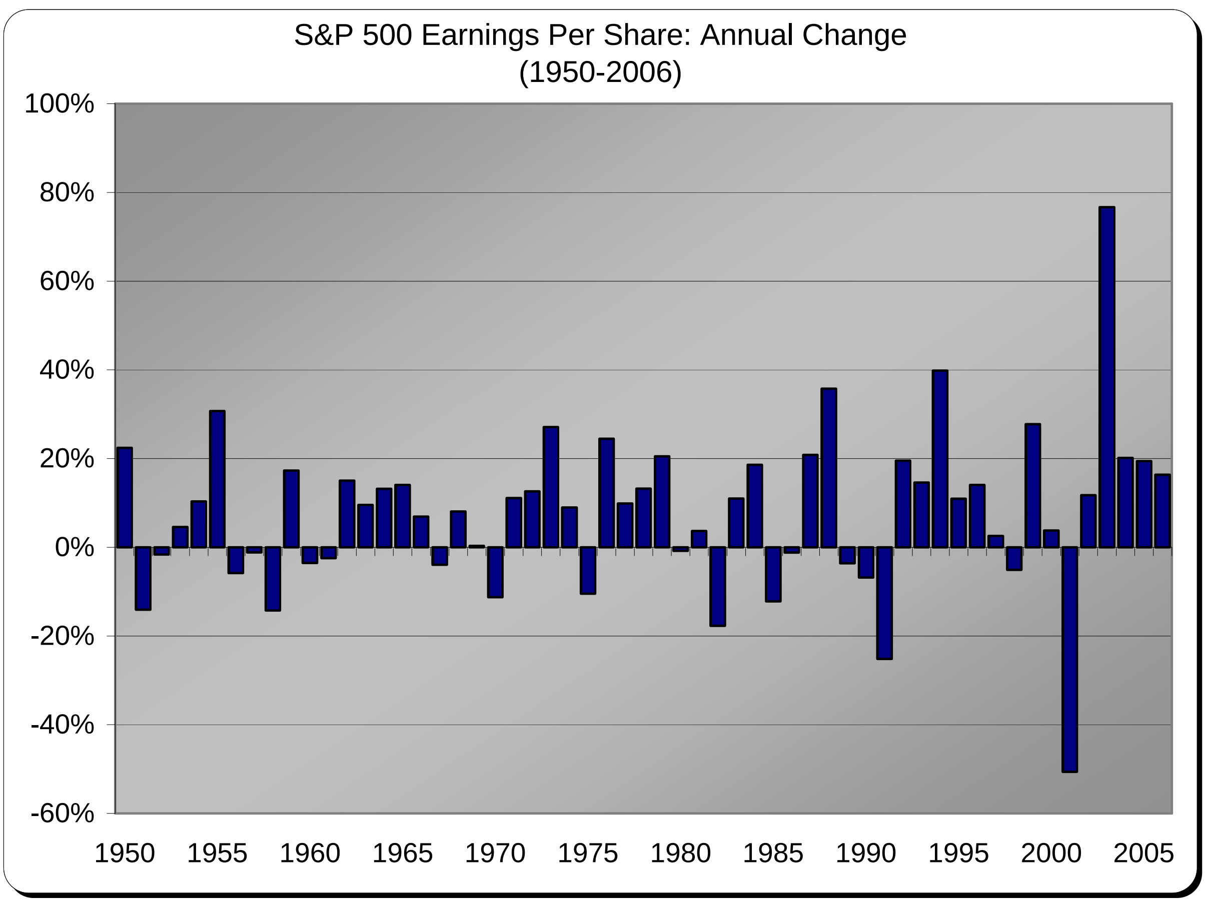
BEYOND THE HORIZON: THE EPS CYCLE

By Ed Easterling
Updated April 23, 2007
(recent BEA and S&P data; EPS update)

Earnings have increased at double-digit growth rates for five consecutive years—although many agree that earnings growth may be slowing, it's beyond almost everyone's foreseeable horizon that earnings might actually experience a decline.

