrapped around it. The kernel of truth in conventional wisdom is that you cannot time the market. Knowing exactly when the market is going to weigh-in and recognize the value is something that no one can predict. However, the big lie wrapped around it is that since the market cannot be timed you should always be in it.

This is like saying if you are driving your car and you have a bald tire with the threads showing, you should continue to drive on that tire since it always held up in the past and no one can predict when a tire (or a market) is going to blowout. Wouldn't it be more prudent to recognize that a bald tire with the threads showing is a huge risk, and that it would be better to wait for a new tire even if it means postponing your trip? In the example of your portfolio, you are risking your life savings; in the example of the tire, you are risking your life. *After reviewing these two scenarios, we are sure glad we don't have to give advice on tires!*

**If being fully invested in overvalued markets is not the answer, then how do we invest?**

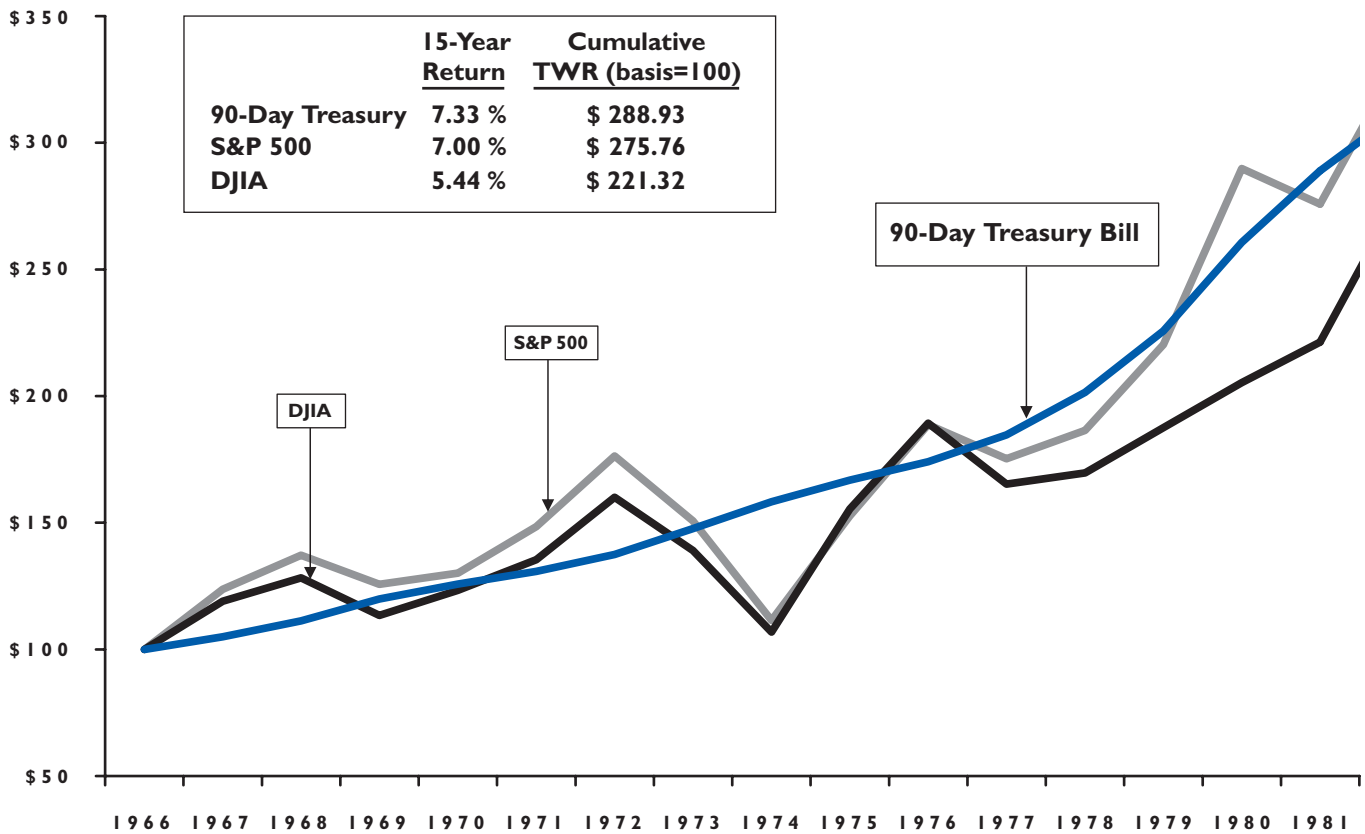
The good news is that in managing your portfolios we do not subscribe to conventional wisdom, popular opinion, Wall Street's conflicted research, or the majority of economic forecasters (Wall Street's version of the

weatherman) with their optimistic, yet poor predictions and dismal records. Rather we subscribe to the time tested philosophy, as taught by Benjamin Graham, of buying fractional shares of businesses at discounts to their intrinsic values. If there are no discounts available (cheap stocks), we wait.

At times, this causes the cash balance of the portfolio to increase. However, the build-up of cash serves two purposes. **First**, it is a safe place to hold the proceeds from stocks that are sold to lock in gains once the companies reach their fair market values. By exercising this sell discipline, we can avoid future declines from what are then fully priced companies. **Second**, the cash provides us the opportunity to plant new seeds for the future harvest at bargain prices, thus beginning the investment cycle all over again. Chart 46 shows the results of this discipline. Even though our client portfolios averaged between 25% and 55% cash during this period (12/31/97 through 09/30/04 or 6.75 years), the CM Value I Composite<sup>(59)</sup> produced an annualized return of 16.60% net of fees back to investors compared to the fully invested S&P 500 index of 3.57%.

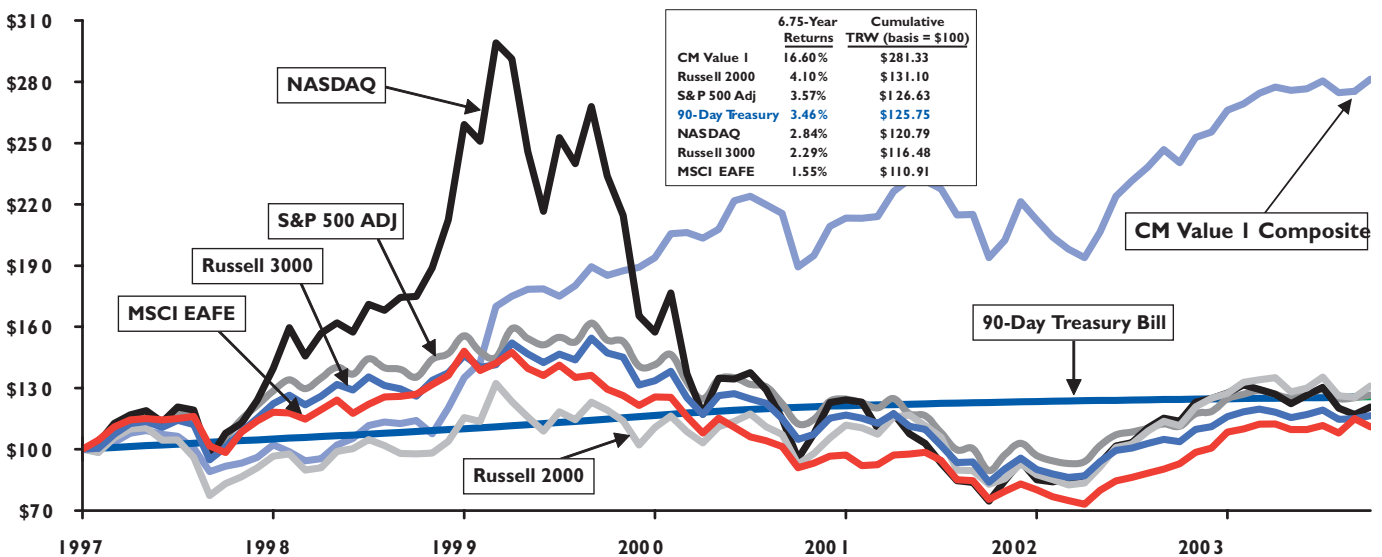
Today, as we search for bargains and investment opportunities, we are finding very few stocks selling at 50% to 70% discounts to their intrinsic values that our discipline requires. With this being the case, how then can we position ourselves to profit in this kind of market environment? The answer is simple. We will continue to stick to the same value discipline we have been using for the past 30 years:

### Chart 45: Cash Outperformed Equities from 1966 through 1981 (15 Years)



Source: Bloomberg, 12/1966-12/1981, \$100 in S&P 500 and DJIA vs. \$100 in 90-Day Treasury all adjusted for inflation. TWR is Time Weighted Return, Returns are annualized.

### Chart 46: Value Versus the Overvalued (Giving New Meaning to Regression to the Mean!)



Source: FT Interactive Data 12/31/97-9/30/04, TWR is Time Weighted Return

### Chart 47: CM Value I Composite Average Cash Position

(Sept. 30, 2004 is Our Highest Cash Position in 30 Years)

Sept. 30, 2004	65.03%
1-Year Avg.	56.37%
3-Year Avg.	40.89%
5-Year Avg.	34.32%
10-Year Avg.	25.80%
30-Year Avg.	21.10%

Source: Century Management September 1974 through September 2004

1. Buy stocks only when they are selling at significant discounts (50% to 70%) of their private market (intrinsic) values.
2. Sell stocks when they are approaching 80% of their private market (intrinsic) values.
3. Continue to ignore the “wisdom” and advice of Wall Street’s economic projections and government pronouncements, as well as disregard media hype and sensationalism.

4. If we find there is nothing cheap to buy, we wait in cash or cash equivalents and avoid the potential for permanent loss of capital.

With nothing cheap to buy, this is precisely what we are doing today. We have found very few replacements, if any, for the stocks that have been sold in your portfolios during the past year. As a result, cash has continued to build. As of September 30, 2004, our average client portfolio, as measured by our CM Value 1 Composite, has approximately 65% of the portfolio in a money market fund or short-term U.S. Treasury bills. For clients who started with us between late 2003 through today, your cash positions are even higher, as there have been few bargains available for investment since you joined our firm. Chart 47 shows today’s cash position is more than three times our 30-year average and our highest cash position ever! This will give you some indication of just how expensive we believe most stocks and bonds are today.

To quote Jim Rogers, former partner of the Quantum Fund (the longest and most successful hedge fund on record), **“One of the best rules anybody can learn about investing is to do nothing, absolutely nothing, unless there is something to do. Most people always have to be playing...they always have to be doing something.”**

## Section V: Four Market Scenarios for Stocks and Bonds

So far, we have demonstrated that while corporations have improved their balance sheets by adding cash, their debt levels compared to GDP are still much higher than their 59-year average. However, when we compare Corporate America to the consumer and the U.S. government, it is in much better shape.

We have also demonstrated that consumers have added debt at record levels and that their ability to service this debt is reaching their upper limits. In addition, by reviewing the finances of the U.S. Government, and applying the proper accounting rules, we can see that the government can never fulfill its current financial obligations with regard to Medicare and Social Security without greatly reducing the promised benefits.

Furthermore, the prospect of larger budget and trade deficits continue to put pressure on the U.S. dollar. Additionally, foreigners now own almost 41.79% of the outstanding U.S. debt held by the public. Equally important, foreigners have been large buyers of U.S.

equities. Any loss of confidence in our currency would only encourage these foreigners to sell their U.S. stocks and bonds. Consequently, this sell-off could place additional pressure on a recovering economy.

After reviewing the debt, the economy, the markets, and similar economic situations of the past and present in both domestic and world economies, we see four possible scenarios for the market. They are low interest rates and low inflation (best case), deflation, stagflation, and inflation. These scenarios are nothing new, as they have always been possible. However, in the past, the probability that we would be faced with serious deflation or inflation was very small. This is no longer the case. The risk of deflation has increased dramatically with the increased leverage that has been added throughout our economy in just the last 10 years. In trying to prevent the pain of serious deflation, the government could overreact by creating excess stimulus which can eventually lead to inflation.



Each of these scenarios is greatly impacted by interest rates and the direction of inflation. In developing these scenarios we considered the following:

1. The average inflation rate (CPI) over the past 50 years is 3.98%, the median is 3.21%, and the extreme high exceeded 14% in 1980 (Chart 57).
2. For the past 51.5 years the average premium for the 10-year Treasury bond over inflation has been 2.68%.<sup>(60)</sup> Example: If you add the 2.68% premium for the 10-year Treasury bond to the median inflation rate of 3.21%, it equals a 5.89% interest rate on the 10-year Treasury bond.
3. For the past 37.5 years the average premium for the 20-year Treasury bond over inflation has been 3.03%.<sup>(61)</sup>
4. We believe that interest rates in the future should average the inflation rate plus approximately 3%.