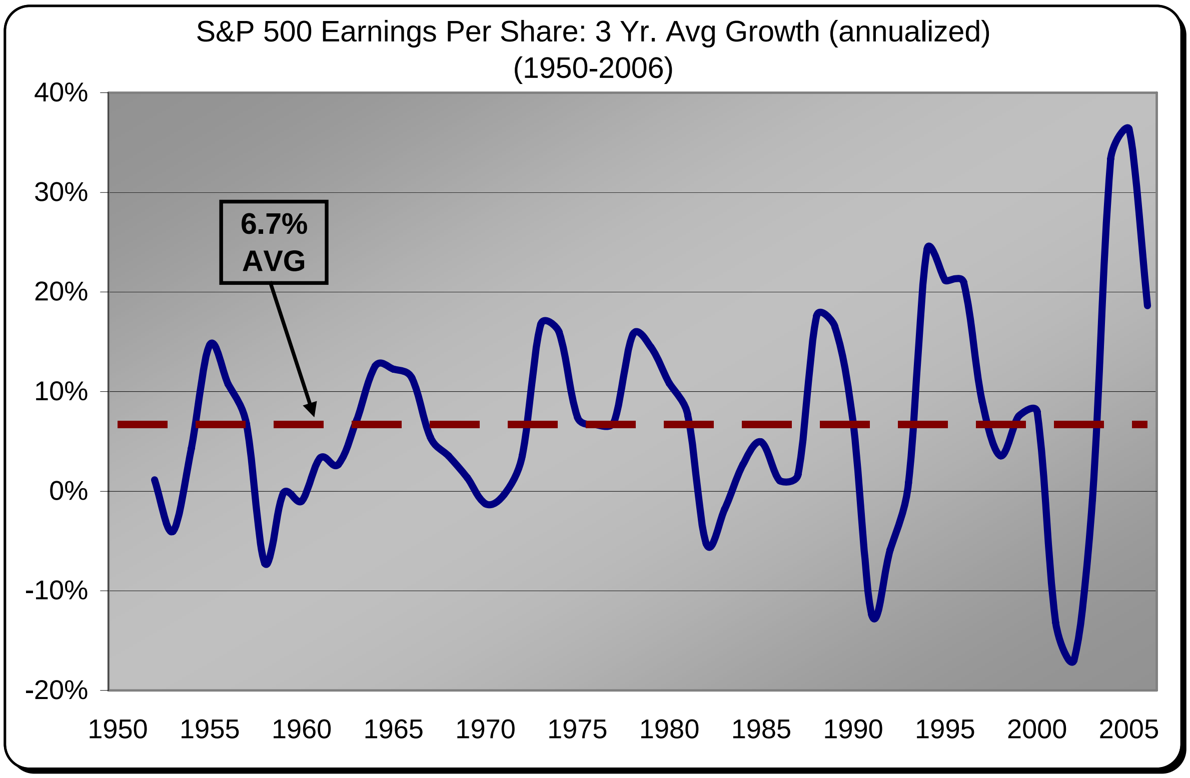
Yet a look back at history provides insights about the earnings cycle and what is considered to be normal. Despite the statistics about average earnings growth, the business cycle drives periods of surge and stall. And the stall is generally a year or two of outright retreat, rather than smoothly slower growth. As reflected in Figure 1, earnings typically grow handsomely for three to five years, and then decline for a year or two before again growing. That's usually all that it takes to restore the balance.

Figure 1. S&P 500 Earnings Per Share Growth: 1950—2006



This choppy, irregular pattern has endured across periods of wars, technology, innovation, political issues, and change. Yet the business cycle is not short; it does not run its course within a year. To more accurately see the trends, we can extend the period a few years to present the cycle as a multi-year average. Figure 2 presents the three-year average growth rate for earnings. The cycle, while still somewhat erratic, begins to show its more cyclical nature—and the tendency for it to return to a baseline growth rate.

Figure 2. S&P 500 EPS 3-Yr. Average Growth: 1950—2006



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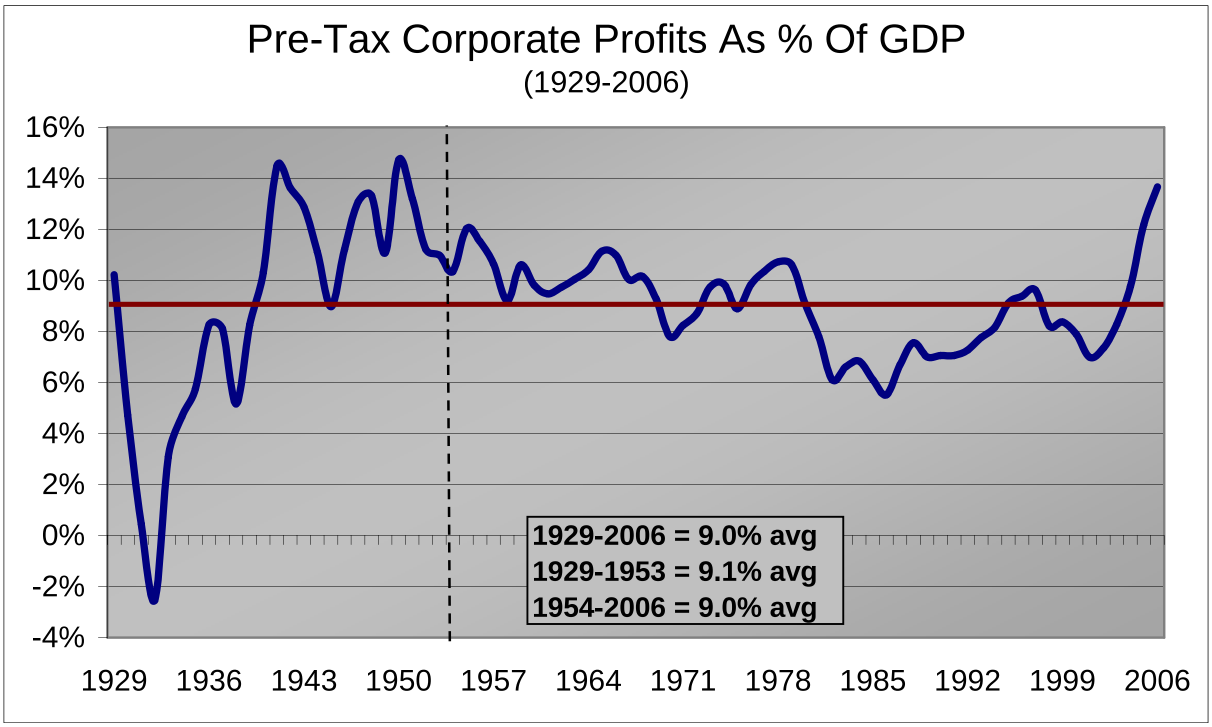
Profits not only grow and decline in dollar terms; they also change in relation to the amount of sales that it takes to generate the profits. Described in more detail, profits are the portion of sales that companies keep after all costs and expenses. When profits are compared to sales, the resulting ratio is known as the profit margin. As economists will acknowledge, the business cycle tends to push profit margins around a base level. When the sales of all companies are consolidated together, the result is essentially Gross Domestic Product ("GDP"). Therefore the aggregate profits of all companies can be compared to GDP as a measure of profit margins and relative profitability.

> *Despite the statistics about average earnings growth, the business cycle drives periods of surge and stall.*

Figure 3 presents the profit margin relationship since 1929, when the data was first readily available. The relationship has not been smooth, yet it has been fairly consistent. During the Great Depression, profit margins were low and negative. That underperforming period was followed by an extended era of above-average profit margins. The average for the entire period of almost eighty years from 1929 to 2006 is 9%. Interestingly, the average for the first twenty-five years (1929-1953), with its extremes, averages almost 9%.

The extremes in both directions during the early part of the last century counterbalanced each other as it would have been expected in order to achieve the "normal" average. Following 1953, the average has also been 9%; yet with less extreme cycles. (Note: 1953 was used as the cutoff year to reflect a twenty-five year period and to encompass all of the more extreme years during the first half of past century.)