In each of these scenarios, we show a range of profit margins and P/E multiples that will help provide a summary of our projected returns for the S&P 500 over the next 5 years. Furthermore, we are highlighting what we believe to be the more likely results given each scenario's economic and market environment. However, listed in the appendix at the back of this report, we have included an expanded set of profit margins and P/E multiples so that you can review other possible results.

In addition to showing our projected 5-year returns for the S&P 500 from today's price of 1185, we also show our projected returns if we were able to buy the S&P 500 index 25% to 50% cheaper than today's

price. Last, we have included our 5-year projected returns for 5, 10, and 30-year Treasury bonds in each of the four scenarios.

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### Scenario 1: Best Case/Federal Reserve's Goal (Low interest rates and low inflation)

This scenario is the most optimistic of the four scenarios we are presenting. It assumes that we have low inflation (below 3%), we avoid recessions and financial mishaps, earnings and employment continue to grow, energy prices are contained, there is no major decline in the U.S. dollar, Asian countries remain healthy, and we avoid any major terrorist attacks or additional military conflicts. In addition, it assumes maintaining peak profit margins that have only occurred four times in 75 years, as well as peak P/E multiples. This type of peak is rarely sustained for any great length of time.

Historically, once at this kind of peak, it typically takes less than 2.5 years before margins go back to their long-term sustainable averages. Therefore, while anything is possible, this best case scenario is a tall order as it requires a perfect world. We believe it has a very low probability of being realized. However, we still show this scenario as one of the possibilities since anything is possible on "Wall Street". At least in the short-run!

The more realistic best case scenario, since we are projecting five years out, is to use a peak P/E multiple of 22 with the long-term average after-tax profit margin of 5.5%, instead of the 7.92% shown on the chart. Chart 48, Set 1 shows this best case scenario would yield a 5-year annualized return of just 1.6%.

**Chart 48: 5-Year CM Projected Best Case Scenario for S&P 500**

After-Tax Profit Margin	Various P/E Ratios	CM Projected S&P 500 Sales 5-Years Out Assuming 7% Growth	Assumed S&P 500 Index Purchase Price	CM Projected Price For S&P 500 In 5 Years	Total 5-Year Return	Annualized 5-Year Return
<b>Set 1: S&amp;P 500 From: Today</b>						
7.92%	22	1,060	1,185	1,848	55.9%	9.3%
5.50%	22	1,060	1,185	1,283	8.3%	1.6%
<b>Set 2: S&amp;P 500 Starting: 25% Less</b>						
7.92%	22	1,060	889	1,848	107.9%	15.8%
5.50%	22	1,060	889	1,283	44.3%	7.6%

Note: Please see appendix for a wider choice of P/E ratios and profit margin scenarios. Source: Century Management.

**Chart 49: 5-Year CM Projected Best Case Scenario for Bonds**

Assumed Interest Rate in 5 Years	5-YEAR TREASURY BOND		10-YEAR TREASURY BOND		30-YEAR TREASURY BOND	
	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return
4%	19.06%	3.55%	23.79%	4.36%	39.01%	6.81%
5%	19.06%	3.55%	19.52%	3.63%	25.82%	4.70%

Source: Century Management. Scenario assumes 5-year bond is held to maturity. 10- and 30-year bonds are still held in a hypothetical portfolio. Bond prices quoted from Bloomberg on 11/15/04. 5-year bond assumed purchase price 99.34 due 10/15/09. 10-year bond assumed purchase price 100.5 due 8/15/14. 30-year bond assumed purchase price 107 due 2/15/31.

However, if we were able to buy the S&P 500 25% cheaper than today, at 889 per share instead of 1185 per share, Chart 48, Set 2, shows the 5-year annualized return could increase to 7.6%.

Assuming the same best case environment for bonds as for equities, Chart 49 shows our projected returns for 5, 10 and 30-year U.S. Treasury bonds. If we were to hold each of these bonds for a period of 5 years, we would expect the 30-year bond to provide the highest return. If long-term interest rates were 5% in 5 years, the 5-year annualized return on the 30-year bond would be 4.7%. However, if long-term rates were 4% in 5 years, the 5-year annualized return on the 30-year bond would increase to 6.81%.

In summary, should the best case scenario occur over the next 5 years, we would expect stocks, as represented by the S&P 500, to yield an annualized return between 1.6% and 9.3%. We would expect bonds to yield an annualized return between 4.7% and 6.8%. Based on today's prices, we can see that bonds are a better choice, especially if we adjust for the risk. By looking at the low return on stocks when compared to bonds, **even under this best case scenario, we can get a greater appreciation of just how overvalued the stock market really is today.**

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## Scenario 2: Deflation

**(Century Management has used assumptions that are likely to occur during a recessionary environment, including high unemployment)**

Deflation is a contraction of economic activity resulting in a decline of prices caused by a reduction in the supply of money or credit. It can also be described as a lower demand for goods and services (due to the consumer burdened with debt) or an increase in supply due to excess capacity. During deflation, asset prices such as stocks and real estate come under tremendous pressure.

Chairman Alan Greenspan and the Federal Reserve have been greatly concerned about the prospect of deflation. Therefore, they have studied the Japanese economy as a primary example of what not to do. Since 1989, when Japanese assets were at their peak, prices have been in a continual decline. Their stock market is down 72% over the last 15 years and real estate is down more than 50%. Loans have been defaulting in such volume that if Japanese banks were to write-off all their bad loans most of them would be bankrupt.

***What then could make our economy go the way of deflation?*** Since 1992, capital spending as a Percentage of GDP went from 9.5%, its 50-year average, up to 12.6% in 2002.<sup>(62)</sup> This over-investment created excess capacity not only in the technology sector, but in many other sectors as well. While some of this overcapacity has been worked off as the result of plant closings and layoffs, it still has a long way to go. As long as companies are forced to close plants and layoff thousands of people in order to remain competitive, it will continue to be difficult to create new jobs or to increase wages.

In addition, as previously mentioned, the consumer is highly leveraged and therefore not in a position to continue purchasing goods and services at the same record pace as they have in the past few years. Furthermore, with the personal savings rate at slightly above zero, the consumer has little left over with which to make new investments that would generate future economic growth. This is significant because new investments on the part of consumers and corporations have been responsible for 16% of the economy.

With the U.S. consumer heavily in debt and China growing rapidly, any mishap that shocks this relationship could result in a recession and put the U.S. at risk of deflation. During deflation, employment and consumer spending would decline. China, relying on the U.S. consumer, would see a significant reduction in purchases from its largest customer. This combination

**Chart 50: 5-Year CM Projected Deflation Scenario for S&P 500**

After-Tax Profit Margin	Various P/E Ratios	CM Projected S&P 500 Sales 5-Years Out Assuming 7% Growth	Assumed S&P 500 Index Purchase Price	CM Projected Price For S&P 500 In 5 Years	Total 5-Year Return	Annualized 5-Year Return
<b>Set 1: S&amp;P 500 From: Today</b>						
3.50%	25	1,060	1,185	928	-21.7%	-4.8%
3.50%	24	1,060	1,185	891	-24.8%	-5.5%
3.50%	23	1,060	1,185	854	-27.9%	-6.3%
<b>Set 2: S&amp;P 500 Starting: 25% Less</b>						
3.50%	25	1,060	889	928	4.4%	0.9%
3.50%	24	1,060	889	891	0.2%	0.0%
3.50%	23	1,060	889	854	-3.9%	-0.8%
<b>Set 3: S&amp;P 500 Starting: 50% Less</b>						
3.50%	25	1,060	593	928	56.5%	9.4%
3.50%	24	1,060	593	891	50.3%	8.5%
3.50%	23	1,060	593	854	44.0%	7.6%

Note: Please see appendix for a wider choice of P/E ratios and profit margin scenarios. Source: Century Management.

of excess capacity in the U.S. and China, coupled with weak consumer demand, would lead to consumer price declines and would place significant pressure on corporate profits and employment.

Finally, consumer demand is also driven by employment. Since the start of the last recession, we have yet to replace 1.6 million jobs that were lost if you do not include government employees, or 954,000 jobs if you do include government employees. While the economy has been adding jobs, they have been

added at the slowest rate coming out of any past recession. Therefore, if consumers are spending more of their income just to pay down debts, while at the same time new jobs are not being created in a meaningful way, the economy could start to decline.

During deflation, stocks and real estate will decline in value. Again, we only have to look at Japan to see the devastation of deflation. The only asset class that would increase during deflation is bonds. During deflation, interest rates decline due to the lack of demand for

**Chart 51: 5-Year CM Projected Deflation Scenario for Bonds**

Assumed Interest Rate in 5 Years	5-YEAR TREASURY BOND		10-YEAR TREASURY BOND		30-YEAR TREASURY BOND	
	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return
3.5%	19.06%	3.55%	26.06%	4.74%	46.46%	7.93%
4%	19.06%	3.55%	23.79%	4.36%	39.01%	6.81%

Source: Century Management. Scenario assumes 5-year bond is held to maturity. 10- and 30-year bonds are still held in a hypothetical portfolio. Bond prices quoted from Bloomberg on 11/15/04. 5-year bond assumed purchase price 99.34 due 10/15/09. 10-year bond assumed purchase price 100.5 due 8/15/14. 30-year bond assumed purchase price 107 due 2/15/31.

money as the economy is contracting. In order to create demand, interest rates are dropped to encourage spending and investment.

However, in deflation declining interest rates and lower consumer prices no longer provide stimulus to the economy. In other words, in a deflationary period, demand for goods does not increase with cheaper money and lower prices. As rates come down, bond prices rally and bondholders come out as winners in this environment. This is one of the reasons we bought bonds in the past and are willing to buy them again in the future once they provide us with the proper reward to risk ratio (bargain prices).

The danger in deflation is not only deflation itself, but the panic it could create in the financial markets, along with the government's reaction while trying to prevent it. The government could try to prevent deflation by printing money and expanding the money supply. However, if overdone, this reaction could cause serious inflation. It is this potential overreaction and the possibility of serious inflation that we believe will be a problem over the long-run.

Absent a financial mishap in the derivative market, major hedge fund failure, or the collapse of a major financial institution, we would expect the government to be able to contain deflation. With that said, because of the record levels of debt, increased use of derivatives, and the high level of speculation among hedge funds, there is now a greater probability of a major financial mishap than ever before.

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### Scenario 3: Stagflation

**(CM has used 2004 projected S&P 500 earnings by I/B/E/S and has assumed a 7% growth rate in earnings for 5 years. This chart assumes inflation between 3% and 6%, interest rates between 6% and 9%, along with slow growth or recession, plus a weak economy with higher consumer prices.)**

Stagflation is an economic condition that is characterized by slow growth of the economy, rapidly rising consumer prices, and high unemployment. During stagflation we could see a recession, possible trade wars and price

**Chart 52: 5-Year CM Projected Stagflation Scenario for S&P 500**

After-Tax Profit Margin	Various P/E Ratios	CM Projected S&P 500 Sales 5-Years Out Assuming 7% Growth	Assumed S&P 500 Index Purchase Price	CM Projected Price For S&P 500 In 5 Years	Total 5-Year Return	Annualized 5-Year Return
<b>Set 1: S&amp;P 500 From: Today</b>						
5.50%	17	1,060	1,185	991	-16.4%	-3.5%
5.50%	14	1,060	1,185	816	-31.1%	-7.2%
5.50%	13	1,060	1,185	758	-36.0%	-8.5%
<b>Set 2: S&amp;P 500 Starting: 25% Less</b>						
5.50%	17	1,060	889	991	11.5%	2.2%
5.50%	14	1,060	889	816	-8.2%	-1.7%
5.50%	13	1,060	889	758	-14.7%	-3.1%
<b>Set 3: S&amp;P 500 Starting: 50% Less</b>						
5.50%	17	1,060	593	991	67.1%	10.8%
5.50%	14	1,060	593	816	37.6%	6.6%
5.50%	13	1,060	593	758	27.8%	5.0%

Note: Please see appendix for a wider choice of P/E ratios and profit margin scenarios. Source: Century Management.

**Chart 53: 5-Year CM Projected Stagflation Scenario for Bonds**

Assumed Interest Rate in 5 Years	5-YEAR TREASURY BOND		10-YEAR TREASURY BOND		30-YEAR TREASURY BOND	
	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return
6%	19.06%	3.55%	15.42%	2.91%	14.69%	2.78%
7%	19.06%	3.55%	11.49%	2.20%	5.15%	1.01%
8%	19.06%	3.55%	7.78%	1.51%	-2.96%	-0.60%

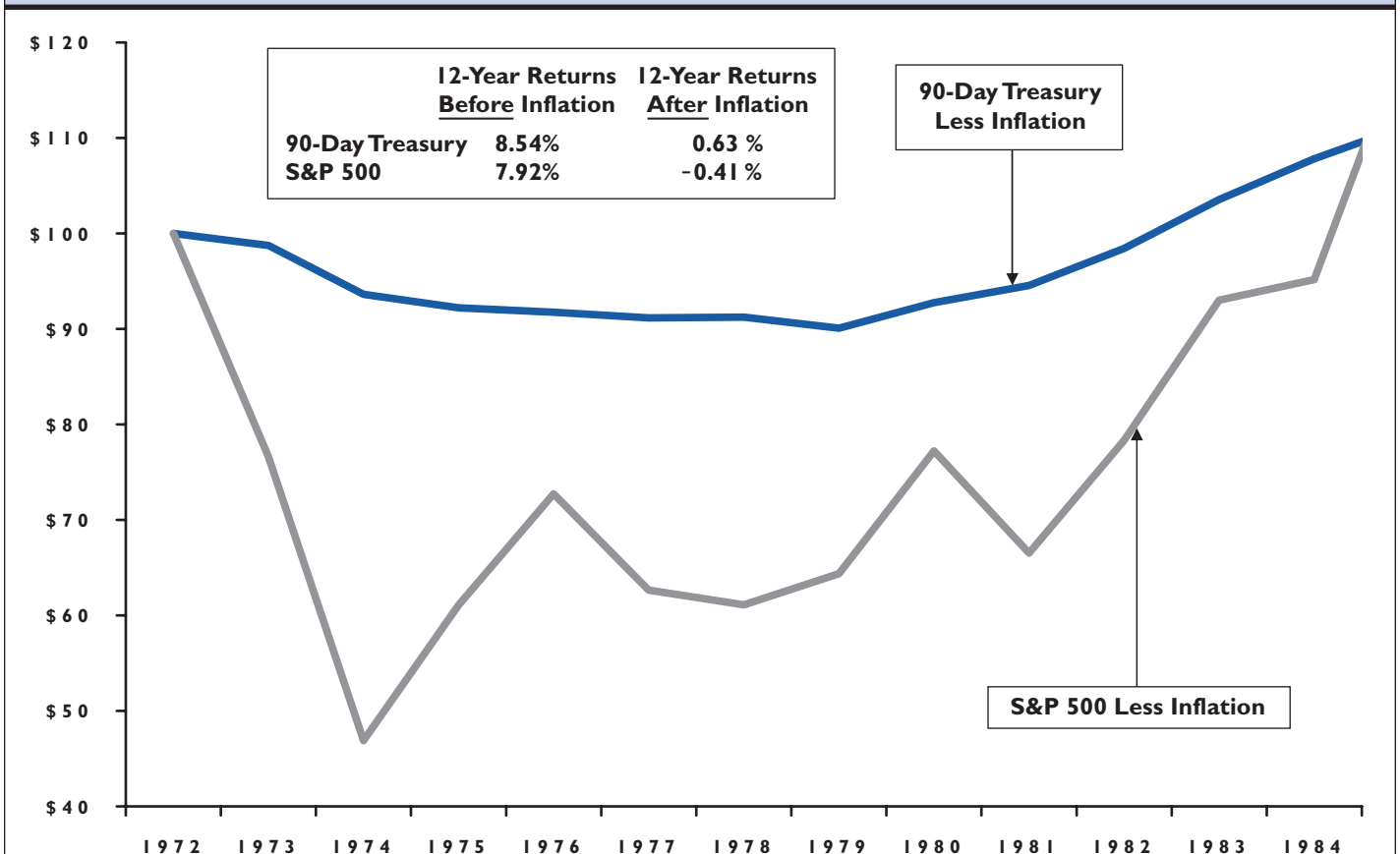
Source: Century Management. Scenario assumes 5-year bond is held to maturity. 10- and 30-year bonds are still held in a hypothetical portfolio. Bond prices quoted from Bloomberg on 11/15/04. 5-year bond assumed purchase price 99.34 due 10/15/09. 10-year bond assumed purchase price 100.5 due 8/15/14. 30-year bond assumed purchase price 107 due 2/15/31.

controls, increasing demand for higher wages, and the government increasing taxes to pay for the deficit. Stagflation usually precedes high inflation. It is how the Federal Reserve reacts to this situation that determines whether we go into higher inflation or deflation.

At this point the economy and wages no longer grow, but inflation does. For example, if the economy and

wages have peaked at 6% growth and inflation is at 10%, we have 4% less purchasing power due to this stagflation. In addition to wages not keeping pace with inflation, for those who are retired or on a fixed income, it would take less than 10 years to destroy a lifetime of wealth under stagflation, as the purchasing power of fixed assets could decline to a fraction of their original values.

**Chart 54: S&P 500 Adjusted for Inflation Versus 90-Day U.S. Treasury Bill (90-Day Treasury Bill Outperformed for 12 Years)**



Source: Bloomberg, 12/1972-12/1984, \$100 in S&P 500 vs. \$100 in 90-Day Treasury both adjusted for inflation. TWR is Time Weighted Return, Returns are annualized.

For example, assume inflation of 10% for seven years and an investment portfolio of \$500,000. At the end of the seventh year, if the portfolio had no return, it would lose almost 50% of its purchasing power due to inflation and would have a value of only \$256,579 in real terms (compounded annually). However, if the portfolio declined 30% over this same period in addition to the 10% inflation, at the end of the seventh year the purchasing power of the portfolio would only be \$179,605 (\$500,000 minus 30% = \$350,000. Next, take \$350,000 and adjust it for 10% inflation compounded over 7 years. This equals \$179,605).

What makes stagflation so damaging is that there is a permanent loss in purchasing power of the currency, not just a temporary contraction. For example, Chart 54 shows what happens to the stock market returns in real terms when adjusted for inflation. You can see that \$100 invested in the S&P 500 on December 31, 1972 through December 31, 1984 (12 years), did not outperform \$100 invested in a 90-Day Treasury bill when adjusted for inflation. For those of

you who are anxious about having been in cash for the past 6 to 9 months, please take a deep breath and read this paragraph again!

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#### Scenario 4: Inflation

**(Century Management is assuming 6% growth rate in earnings, interest rates between 9% and 11%, plus 6% to 9% inflation)**

Inflation is defined as a persistent increase in the level of prices or a persistent decline in the purchasing power of money. This is caused by an increase in available currency and credit beyond the proportion of available goods and services. The seeds of inflation are planted when the economy is in need of stimulation, such as in times of a recession, a major economic slow down, or a financial crisis.

However, if inflation continues over a period of time, the stage is set for a massive change in psychology that becomes increasingly difficult to control. Labor demands higher wages, unions gain more power, wage and price controls appear, commodity prices rise and

**Chart 55: 5-Year CM Projected Inflation Scenario for S&P 500**

After-Tax Profit Margin	Various P/E Ratios	CM Projected S&P 500 Sales 5-Years Out Assuming 7% Growth	Assumed S&P 500 Index Purchase Price	CM Projected Price For S&P 500 In 5 Years	Total 5-Year Return	Annualized 5-Year Return
<b>Set 1: S&amp;P 500 From: Today</b>						
5.00%	11	1,060	1,185	583	-50.8%	-13.2%
5.00%	10	1,060	1,185	530	-55.3%	-14.9%
5.00%	9	1,060	1,185	477	-59.7%	-16.6%
<b>Set 2: S&amp;P 500 Starting: 25% Less</b>						
5.00%	11	1,060	889	583	-34.4%	-8.1%
5.00%	10	1,060	889	530	-40.4%	-9.8%
5.00%	9	1,060	889	477	-46.3%	-11.7%
<b>Set 3: S&amp;P 500 Starting: 50% Less</b>						
5.00%	11	1,060	593	583	-1.7%	-0.3%
5.00%	10	1,060	593	530	-10.6%	-2.2%
5.00%	9	1,060	593	477	-19.6%	-4.3%

Note: Please see appendix for a wider choice of P/E ratios and profit margin scenarios. Source: Century Management.

**Chart 56: 5-Year CM Projected Inflation Scenario for Bonds**

Assumed Interest Rate in 5 Years	5-YEAR TREASURY BOND		10-YEAR TREASURY BOND		30-YEAR TREASURY BOND	
	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return	Total 5-Year Return	Annualized 5-Year Return
9%	19.06%	3.55%	4.22%	0.83%	-9.88%	-2.06%
10%	19.06%	3.55%	0.80%	0.16%	-15.84%	-3.39%
11%	19.06%	3.55%	-2.43%	-0.49%	-20.98%	-4.60%

Source: Century Management. Scenario assumes 5-year bond is held to maturity. 10- and 30-year bonds are still held in a hypothetical portfolio. Bond prices quoted from Bloomberg on 11/15/04. 5-year bond assumed purchase price 99.34 due 10/15/09. 10-year bond assumed purchase price 100.5 due 8/15/14. 30-year bond assumed purchase price 107 due 2/15/31.

are subject to rampant hoarding, general prices for goods and services increase, and there becomes a lack of long-term planning and investment.

**Why Politician’s Love Inflation...**

History has demonstrated that when a government and its political leaders have no discipline on their currency, they most often choose inflation over deflation to address financial problems in the economy. There are three primary reasons why this is so:

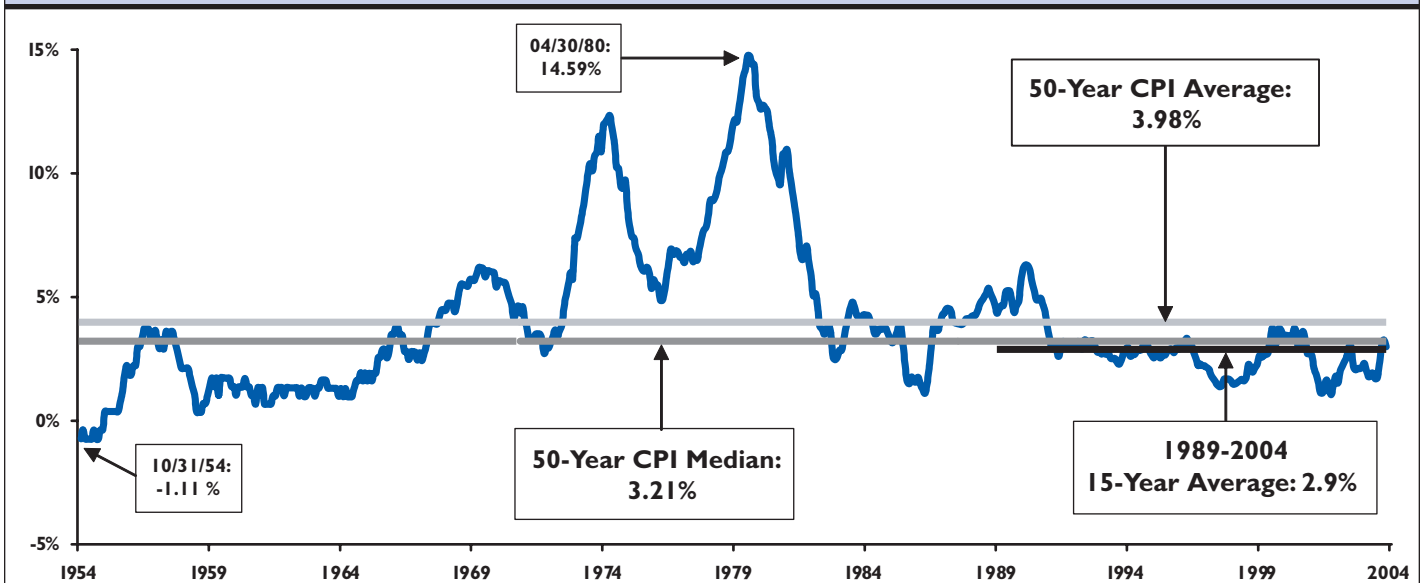
**First**, while inflation has disastrous consequences over the long-run, there are some short-term benefits that are too tempting for politicians to resist. The typical rationale to inflate rather than deflate is that a short-term stimulus can help grow the economy and win elections. By the time the long-term consequences of inflation

come to pass, they will be out of office and someone else will be to blame.