Figure 3. Pre-Tax Corporate Profits As A Percent of GDP



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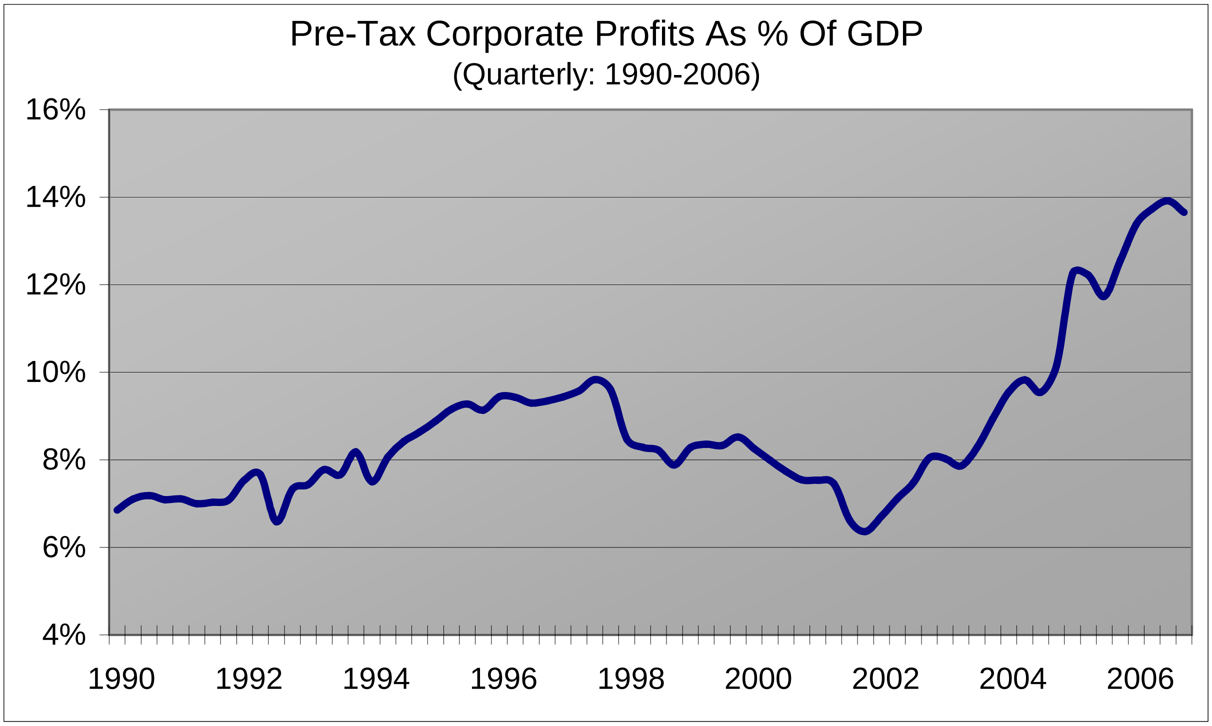
Today, as highlighted in Figure 4, the average has moved well above the historical baseline and is vulnerable to being restored again toward the average. It does not necessarily have to happen immediately, as these cycles are slow moving. It is likely, however, to be forthcoming.

Other economic and market experts are beginning to anticipate this also. As discussed by economists at the Congressional Budget Office ("CBO") in <u>The Budget and Economic Outlook: An Update</u> (August 2006; pg. 31): they "…forecast that corporate profits will grow more slowly than GDP after this year. Profits are projected to decrease from about 13 percent of GDP in 2006 to about 9 percent in 2016." (*note: by the end of 2006, the percentage increased to near 14%.*) Late last year, Standard and Poor's had expected that the third and fourth quarters of 2007 would have lower earnings per share than the same periods in 2006—reflecting the first decline of its kind since 2002 (following the last recession). Their recent forecast, however, now reflects increases in EPS for the second half of 2007 as well as all of 2008.

Figure 4. Pre-Tax Corporate Profits As % of GDP: Quarterly 1990-2006



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SPECIFIC IMPLICATIONS

What does this mean for profits in absolute dollars? First, we start with economic growth. For many decades, GDP has fairly consistently increased at near 3% plus inflation. The vast majority of economists and financial professionals expect future growth to average in the range of 2.5% to 3.0% plus inflation for the next decade or more. Therefore, if the Fed can successfully control inflation, total economic growth including inflation (nominal GDP) is expected to average around 5.0%. The average from 1990 through 2006 was 5.3% and the current expectation in the financial markets is close to 2.3%. Thus, for this analysis, we'll assume 5.3% (3% real growth plus inflation of 2.3%).

Next, we consider the relationship of profit margins to GDP. The CBO and others expect profit margins to return to the historical average baseline. So, if GDP grows at 5.3% and profit margins return to the baseline relationship (declining from 13.7% to 9.0% of GDP), the dollar level of corporate profits in 2016 will be approximately 10% higher than their lofty levels today. That represents 1% growth per year on average.