**Second**, inflation is one of the more subtle and popular tools that government’s use to pay off their debts, since it puts everybody in a higher tax bracket and therefore generates more tax revenue for the government.

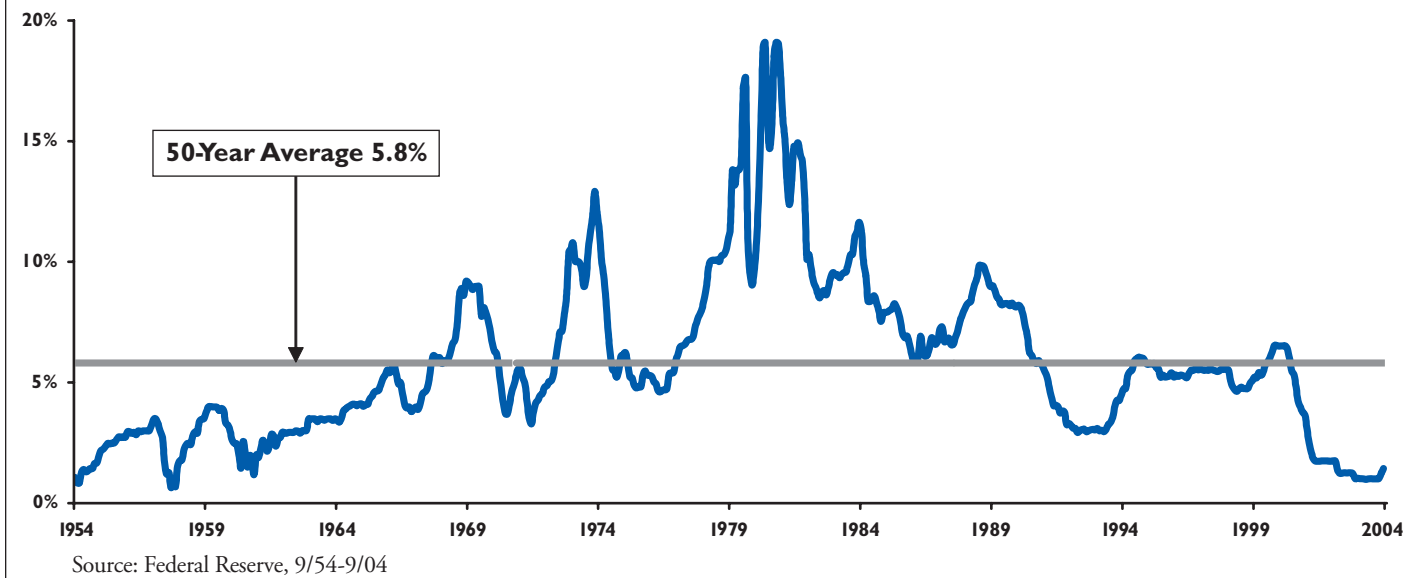
**Third**, by printing money out of thin air, the government can inflate the economy to pay off the federal debt and benefit obligations with cheaper dollars. While we are hopeful that our current government will not take this approach, as it is a long-term prescription for disaster, we must consider it a possibility and one of great concern. Prior to 1968, America was on the gold exchange standard which limited the creation of money by the Federal Reserve. Currently, however, there is no

**Chart 57: Consumer Price Index (CPI)  
(September 1954 through September 2004)**



Source: Bureau of Labor Statistics 09/54-09/04

**Chart 58: Federal Funds Rate  
(1954 through 2004)**



discipline in place, nor many options remaining to control the rate of money creation.

We have found only one exception to the politician's love affair with inflation. Former Federal Reserve Chairman Paul Volker (1979-1987) was sworn into office on August 6, 1979, to stop the inflation of the late 1970's which was caused by the Vietnam War and President Johnson's Great Society Programs. During 1980 and 1981, inflation was running at 14.5% annually and was headed towards a level of runaway inflation. On Chart 57, which shows the 50-year history of the Consumer Price Index (the benchmark for inflation), we can see that this was the highest level of inflation on record.

On October 6, 1979, after just three months in office, Fed Chairman Volker spoke to the country in a rare Saturday night news conference. He promised the nation and the world that he would not just slow inflation, but smash it. In doing so, he would bring back the respect and confidence in the U.S. dollar and it would once again become stable. Under tremendous pressure, he cut the money supply causing a deep recession as the economy slowed. This was a very difficult and courageous stand to take. America owes him a great deal of gratitude for his actions. Much of today's lower inflation rates are due to his actions and tough decisions. It is no coincidence that over the last 20 years, inflation has averaged just 3.05%. This is well below the 50-year average of 3.98% (Chart 57). Correspondingly, over the

last 20 years, Americans have seen a significant increase in their wealth and financial prosperity due to low interest rates and low inflation.

Today, the risk going forward is that if the economy slows, coupled with the increased debt in all sectors, there is little margin of safety to prevent the economy from going into deflation. Over the past few years, the Fed has prevented deflation by aggressively lowering interest rates (Chart 58). Over the past 50 years the Fed Funds rate averaged 5.8%, which is a spread of 1.82% above the same 50-year average inflation rate of 3.98%. However, between January and December 2001, the Fed aggressively dropped its Fed Funds rate from 6.1% to 1.8%! It went below 1% in 2003, and has a current 3-year average of just 1.5%, which is a 45-year low. As of November 2004, the Fed Funds rate is 2%. With inflation today at 2.5%, we can see the spread is negative 0.5%. This simply cannot last.

These lower interest rates encouraged additional borrowing and spending which has helped the economy to recover from the last recession; yet at this point the Fed has few options left at its disposal if the economy starts to slow down. After all, how much more can the consumer borrow and how much more can the Fed lower rates? In Japan, interest rates went down to zero, leaving the printing of money and inflating its economy the most likely choice. These will remain major questions as we move forward. However, we believe that the seeds for future inflation have already been planted.



**Chart 59: Recap Summary of 5-Year CM Projected S&P 500 Return  
(Returns are Annualized)**

<b>Amount S&amp;P 500 Must Decline to Get to Assumed Purchase Price</b>	<b>Assumed S&amp;P 500 Purchase Price</b>	<b>Best Case Scenario Range of Returns</b>	<b>Deflation Scenario Range of Returns</b>	<b>Stagflation Scenario Range of Returns</b>	<b>Inflation Scenario Range of Returns</b>
<b>Today</b>	1185	1.6% to 9.3%	-6.3% to -4.8%	-8.5% to -3.5%	-16.6 to -13.2%
<b>After 25% Decline</b>	889	7.6% to 15.8%	-0.8% to 0.9%	-3.1% to 2.2%	-11.7% to -8.1%
<b>After 50% Decline</b>	593	N/A	7.6% to 9.4%	5.0% to 10.8%	-4.3% to -0.3%

Source: Century Management. All scenarios assume S&P 500 sales are growing 7% per year. See appendix for a wider choice of P/E ratios and profit margins.

While inflation may be difficult to see right now, its effects can take hold in a very short period of time. For example, in August 1972, the consumer price index (CPI) was at a low of 2.94%. In November 1974, just 2.25 years later, the CPI rose to 12.20%, finally hitting a peak in April 1980 at 14.59% (Chart 57). These economic conditions created one of the worst bear markets since the great depression.

The following are just some of the reasons it is likely that we may go down the path of inflation:

1. The U.S. is currently running one of the largest budget and trade deficits in this country's history. This is commonly referred to as the "Twin Deficit". As a result of these deficits, U.S. dollars end up overseas. When this happens, foreign governments have no choice but to reinvest their country's profits back into the U.S. by purchasing the U.S. dollar. They are highly motivated to make this purchase. Otherwise, their own currency would rise against the U.S. dollar which would make their products more expensive in the U.S. However, in order to purchase enough U.S. dollars to keep their country's products competitively priced, foreign governments find themselves needing to print money. In other words, while foreign governments are underwriting the U.S. debt habit by purchasing U.S. dollars, they are creating inflation in their own countries.

2. Record low interest rates have discouraged saving and encouraged debt.

3. During the past 15 years commodity prices have been extremely low. In fact, they have been so low that few companies in commodity related industries have invested in creating inventory or supply since there has been relatively little demand or money to be made. Fueled by the new

demand from countries like China and India, commodity prices have been going up very dramatically, especially oil.

4. The falling U.S. dollar increases the price of imports such as cars and other consumer goods. Because these imported items now effectively cost more dollars to make the same purchase, as compared to before the dollar's decline, domestic manufacturers can easily move their prices higher and still be competitively priced. This leaves consumers and businesses having to pay more for everything.

5. Higher prices for goods and services will force labor costs to increase, as employees will demand higher wages to maintain their same purchasing power and standard of living.

6. The most troubling part of inflation is the psychology. This can range from unions demanding increases in wages and benefits, to people hoarding commodities, to the implementation of price controls. These in turn create shortages and even higher prices.

The impact of increasing inflation is very important to understand and consider, as everything in the evaluation process is based on it. As inflation increases, interest rates will also increase. As interest rates increase, stock, bond, and real estate valuations are lowered, which are typically followed by a decline in prices. Inflation is one of the two greatest enemies of true wealth. The other is higher taxes. During inflation, higher taxes become automatic as inflation pushes everybody into higher tax brackets.

For those of you who believe the big fallacy continually being promoted by Wall Street that stocks are a hedge against inflation, **Chart 54 should be a sobering reminder that the only hedge against inflation is an asset bought at the right price!**

## Section VI: Conclusion

Today we are faced with the most difficult and challenging investment environment in the past 40 years. It may ultimately prove to be even more challenging than the 1968 to 1974 bear market, which was the worst bear market since the great depression of 1929 to 1932. As you can see by the material we have presented to you, stocks, bonds, and real estate are selling at their upper limits based upon fundamental valuations. Simply put, all assets in this market are priced for perfection. What the financial markets need to evaluate over the next few years is whether or not today's prices are justified given these peak asset valuations, and the tremendous economic challenges ahead.

Over the past 20 years, stocks have increased 15-fold, bonds have performed well, and real estate prices have set new highs on a regular basis. With few interruptions on the path to these record prices, investors continue to feel invincible. There seems to be a sense of entitlement and true belief that these high gains and returns are somehow easy to obtain and are owed to them. The average investor and financial professional appear to be more concerned about missing an upside rally or chasing yields, than worrying about the downside risk and capital preservation.

Despite the fact that the stock market's major indices have had no returns to speak of for the past seven years, the average investor's primary fear is still one of missing out on gains instead of risking permanent loss of capital. Until this fear of missing out on gains changes to the fear of losing money, stocks, bonds, and real estate will not be selling at the discounts where true bargains can be found on a large scale basis.

While we are generally concerned with the economic problems that are facing this economy, such as over-capacity, high debt levels, and a lower demand for goods and services, our main concern is not with the economy, as these problems can be solved over time. Our main concern is that the markets are overvalued relative to today's economic environment and accordingly, on a large scale basis, there are few bargains available that are worthy of investment. With that said, we will not hesitate to purchase individual stocks or bonds when they are trading at significant discounts to their private market / intrinsic values.

*“Bull markets are born on pessimism,  
grow on skepticism, mature on optimism  
and die on euphoria.”*

–Sir John Templeton

Today, the general markets are optimistic and priced for perfection. The seeds that will fuel the next bull market are low and compelling stock prices, high savings rates, low debt ratios, and declining interest rates. Presently, we have only one of these components, low interest rates, and the Federal Reserve has indicated that this is beginning to change. Until these seeds are planted, there cannot be a sustained recovery in the stock market.

Today, a new generation of investors has reached the age when they are soon to retire in record numbers. Among these investors is little experience or memory of what deep recessions and depressed markets can truly do to their life savings. One can work an entire lifetime to accumulate a nest egg for retirement, only to have it become greatly impaired or wiped out in a very short period of time because of a breach of a few simple truths. Having seen a number of good, hardworking people experience the reversals of fortune over the past 30 years, it is disheartening to see that the overwhelming need for immediate results and the desire for the big win is still the prevailing philosophy today.

Our approach to money management is simple. We look to achieve the highest total return with the least amount of risk. Our first preference is to buy stocks at deep discounts to their private market (intrinsic) values, as this offers us the greatest return over the long-run. However, when stocks are not cheap and bonds offer a greater reward, we will look to bonds to help increase our total return. About once in every generation there comes a time when neither stocks nor bonds offer great values and cash becomes the investment of choice. This is the case today. Simply put, we invest where we can find the greatest value.

{Returns on Stocks + Bonds + Cash = Total Return}

While we have all heard that stocks and real estate are inflation hedges, this is only true providing we adhere to one simple rule: **Price Determines Return!** If we do not buy stocks, bonds, or real estate at the right

price, the only thing we are hedged against is making a profit! Our best hedge is patience, discipline, and to go where there is value.

In the coming years you can expect us to continue to buy U.S. stocks and bonds for long-term growth, Treasury inflation-protected securities (TIPS) at the right price to hedge inflation, and gold and gold stocks. However, when there is no value to be had in these assets, we will invest in cash. For those of you concerned about the return on cash, remember, over the long-run the average Fed Funds rate is 5.8% (Chart 58). More importantly, regardless of yield, when investment assets are absent of value, cash is always a better option than permanently losing money!

In closing, we would like to leave you with a thought from Benjamin Graham as he was reflecting on his career.

*“A final retrospective thought. When the young author entered Wall Street in June 1914 no one had any inkling of what the next half-century had in store....Yet if we confine our attention to American investment experience, there is some comfort to be gleaned from the last 57 years. Through all their vicissitudes and casualties, as earthshaking as they were unforeseen, it remained true that sound investment principles produced generally sound results. We must act on the assumption that they will continue to do so.”*

One of the most profound lessons to be taken from Graham’s writing is that nobody could have predicted these events, just like nobody can predict the major events of tomorrow. As John Maynard Keynes said, **“The inevitable never happens. It is the unexpected always.”** Successful investing is not dependent upon the ability to predict the future, but rather on using sound investment principles as they will produce sound investment results. You have our commitment that we will continue to use sound investment principles in the management of your portfolios.

## Major Events During and After Benjamin Graham’s Life (1894-1976)

1914	World War I
1929	Beginning of Great Depression
1939	World War II Begins in Europe
1941	Pearl Harbor
1950	Korean War Begins
1962	Cuban Missile Crisis
1963	President Kennedy Assassinated
1968	Vietnam War
1973	Arab Oil Embargo-Oil Prices Triple
1974	President Nixon Resigns
1987	U.S. Stock Market Crash
1991	Gulf War
2001	Terrorist Attack on World Trade Center (9/11)
2002	Afghanistan and Iraq War Begin
Plus	11 Recessions since 1948

September 2004 was the official 30-year anniversary of Century Management. We would like to thank you, our friends and clients, for your continued trust and confidence in our company. As part of our commitment to you, we continue to invest 100% of our own investable assets in the same securities that are found in your portfolios, including cash.

Sincerely,

Century Management

## Sources & Notes

1. The price to sales ratio is a ratio used for finding a stock's valuation relative to its own past performance, other companies past performance, or the market itself. It is calculated by dividing a stock's current price by its revenue per share. The value is the same whether the calculation is done for the whole company or on a per share basis.
2. Intrinsic value is the value of a security, justified by factors such as assets, dividends, earnings, and management quality. Intrinsic value is at the core of fundamental analysis since it is used in an attempt to calculate the value for an individual stock and then compare it with the market price. Intrinsic value also includes hidden things such as the value of a brand name which can be difficult to quantify.
3. The original Century Management April 1999 newsletter can be found on our website at <<http://www.centman.com/Library/Articles/April99/OutlookForTheS&P.html>>.
4. The S&P 500 includes 100 financial companies in its composite holdings where the S&P 400 was comprised mainly of industrial companies. Standard and Poor's is at <<http://www2.standardandpoors.com/NASApp/cs/ContentServer?pagename=sp/Page/HomePg&r=1&l=EN&b=10>>.
5. Market capitalization is the total value of a firm's outstanding shares, calculated by multiplying the market price per share times the total number of shares outstanding. For example, at a current price of \$50 for each of its 20 million shares of outstanding stock, a firm has a market capitalization of \$50 times 20 million, or \$1 billion. Also called market value.
6. Compustat database is our source used to determine the number of publicly traded companies in the universe. Compustat is a database of financial, statistical, and market information. It is owned by Standard and Poor's. This data was calculated as of August 31, 2004. <[http://www2.standardandpoors.com/servlet/Satellite?r=1&l=EN&b=10&f=s=&ig=&ci=&pageName=sp/sp\\_product/UmbrellaBodyTemplate&cid=1021984025986](http://www2.standardandpoors.com/servlet/Satellite?r=1&l=EN&b=10&f=s=&ig=&ci=&pageName=sp/sp_product/UmbrellaBodyTemplate&cid=1021984025986)>.
7. The total market price is represented by the market capitalization (value) of the following three exchanges: NYSE is at <http://www.newyorkstockexchange.com/home.html>. AMEX is at <<http://www.amex.com/>>. NASDAQ is at <<http://www.nasdaq.com/>>.
8. GDP: Source of Gross Domestic Product is the U.S. Department of Commerce, Bureau of Economic Analysis. <<http://www.bea.gov/beahome.html>>.
9. Per the CM Value I composite, the average Century Management client became more than 80% invested as of October 9, 2002. Note that Century Management began to increase its equity exposure in July 2002 and then again very aggressively in September and early October 2002. <[www.centman.com](http://www.centman.com)>.
10. 552 companies divided by 10,108 companies in the universe = 5.5% (August 2004) that traded at their lows as per the study. In November 2000 there were 2,394 companies divided by 10,108 companies in the universe = 23.7% that traded at their lows per the study. In October 2002 there were 1,645 companies divided by 10,108 in the universe = 16.3% that traded at their lows per the study. Source is Compustat.
11. Source of S&P 500 earnings, projected and current, are from I/B/E/S as downloaded from the Bloomberg database on November 15, 2004. The S&P 500 index price on November 15, 2004 was 1,185.
12. Source: U.S. Department of Labor, Bureau of Labor Statistics. <<http://www.bls.gov/>>. Data Series Id: CES0500000001, Seasonally Adjusted as of September 2004 (preliminary).
13. The Analysts' Accounting Observer and Standard and Poor's Market Review October 24, 2002.
14. The Analysts' Accounting Observer, August 29, 2003, Volume 12, Nos. 10 & 11. Written by Jack T. Ciesielski, CPA, CFA. Page 16.
15. Source: <[www.irs.gov](http://www.irs.gov)>. Internal Revenue Service Publication 542 shows the 2003 standard tax rate schedule for corporations. The table shows that once a company is over \$100,000 in profits the tax brackets range from 34% to 39%. Any profit over \$18,333,333 is taxed at 35%.
16. Standard and Poor's and Internal Revenue Service.
17. Between April 1, 2001 and February 2003, the following nine companies had a total of \$276 billion in pre-bankruptcy assets: World Com, Enron, Global Crossing, Adelphia Communications, Pacific Gas and Electric, KMART Corp., Reliance Group, Health South, and Qwest Communications. Source: Wall Street Journal, Reuters, and Bloomberg.

18. Source: Bloomberg.
19. Source: Standard and Poor's. <[http://www2.Standardandpoors.com/spf/pdf/media/Core Earnings May 2002 White Paper.pdf](http://www2.Standardandpoors.com/spf/pdf/media/Core_Earnings_May_2002_White_Paper.pdf)>. Measures of Corporate Earnings originally released November 7, 2001 by David Blitzer, Ph.D., Robert Friedman, CPA, and Howard Silverblatt.
20. Source for S&P 500 projected earnings in 2000 is I/B/E/S via the Bloomberg database.
21.  $\$65.19$  minus  $\$59.36$  =  $\$5.83$ .  $\$5.83$  divided by  $\$65.19$  = 8.9%. We rounded up to 9%.
22. Historically, the long-term average P/E for the total market has ranged between 16 and 18. Source: Century Management.
23.  $1159\%$  of sales divided by  $76\%$  sales = 15.25 times
24. Non-financial corporations are all companies excluding those in the financial industry. Source of the non-financial corporate debt is the Federal Reserve at <<http://www.federalreserve.gov/>>.
25. Source: On-line Wall Street Journal, October 11, 2004. <[http://online.wsj.com/article/0,,SB109744740058141504,00.html?mod=todays\\_us\\_page\\_one](http://online.wsj.com/article/0,,SB109744740058141504,00.html?mod=todays_us_page_one)>.
26. Source: Federal Reserve: <[www.federalreserve.gov/boarddocs/speeches/2004/20040223/default.html](http://www.federalreserve.gov/boarddocs/speeches/2004/20040223/default.html)>.
27. Source: Federal Reserve: <<http://www.federalreserve.gov>>.
28. Source: <[http://www.census.gov/const/newresales\\_0410.pdf](http://www.census.gov/const/newresales_0410.pdf)>.
29. Source: <<http://www.ofheo.gov/media/pdf/3q04hpi.pdf>>.
30. Source: <<http://www.ofheo.gov/media/pdf/3q04hpi.pdf>>.
31. Source: <<http://www.federalreserve.gov/releases/z1/current/annuals/a1995-2003.pdf>>.
32. Source: <[http://www.freddiemac.com/news/finance/docs/cashout\\_volume.xls](http://www.freddiemac.com/news/finance/docs/cashout_volume.xls)> and <[http://www.freddiemac.com/news/finance/refi\\_archives.htm](http://www.freddiemac.com/news/finance/refi_archives.htm)>.
33. Equity + Debt = Total home values. Therefore  $77\%$  equity +  $23\%$  mortgage (debt) =  $100\%$  total home values in 1954. Back in 1952, the percentages were  $79\%$  equity +  $21\%$  mortgage (debt) =  $100\%$  total home values.
34. Equity + Debt = Total home values. Therefore  $55\%$  equity +  $45\%$  mortgage (debt) =  $100\%$  total home values.
35. Source: <<http://www.bls.gov/cex/2003/standard/tenure.pdf>>.
36. Chart 29 shows the percentage of equity against the median existing home price whereas Chart 28 shows the percentage of equity against the total property value.
37. Equity + Debt = Total median home value. Therefore  $19\%$  equity +  $81\%$  mortgage (debt) =  $100\%$  of total home values.
38. Source: Federal Housing Finance Board. <<http://www.fhfb.gov/mirs/mirstbl1.xls>>.
39. Source: Federal Reserve Flow of Funds. Mortgages outstanding at the end of 2001 were  $\$5.3014$  trillion. On June 30, 2004 outstanding mortgages were  $\$7.0783$  trillion. The difference is  $\$1.7769$  trillion. <<http://www.federalreserve.gov/releases/z1/current/z1r-5.pdf>>.
40. Source: Federal Reserve Board. Remarks by Governor Edward M. Gramlich at the Financial Services Roundtable Annual Housing Policy Meeting, Chicago, Illinois, May 21, 2004. <<http://www.federalreserve.gov/boarddocs/speeches/2004/20040521/default.htm>>, as well as from the Joint Center for Housing Studies of Harvard University, the State of the Nation's Housing 2004 Report. Page 16.
41. Source: Federal Reserve Board. Remarks by Governor Edward M. Gramlich at the Financial Services Roundtable Annual Housing Policy Meeting, Chicago, Illinois, May 21, 2004. <<http://www.federalreserve.gov/boarddocs/speeches/2004/20040521/default.htm>>, as well as from the Federal Reserve Flow of Funds. <<http://www.federalreserve.gov/releases/z1/current/z1r-5.pdf>> and Joint Center for Housing Studies of Harvard University, the State of the Nation's Housing 2004 Report. Page 16.
42. Source: Mortgage Bankers Association. <<http://www.mortgagebankers.org/>>.
43. Source: <<http://www.mortgagebankers.org/marketdata/index.asp>>.
44. Source: Wall Street Journal, Tuesday, November 30, 2004. Article titled Investors Buy Real Estate at Record Pace by Ruth Simon. Data was provided for

WSJ by LoanPerformance, a San Francisco-based firm that tracks the performance of 46 million mortgages monthly.

45. Source: Wall Street Journal, Tuesday, November 30, 2004. Article titled Investors Buy Real Estate at Record Pace, quoting Mark Zilbert, an associate with Esslinger-Wooten-Maxwell Realtors.

46. Source: Joint Center for Housing Studies of Harvard University, the State of the Nation's Housing 2004 Report. Page 4, Figure 5 footnotes.

47. Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 1994-2003.

48. Source: Bureau of Labor Statistics. <<http://www.bls.gov/home.htm>>.

49. Source: Century Management

50. Source: Office of Federal Housing Enterprise Oversight (OFHEO). Housing Price Index for Second Quarter 2004 PDF report. <<http://www.ofheo.gov/media/pdf/2q04hpir.pdf>>. Census Divisions in the House Price Index (HPI): **New England:** Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont. **Mid-Atlantic:** New Jersey, New York, Pennsylvania. **South Atlantic:** Washington, D.C., Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia. **East North Central:** Illinois, Indiana, Michigan, Ohio, Wisconsin. **West North Central:** Iowa, Kansas, Minnesota, Missouri, North Dakota, South Dakota, Nebraska. **East South Central:** Alabama, Kentucky, Mississippi, Tennessee. **West South Central:** Arkansas, Louisiana, Oklahoma, Texas. **Mountain:** Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming. **Pacific:** Alaska, California, Hawaii, Oregon, Washington.

51. Federal Reserve Board of Governors website under the title Flow of Funds Z.1, September 16, 2004. Report: F.10 Derivation of Measures of Personal Saving <http://www.federalreserve.gov/releases/z1/Current/>. Also the BEA at <[www.bea.gov](http://www.bea.gov)>.

52. Total Credit Market Debt: <<http://www.federalreserve.gov/>>. Total credit market debt is all debt (consumer, corporate, federal) except for intra-agency (government) debt.

53. Source: Bureau of Economic Analysis. National Income and Product Accounts Table. Table 2.6.

Personal Income and Its Disposition, Monthly. <<http://www.bea.gov/bea/dn/nipaweb/TableView.asp?SelectedTable=75&FirstYear=2004&LastYear=2004&Freq=Month>>.

54. Source: The White House and Office of Management and Budget (2003 Financial Report of the United States Government). <[http://www.whitehouse.gov/omb/pubpress/fy2004/2003\\_financial\\_rpt.pdf](http://www.whitehouse.gov/omb/pubpress/fy2004/2003_financial_rpt.pdf)>.

55. Economic Report of the President together with The Annual Report of the Council of Economic Advisers presented to the 108th Congress, 2nd Session...H. Doc. 108-145. <<http://www.gpoaccess.gov/eop/index.html>>.

56. PMZ Pension Consultants. <http://www.pensionwiz.com/> 12 Journey, Suite 201, Aliso Viejo, CA 92656.

57. Computation schedule for amortization of unfunded pension liabilities of the United States Federal Government. Based upon public records, the federal government acknowledges an unfunded pension liability for the fiscal year ended September 30, 2003 to be \$26,868,000,000,000. Assuming a 6% annual interest assumption for this \$26.868 trillion dollars of liability, the expense to amortize this unfunded liability over the stipulated 75 years is as follows: \$26,868,000,000,000 times the discount rate (0.6/1.06) divided by 1 minus (1.06 to the 75th power) equals \$1,540,313,793,000.

58. Ibid., p. 108 and 109 of the 2004 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. The unfunded obligation for the Medicare Prescription Drug Improvement and Modernization Act of 2003 over the period 2003-2078 is \$8.1 trillion. The unfunded obligation over an infinite time horizon is \$16.6 trillion. This year, the Medicare trustees have introduced an additional way to calculate the program's future costs and liabilities. This method, known as "infinite horizon" includes all current and future participants. Under this category, the unfunded obligation of the drug entitlement amounts to \$16.6 trillion.

59. Source: Century Management. <[www.centman.com](http://www.centman.com)>. CM Value I Composite: This composite is constructed using every client account both past and present since September 1974. Each of the clients and

accounts in this composite paid Century Management a fixed fee and all brokerage fees were transaction based. The performance of the accounts in this composite are based on all buys, sells, dividends, interest, deposits, and withdrawals for each and every client account of record.

60. Bloomberg, LP

61. Bloomberg, LP

62. Source: Bureau of Economic Analysis. <<http://www.bea.gov/bea/dn/nipaweb/TableView.asp?SelectedTable=5&FirstYear=2002&LastYear=2004&Freq=Qtr>>.

## Appendix 1-3: Base Assumptions for Scenarios (Expansion of Charts 48-55)

Each scenario assumes a 5-year return. Returns are shown both total and annualized.

- S&P 500 closing price on November 15, 2004 is 1185 (rounded up).
- S&P 500 2004 projected operating earnings are \$65.19 per share (source: Bloomberg).
- S&P 500 trailing sales are \$754 per share (source: Bloomberg).
- CM assumes that S&P 500 sales will grow at 7% per year for the next 5 years.
- The 75-year average after-tax profit margin is 5.5% (Chart 10).
- Long-term sustainable after-tax profit margins range between 5% and 6%.

The appendix charts will highlight our 5-year projected price, total return, and annualized return for the S&P 500 given various P/E ratios and after-tax profit margins. **The main difference between these appendix charts is the beginning price being assumed for the S&P 500.** Example:

1. **Appendix 1** assumes the S&P 500 from today's closing price of 1185.
2. **Appendix 2** assumes the S&P 500 declined 25% from 1185 and was purchased at 889.
3. **Appendix 3** assumes the S&P 500 declined 50% from 1185 and was purchased at 593.

When reading these charts, keep in mind that the 75-year average after-tax profit margin is 5.5%. Additionally, the long-term average P/E ratio for the S&P 500 ranges between 15 and 16. **The following is an example on how to read the charts found in the appendix.**

- Go to Appendix 1.
- Go to the row labeled 5.5% profit margin on the left axis.
- Next, go to the column titled 16 P/E.
- Next, find the point on the chart where this row and column meet.
- The first set shows our 5-year projected price for the S&P 500 is 933.
- The second set shows our 5-year projected total return for the S&P 500 is -21.3%.
- The third set shows our 5-year projected annualized return for the S&P 500 is -4.7%.

Simply repeat this process to review other possible scenarios.

# Appendix I

Assumes S&P 500 From Today's Price 1185 (November 15, 2004 Price)

<b>2009 Sales</b>	<b>2004 Sales</b>	<b>Sales Growth</b>	<b>S&amp;P 500 Price</b>
1060	756	7%	1185

## Century Management Estimated Price for the S&P 500 at the End of 5 Years

Margins	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
7.92%	2,099	2,015	1,931	1,848	1,764	1,680	1,596	1,512	1,428	1,344	1,260	1,176	1,092	1,008	924	840	756		
7.50%	1,988	1,909	1,829	1,750	1,670	1,590	1,511	1,431	1,352	1,272	1,193	1,113	1,034	954	875	795	716		
7.00%	1,856	1,781	1,707	1,633	1,559	1,484	1,410	1,336	1,262	1,188	1,113	1,039	965	891	816	742	668		
6.50%	1,723	1,654	1,585	1,516	1,447	1,378	1,310	1,241	1,172	1,103	1,034	965	896	827	758	689	620		
6.00%	1,590	1,527	1,463	1,400	1,336	1,272	1,209	1,145	1,082	1,018	954	891	827	763	700	636	573		
5.50%	1,458	1,400	1,341	1,283	1,225	1,166	1,108	1,050	991	933	875	816	758	700	641	583	525		
5.00%	1,325	1,272	1,219	1,166	1,113	1,060	1,007	954	901	848	795	742	689	636	583	530	477		
4.00%	1,060	1,018	976	933	891	848	806	763	721	679	636	594	551	509	467	424	382		
3.50%	928	891	854	816	779	742	705	668	631	594	557	520	482	445	408	371	334		

## Century Management Estimated Total Return for the S&P 500 Over the Next 5 Years

Margins	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
7.92%	77.2%	70.1%	63.0%	55.9%	48.8%	41.7%	34.6%	27.6%	20.5%	13.4%	6.3%	-0.8%	-7.9%	-15.0%	-22.0%	-29.1%	-36.2%		
7.50%	67.8%	61.1%	54.4%	47.6%	40.9%	34.2%	27.5%	20.8%	14.1%	7.4%	0.7%	-6.0%	-12.8%	-19.5%	-26.2%	-32.9%	-39.6%		
7.00%	56.6%	50.3%	44.1%	37.8%	31.5%	25.3%	19.0%	12.7%	6.5%	0.2%	-6.0%	-12.3%	-18.6%	-24.8%	-31.1%	-37.4%	-43.6%		
6.50%	45.4%	39.6%	33.8%	28.0%	22.1%	16.3%	10.5%	4.7%	-1.1%	-6.9%	-12.8%	-18.6%	-24.4%	-30.2%	-36.0%	-41.8%	-47.7%		
6.00%	34.2%	28.9%	23.5%	18.1%	12.7%	7.4%	2.0%	-3.4%	-8.7%	-14.1%	-19.5%	-24.8%	-30.2%	-35.6%	-40.9%	-46.3%	-51.7%		
5.50%	23.0%	18.1%	13.2%	8.3%	3.3%	-1.6%	-6.5%	-11.4%	-16.3%	-21.3%	-26.2%	-31.1%	-36.0%	-40.9%	-45.9%	-50.8%	-55.7%		
5.00%	11.8%	7.4%	2.9%	-1.6%	-6.0%	-10.5%	-15.0%	-19.5%	-23.9%	-28.4%	-32.9%	-37.4%	-41.8%	-46.3%	-50.8%	-55.3%	-59.7%		
4.00%	-10.5%	-14.1%	-17.7%	-21.3%	-24.8%	-28.4%	-32.0%	-35.6%	-39.2%	-42.7%	-46.3%	-49.9%	-53.5%	-57.0%	-60.6%	-64.2%	-67.8%		
3.00%	-21.7%	-24.8%	-28.0%	-31.1%	-34.2%	-37.4%	-40.5%	-43.6%	-46.8%	-49.9%	-53.0%	-56.2%	-59.3%	-62.4%	-65.6%	-68.7%	-71.8%		

## Century Management Estimated Annualized Return for the S&P 500 Over the Next 5 Years

Margins	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
7.92%	12.1%	11.2%	10.3%	9.3%	8.3%	7.2%	6.1%	5.0%	3.8%	2.5%	1.2%	-0.2%	-1.6%	-3.2%	-4.9%	-6.7%	-8.6%		
7.50%	10.9%	10.0%	9.1%	8.1%	7.1%	6.1%	5.0%	3.9%	2.7%	1.4%	0.1%	-1.2%	-2.7%	-4.2%	-5.9%	-7.7%	-9.6%		
7.00%	9.4%	8.5%	7.6%	6.6%	5.6%	4.6%	3.5%	2.4%	1.3%	0.0%	-1.2%	-2.6%	-4.0%	-5.6%	-7.2%	-8.9%	-10.8%		
6.50%	7.8%	6.9%	6.0%	5.1%	4.1%	3.1%	2.0%	0.9%	-0.2%	-1.4%	-2.7%	-4.0%	-5.4%	-6.9%	-8.5%	-10.3%	-12.1%		
6.00%	6.1%	5.2%	4.3%	3.4%	2.4%	1.4%	0.4%	-0.7%	-1.8%	-3.0%	-4.2%	-5.6%	-6.9%	-8.4%	-10.0%	-11.7%	-13.5%		
5.50%	4.2%	3.4%	2.5%	1.6%	0.7%	-0.3%	-1.3%	-2.4%	-3.5%	-4.7%	-5.9%	-7.2%	-8.5%	-10.0%	-11.6%	-13.2%	-15.0%		
5.00%	2.3%	1.4%	0.6%	-0.3%	-1.2%	-2.2%	-3.2%	-4.2%	-5.3%	-6.5%	-7.7%	-8.9%	-10.3%	-11.7%	-13.2%	-14.9%	-16.6%		
4.00%	-2.2%	-3.0%	-3.8%	-4.7%	-5.6%	-6.5%	-7.4%	-8.4%	-9.5%	-10.5%	-11.7%	-12.9%	-14.2%	-15.6%	-17.0%	-18.6%	-20.3%		
3.00%	-4.8%	-5.6%	-6.4%	-7.2%	-8.0%	-8.9%	-9.9%	-10.8%	-11.8%	-12.9%	-14.0%	-15.2%	-16.4%	-17.8%	-19.2%	-20.7%	-22.4%		



# Appendix 2

Appendix 2: Assumes S&P 500 Declined 25% from 1185 (November 15, 2004 Price)

2009 Sales	2004 Sales	Sales Growth	S&P 500 Price
1060	756	7%	889

## Century Management Estimated Price for the S&P 500 at the End of 5 Years

	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
Margins																			
7.92%	2,059	2,015	1,931	1,848	1,764	1,680	1,596	1,512	1,428	1,344	1,260	1,176	1,092	1,008	924	840	756		
7.50%	1,988	1,909	1,829	1,750	1,670	1,590	1,511	1,431	1,352	1,272	1,193	1,113	1,034	954	875	795	716		
7.00%	1,856	1,781	1,707	1,633	1,559	1,484	1,410	1,336	1,262	1,188	1,113	1,039	965	891	816	742	668		
6.50%	1,723	1,654	1,585	1,516	1,447	1,378	1,310	1,241	1,172	1,103	1,034	965	896	827	758	689	620		
6.00%	1,590	1,527	1,463	1,400	1,336	1,272	1,209	1,145	1,082	1,018	954	891	827	763	700	636	573		
5.50%	1,458	1,400	1,341	1,283	1,225	1,166	1,108	1,050	991	933	875	816	758	700	641	583	525		
5.00%	1,325	1,272	1,219	1,166	1,113	1,060	1,007	954	901	848	795	742	689	636	583	530	477		
4.00%	1,060	1,018	976	933	891	848	806	763	721	679	636	594	551	509	467	424	382		
3.50%	928	891	854	816	779	742	705	668	631	594	557	520	482	445	408	371	334		

## Century Management Estimated Total Return for the S&P 500 Over the Next 5 Years

	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
Margins																			
7.92%	136.2%	126.7%	117.3%	107.8%	98.4%	88.9%	79.5%	70.0%	60.6%	51.1%	41.7%	32.2%	22.8%	13.4%	3.9%	-5.5%	-15.0%		
7.50%	123.6%	114.7%	105.7%	96.8%	87.9%	78.9%	70.0%	61.0%	52.1%	43.1%	34.2%	25.2%	16.3%	7.3%	-1.6%	-10.5%	-19.5%		
7.00%	108.7%	100.4%	92.0%	83.7%	75.3%	67.0%	58.6%	50.3%	41.9%	33.6%	25.2%	16.9%	8.5%	0.2%	-8.2%	-16.5%	-24.9%		
6.50%	93.8%	86.1%	78.3%	70.6%	62.8%	55.1%	47.3%	39.5%	31.8%	24.0%	16.3%	8.5%	0.8%	-7.0%	-14.7%	-22.5%	-30.2%		
6.00%	78.9%	71.8%	64.6%	57.4%	50.3%	43.1%	36.0%	28.8%	21.7%	14.5%	7.3%	0.2%	-7.0%	-14.1%	-21.3%	-28.4%	-35.6%		
5.50%	64.0%	57.4%	50.9%	44.3%	37.8%	31.2%	24.6%	18.1%	11.5%	5.0%	-1.6%	-8.2%	-14.7%	-21.3%	-27.8%	-34.4%	-41.0%		
5.00%	49.1%	43.1%	37.2%	31.2%	25.2%	19.3%	13.3%	7.3%	1.4%	-4.6%	-10.5%	-16.5%	-22.5%	-28.4%	-34.4%	-40.4%	-46.3%		
4.00%	19.3%	14.5%	9.7%	5.0%	0.2%	-4.6%	-9.4%	-14.1%	-18.9%	-23.7%	-28.4%	-33.2%	-38.0%	-42.7%	-47.5%	-52.3%	-57.1%		
3.00%	4.4%	0.2%	-4.0%	-8.2%	-12.3%	-16.5%	-20.7%	-24.9%	-29.0%	-33.2%	-37.4%	-41.6%	-45.7%	-49.9%	-54.1%	-58.3%	-62.4%		

## Century Management Estimated Annualized Return for the S&P 500 Over the Next 5 Years

	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
Margins																			
7.92%	18.8%	17.8%	16.8%	15.8%	14.7%	13.6%	12.4%	11.2%	9.9%	8.6%	7.2%	5.7%	4.2%	2.5%	0.8%	-1.1%	-3.2%		
7.50%	17.5%	16.5%	15.5%	14.5%	13.4%	12.3%	11.2%	10.0%	8.7%	7.4%	6.1%	4.6%	3.1%	1.4%	-0.3%	-2.2%	-4.2%		
7.00%	15.9%	14.9%	13.9%	12.9%	11.9%	10.8%	9.7%	8.5%	7.3%	6.0%	4.6%	3.2%	1.7%	0.0%	-1.7%	-3.5%	-5.6%		
6.50%	14.2%	13.2%	12.3%	11.3%	10.2%	9.2%	8.1%	6.9%	5.7%	4.4%	3.1%	1.7%	0.2%	-1.4%	-3.1%	-5.0%	-6.9%		
6.00%	12.3%	11.4%	10.5%	9.5%	8.5%	7.4%	6.3%	5.2%	4.0%	2.7%	1.4%	0.0%	-1.4%	-3.0%	-4.7%	-6.5%	-8.4%		
5.50%	10.4%	9.5%	8.6%	7.6%	6.6%	5.6%	4.5%	3.4%	2.2%	1.0%	-0.3%	-1.7%	-3.1%	-4.7%	-6.3%	-8.1%	-10.0%		
5.00%	8.3%	7.4%	6.5%	5.6%	4.6%	3.6%	2.5%	1.4%	0.3%	-0.9%	-2.2%	-3.5%	-5.0%	-6.5%	-8.1%	-9.8%	-11.7%		
4.00%	3.6%	2.7%	1.9%	1.0%	0.0%	-0.9%	-1.9%	-3.0%	-4.1%	-5.3%	-6.5%	-7.8%	-9.1%	-10.6%	-12.1%	-13.8%	-15.6%		
3.00%	0.9%	0.0%	-0.8%	-1.7%	-2.6%	-3.5%	-4.5%	-5.6%	-6.6%	-7.8%	-8.9%	-10.2%	-11.5%	-12.9%	-14.4%	-16.0%	-17.8%		

# Appendix 3

Appendix 3: Assumes S&P 500 Declined 50% from 1185 (November 15, 2004 Price)

<b>2009 Sales</b>	<b>2004 Sales</b>	<b>Sales Growth</b>	<b>S&amp;P 500 Price</b>
1060	756	7%	593

## Century Management Estimated Price for the S&P 500 at the End of 5 Years

Margins	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
7.92%	2,099	2,015	1,931	1,848	1,764	1,680	1,596	1,512	1,428	1,344	1,260	1,176	1,092	1,008	924	840	756		
7.50%	1,988	1,909	1,829	1,750	1,670	1,590	1,511	1,431	1,352	1,272	1,193	1,113	1,034	954	875	795	716		
7.00%	1,856	1,781	1,707	1,633	1,559	1,484	1,410	1,336	1,262	1,188	1,113	1,039	965	891	816	742	668		
6.50%	1,723	1,654	1,585	1,516	1,447	1,378	1,310	1,241	1,172	1,103	1,034	965	896	827	758	689	620		
6.00%	1,590	1,527	1,463	1,400	1,336	1,272	1,209	1,145	1,082	1,018	954	891	827	763	700	636	573		
5.50%	1,458	1,400	1,341	1,283	1,225	1,166	1,108	1,050	991	933	875	816	758	700	641	583	525		
5.00%	1,325	1,272	1,219	1,166	1,113	1,060	1,007	954	901	848	795	742	689	636	583	530	477		
4.00%	1,060	1,018	976	933	891	848	806	763	721	679	636	594	551	509	467	424	382		
3.50%	928	891	854	816	779	742	705	668	631	594	557	520	482	445	408	371	334		

## Century Management Estimated Total Return for the S&P 500 Over the Next 5 Years

Margins	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
7.92%	254.0%	239.9%	225.7%	211.6%	197.4%	183.2%	169.1%	154.9%	140.7%	126.6%	112.4%	98.3%	84.1%	69.9%	55.8%	41.6%	27.5%		
7.50%	235.3%	221.9%	208.4%	195.0%	181.6%	168.2%	154.8%	141.4%	128.0%	114.6%	101.2%	87.7%	74.3%	60.9%	47.5%	34.1%	20.7%		
7.00%	212.9%	200.4%	187.9%	175.4%	162.8%	150.3%	137.8%	125.3%	112.8%	100.3%	87.7%	75.2%	62.7%	50.2%	37.7%	25.2%	12.6%		
6.50%	190.6%	178.9%	167.3%	155.7%	144.1%	132.4%	120.8%	109.2%	97.6%	86.0%	74.3%	62.7%	51.1%	39.5%	27.8%	16.2%	4.6%		
6.00%	168.2%	157.5%	146.8%	136.0%	125.3%	114.6%	103.8%	93.1%	82.4%	71.7%	60.9%	50.2%	39.5%	28.7%	18.0%	7.3%	-3.4%		
5.50%	145.9%	136.0%	126.2%	116.4%	106.5%	96.7%	86.9%	77.0%	67.2%	57.4%	47.5%	37.7%	27.8%	18.0%	8.2%	-1.7%	-11.5%		
5.00%	123.5%	114.6%	105.6%	96.7%	87.7%	78.8%	69.9%	60.9%	52.0%	43.0%	34.1%	25.2%	16.2%	7.3%	-1.7%	-10.6%	-19.5%		
4.00%	78.8%	71.7%	64.5%	57.4%	50.2%	43.0%	35.9%	28.7%	21.6%	14.4%	7.3%	0.1%	-7.0%	-14.2%	-21.3%	-28.5%	-35.6%		
3.00%	56.5%	50.2%	43.9%	37.7%	31.4%	25.2%	18.9%	12.6%	6.4%	0.1%	-6.1%	-12.4%	-18.6%	-24.9%	-31.2%	-37.4%	-43.7%		

## Century Management Estimated Annualized Return for the S&P 500 Over the Next 5 Years

Margins	P/E Multiples																		
	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9		
7.92%	28.8%	27.7%	26.6%	25.5%	24.4%	23.1%	21.9%	20.6%	19.2%	17.8%	16.3%	14.7%	13.0%	11.2%	9.3%	7.2%	5.0%		
7.50%	27.4%	26.3%	25.3%	24.2%	23.0%	21.8%	20.6%	19.3%	17.9%	16.5%	15.0%	13.4%	11.8%	10.0%	8.1%	6.0%	3.8%		
7.00%	25.6%	24.6%	23.5%	22.5%	21.3%	20.1%	18.9%	17.6%	16.3%	14.9%	13.4%	11.9%	10.2%	8.5%	6.6%	4.6%	2.4%		
6.50%	23.8%	22.8%	21.7%	20.7%	19.5%	18.4%	17.2%	15.9%	14.6%	13.2%	11.8%	10.2%	8.6%	6.9%	5.0%	3.1%	0.9%		
6.00%	21.8%	20.8%	19.8%	18.7%	17.6%	16.5%	15.3%	14.1%	12.8%	11.4%	10.0%	8.5%	6.9%	5.2%	3.4%	1.4%	-0.7%		
5.50%	19.7%	18.7%	17.7%	16.7%	15.6%	14.5%	13.3%	12.1%	10.8%	9.5%	8.1%	6.6%	5.0%	3.4%	1.6%	-0.3%	-2.4%		
5.00%	17.5%	16.5%	15.5%	14.5%	13.4%	12.3%	11.2%	10.0%	8.7%	7.4%	6.0%	4.6%	3.1%	1.4%	-0.3%	-2.2%	-4.3%		
4.00%	12.3%	11.4%	10.5%	9.5%	8.5%	7.4%	6.3%	5.2%	4.0%	2.7%	1.4%	0.0%	-1.4%	-3.0%	-4.7%	-6.5%	-8.4%		
3.00%	9.4%	8.5%	7.6%	6.6%	5.6%	4.6%	3.5%	2.4%	1.2%	0.0%	-1.3%	-2.6%	-4.0%	-5.6%	-7.2%	-8.9%	-10.8%		

## Helpful Websites

1. American Bankruptcy Institute (ABI): <<http://www.abiworld.org/>>.
2. American Stock Exchange (AMEX): <<http://www.amex.com/>>.
3. Bloomberg: <<http://www.bloomberg.com/>>.
4. Bureau of Economic Analysis (BEA): <<http://www.bea.doc.gov/>>.
5. Century Management (CM): <[www.centman.com](http://www.centman.com)>.
6. Columbia Business School / Heilbrunn Center for Graham & Dodd Investing: <[http://www-1.gsb.columbia.edu/valueinvesting/research/schloss\\_archives.html](http://www-1.gsb.columbia.edu/valueinvesting/research/schloss_archives.html)>.
7. Federal Housing Finance Board (FHFB): <<http://www.fhfb.gov/>>.
8. Federal Reserve Board of Governors: <<http://www.federalreserve.gov/>>.
9. Federal Reserve Bank of St. Louis: <<http://research.stlouisfed.org/index.html>>.
10. International Monetary Fund (IMF): <<http://www.imf.org/>>.
11. Investopedia (Financial Dictionary): <<http://www.investopedia.com/dictionary/>>.
12. Mortgage Bankers Association (MBA): <<http://www.mbaa.org/>>.
13. National Association of Home Builders (NAHB): <<http://www.nahb.org>>.
14. National Bureau of Economic Research (NBER): <<http://www.nber.org/>>.
15. National Association of Securities Dealers (NASDAQ): <[www.nasdaq.com](http://www.nasdaq.com)>.
16. New York Stock Exchange (NYSE): <<http://www.nyse.com/>>.
17. Office of Federal Housing Enterprise Oversight (OFHEO): <<http://www.ofheo.gov/>>.
18. Office of Management and Budget (OMB): <<http://www.whitehouse.gov/omb/>>.
19. Securities Industry Association (SIA): <<http://www.sia.com>>.
20. Standard and Poor's (S&P): <<http://www2.standardandpoors.com/>>.
21. Statistics Bureau / Ministry of International Affairs (Japan): <<http://www.sia.com>>.
22. The Brookings Institution: <<http://www.brookings.edu/>>.
23. Treasury Financial Management Service: <<http://www.fms.treas.gov/>>.
24. U.S. Department of Labor / Bureau of Labor Statistics (BLS): <<http://www.bls.gov>>.
25. U. S. Department of the Treasury: <<http://www.ustreas.gov/>>.
26. U.S. Census Bureau: <<http://www.census.gov/>>.

## Glossary

**Adjustable Rate:** Interest rate or dividend which is adjusted periodically, usually based on a standard market rate such as that prevailing on Treasury Bonds or notes. Typically, such issues have a set floor or ceiling which limit the adjustment.

**Annualized Return:** Converting the rate of return from a period of less than one year to an annual (yearly) basis or average. For example, a security which returns 1% a month returns 12% on an annualized basis. It is also known as “annualized rate” or “annual return”. The term also is similar to the term to “run rate”.

**Bear Market:** A prolonged period in which investment prices fall, accompanied by widespread pessimism. If the period of falling stock prices is short and immediately follows a period of rising stock prices, it is instead called a correction. Bear markets usually occur when the economy is in a recession and unemployment is high, or when inflation is rising quickly. A market in which prices of a certain group of securities are falling or are expected to fall. Although figures can vary, a downturn of 15%-20% or more in multiple indexes (Dow or S&P 500) is considered an entry into a bear market.

**Bubble:** A description of rapidly rising equity prices, usually in a particular sector, that some investors feel is unfounded. The term is used because, like a bubble, the prices will reach a point at which they pop and collapse violently. A speculative market or stock, in which the values rise very rapidly then fall sharply. A temporary market condition created through excessive buying, and an unfounded run-up in prices occurs. Speculative bubbles are generally a result of the “bandwagon effect”. Investors, seeing an upward trend in prices, quickly enter long positions in an attempt to participate in the stocks’ profitability. Typically, these bubbles are followed by even faster sell-offs once prices begin to decline. It is called a bubble because it will eventually burst. A good example of this was the dot-com bubble of the late 1990s.

**Capitalization:** The sum of a corporation’s long-term debt and equity. Or, the market price of an entire company, calculated by multiplying the number of shares outstanding by the price per share (also known as “market capitalization” or “market cap”).

**CM Value I Composite (also known or referred to as the Standard Composite):** This consists of the accounts of every client both past and present who has had an account with Century Management, for which

the investment management charge was fee based and the brokerage fee was transaction based, since the company’s inception in September, 1974. The performance of the accounts in this composite is based on all buys, sells, dividends, interest, deposits, and withdrawals for each and every client of record.

**Compounded Return:** The annual rate of return earned on an investment in which dividends or interest are reinvested at the same annual rate of return.

**Consortium:** An association or a combination, of businesses, financial institutions, or investors, for the purpose of engaging in a joint venture.

**Current Yield:** Stated interest or dividend rate expressed as a percentage of the market price of the security.

**Derivatives:** A security, such as an option or futures contract, whose value depends on the performance of an underlying security. Futures contracts, forward contracts and options are the most common types of derivatives. Derivatives are generally used by institutional investors to increase overall portfolio return or to hedge portfolio risk.

**Earnings Per Share (EPS):** Portion of a company’s profit allocated to each outstanding share of common stock. For example, a corporation that earned \$10 million last year and has 10 million shares outstanding would report earnings of \$1 per share. This figure is calculated after paying taxes and after paying preferred shareholders and bondholders.

**Earnings Yield:** Relationship of earnings per share to the current price. Earnings divided by price. This is the inverse of a P/E ratio. The earnings yield allows one to compare the relative attractiveness of stocks, bonds and money market instruments. Example: If a company has a P/E ratio of 20, it has an earnings yield of 5%.

**Enterprise Value:** A measure of what the market believes a company’s ongoing operations are worth. Enterprise value is equal to company’s market capitalization + debt + preferred stock - cash and cash equivalents.

**Generally Accepted Accounting Principles (GAAP):** GAAP is not a fixed set of rules. They are guidelines, or more precisely a group of objectives and conventions that have evolved over time to govern how financial statements are prepared and presented. The Financial Accounting Standards Board, the American Institute of Certified Public Accountants, and the Securities and

Exchange Commission provide guidance about acceptable accounting practices.

**Gross Domestic Product (GDP):** The monetary value of all the goods and services produced by an economy over a specified period. It includes consumption, government purchases, investments and exports minus imports. This is perhaps the best indicator of the economic health of a country. Growth of the U.S. economy is measured by the change in inflation-adjusted GDP.

**I/B/E/S S&P 500® Aggregates:** Sector and industry level aggregates for the U.S. market from as far back as 1985. Projections and forecasted earnings, P/E ratios, and growth rates constructed by aggregating analysts' expectations for all the stocks in the S&P 500 index.  
[http://www.thomson.com/common/view\\_brand\\_overview.jsp?section=financial&body\\_include=/financial/brand\\_overviews/IBES\\_Global\\_Aggregates&page\\_mode=full&subsection=&secondary=research&subnav=investmgr&tertiary=&product\\_name=I/B/E/S\\_Aggregated\\_Forecasts](http://www.thomson.com/common/view_brand_overview.jsp?section=financial&body_include=/financial/brand_overviews/IBES_Global_Aggregates&page_mode=full&subsection=&secondary=research&subnav=investmgr&tertiary=&product_name=I/B/E/S_Aggregated_Forecasts).

**Intrinsic Value:** The value of a security, justified by factors such as assets, dividends, earnings, and management quality. Intrinsic value is at the core of fundamental analysis since it is used in an attempt to calculate the value for an individual stock and then compare it with the market price. Intrinsic value also includes hidden things like the value of a brand name, which can sometimes be difficult to calculate.

**Loan to Value Ratio:** The amount borrowed divided by the appraised value of the collateral, expressed as a percentage.

**Margin of Safety:** Difference between the price investors pay for a security and the security's private market value or intrinsic value. For example, if the "Widget Company" has a private market value of \$100 per share and the investor pays only \$40 dollars per share in the open market, then the investor has a built in margin of safety in the amount of \$60 per share. Using a margin of safety helps reduce the risk level of a portfolio.

**Market Capitalization:** The total value of all of a firm's outstanding shares. This is calculated by multiplying the market price per share times the total number of shares outstanding. For example, at a current price of \$50 for each of its 20 million shares of outstanding stock, a firm has a market capitalization of \$50 times 20 million, or \$1 billion. *Also called market value.*

**Money Market Fund:** An open-end mutual fund which invests only in money markets. These funds invest in short term (one day to one year) debt obligations such as Treasury bills, certificates of deposit, and commercial paper. The main goal is the preservation of principal, accompanied by modest dividends. The fund's net asset value remains a constant \$1 per share to simplify accounting, but the interest rate does fluctuate. However, this \$1 is not guaranteed. Money market funds are very liquid investments, and therefore are often used by financial institutions to store money that is not currently invested. Unlike bank accounts and money market accounts, most deposits are not FDIC insured, but the risk is extremely low (only those funds administered by banks are FDIC-insured, but some others are privately insured). Although money market mutual funds are among the safest types of mutual funds, it still is possible, although unlikely for money market funds to fail. Century Management prefers money market funds that only invest in 100% U.S. Treasuries, so as to provide the highest degree of safety possible.

**Net Debt:** Debt minus cash. This is used to give an overall impression of a company's debt situation because cash is applied against the debt.

**Nikkei Index:** The leading and most respected index of Japanese stocks. It is published by Nihon Keizai Shimbun-Sha, a well-known financial newspaper publishing firm.

**Price to Earnings Ratio (P/E):** Price of a stock divided by its earnings per share. Also known as "Earnings Multiple" or "Multiple" because it shows how much investors are willing to pay per dollar of earnings. It gives investors an idea of how much they are paying for a company's earning power. The higher the P/E, the more investors are paying and therefore, the more earnings growth they are expecting.

**Price to Sales Ratio:** A technique for finding a stock's valuation relative to its own past performance, other companies, or the market itself. It is calculated by dividing a stock's current price by its revenue per share. The value is the same whether the calculation is done for the whole company or on a per-share basis.

**Private Market Value (PMV):** The price at which sophisticated and informed investors are willing to pay to buy and sell a company. The sellers want the highest price and the buyers want the lowest price. By the time each party has consulted their accountants, lawyers, and business advisors, the price each side is willing to agree upon is Private Market Value. This is also referred to as

the intrinsic value of a company.

**S&P 500:** Standard & Poor's S&P 500 index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941-43 base period. For more information on this index visit <[www.indices.standardandpoors.com](http://www.indices.standardandpoors.com)>.

**Total Credit Market Debt:** Total credit market debt is all debt (consumer, corporate, federal) except for intra-agency (government) debt.

**Treasury Inflation-Protected Security (TIPS):** This is a bond which is identical to a treasury bond, except that principal and coupon payments are adjusted to eliminate the effects of inflation.

**Unfunded Pension Liability:** The amount of Medicare and Social Security benefits that have been promised but not yet paid for by the government.

## Century Management Performance

### Century Management Performance Performance Updates through September 30, 2004

	<b>Year-to-Date</b> 12/31/03 to 9/30/04	<b>3-Year Return</b> 9/30/01 to 9/30/04	<b>5-Year Return</b> 9/30/99 to 9/30/04	<b>10-Year Return</b> 9/30/94 to 9/30/04	<b>30-Year Return</b> 9/16/74 to 9/30/04
<b>CM Value 1 Composite Net of Fees</b>	5.73%	14.15%	19.82%	16.59%	15.85%
<b>Dow Jones 30 ADJ*</b>	-2.06%	6.71%	1.43%	12.37%	13.75%
<b>S&amp;P 500 ADJ*</b>	1.55%	4.04%	-1.33%	11.09%	13.60%
<b>NASDAQ*</b>	-5.32%	8.18%	-7.14%	9.53%	12.39%
<b>Russell 2000*</b>	2.88%	12.29%	6.05%	8.40%	N/A

\*Source: FT Interactive Data Corporation. CM Value 1 Composite source is Century Management. **Past performance of markets, composites, or any individual securities may not be indicative of future results. In addition, past performance is no guarantee of future results.** Results have been time-weighted since inception. Interim performance results are linked monthly. CM Value 1 composite is valued on a monthly basis.

\*ADJ means dividends are included. Century Management's performance is in compliance with AIMR-PPS standards through 2003 and has been verified by the accounting firm of Ernst & Young LLP through 2003. The 2004 performance results have not yet been verified as of the printing of this report. The Association of Investment Management and Research (AIMR) has not been involved with the preparation or review of the Ernst and Young verification report. Complete performance results are available upon request or can be seen on our website at [www.centman.com](http://www.centman.com).



## **CENTURY MANAGEMENT**

Century Management Investment Counselors  
Corporate Office  
805 Las Cimas Parkway, Suite 430  
Austin, TX 78746  
Phone: 800-664-4888 or (512) 329-0050  
Fax: (512) 329-0816  
[www.centman.com](http://www.centman.com)



**CENTURY MANAGEMENT**

Offices in Austin, Texas; Houston, Texas; Pasadena, California