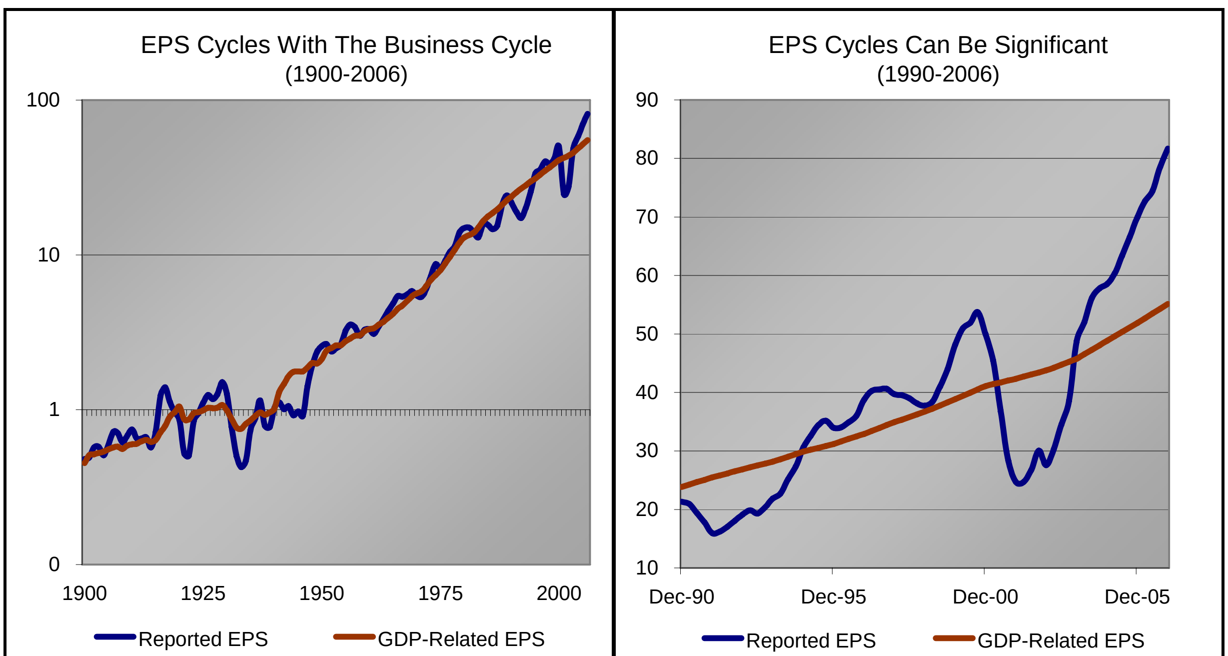
However, the CBO does not see this happening smoothly. They expect declines in three of the next four years, then modest growth out to 2016 (the end of their forecast period). By the way, this is what we saw in Figure 1: a run of profit gains, a decline or two, another surge, all resulting in a general business cycle that reflects the impact of capitalism and economic forces.

For some this may seem unrealistic; yet for the recognized economists, this represents the recurring and normal business cycle. This one has its own unique elements—they always do. This cycle, however, has delivered such strong growth that profit margins are now well above the historical baseline. The recent record run of corporate profitability may have been driven by the double-barrel stimulus of tax cuts and one percent interest rates as well as other economic and financial forces.

WHAT'S THIS TELLING US

Figure 5 presents the historical relationship between reported EPS and EPS adjusted for the business cycle. Adjusted EPS is based upon the long-term and highly-correlated relationship between EPS and the overall economy. The relationship and methodology were explored in layman's terms in *Unexpected Returns: Understanding Secular Stock Market Cycles*. As reflected in the left side of Figure 5, reported earnings per share (EPS) for the S&P 500 companies over the past century has cycled actively and repeatedly—reflecting the business cycle. On the right side of the figure, the cycle is more apparent when viewed since 1990. EPS exceeded, then regressed, as it cycled around the baseline. Keep in mind that the CBO economists are predicting that reported EPS will return only to the baseline over the next ten years, rather than considering that the cycle symmetrically rotates above and below that baseline.

Figure 5. The Business Cycle And The Impact On EPS



So let's translate this to terms that every investor wants to know…what does this mean for the stock market? Where might we be in ten years?

As discussed extensively in *Unexpected Returns*, we only need two factors to determine the future level of the stock market (S&P 500) in 2016: (1) EPS—earnings per share, and (2) P/E—price/earnings ratio. To forecast EPS, we can look to its relationship with the economy. On one hand, we have an EPS forecast based upon the CBO's (and other's) outlook for the historically average level of profitability: approximately $90.

On the other hand, if EPS remains steady at the current historically-high relationship, the value would be $136. It's probably not realistic to consider even higher margin percentages for 2016; that would not be consistent with history or economic principles. (Note that the EPS values of $90 and $136 are higher than the forecast values from last year's version of this analysis. This is the result of the effects from continued increases in profit margins—estimated to be 13.7% of GDP at year-end 2006.).

To forecast P/E, we can develop assumptions based upon the historical relationship of P/E to inflation (the fundamental driver of valuation for financial assets). If we are in a period of price stability, P/E can be expected to be 20-25x. For average inflation, 15-16x, and if we have higher inflation or deflation, P/E is likely to be 10x or less. Historically, inflation has not remained stable for very long; it tends to trend up or down. That cycle is a key driver of secular stock market cycles. From more than 100 years of history, we have seen that the market P/E tends to bottom below 10, finds 15 to be a passing point, and peaks in the low-to-mid 20s. Thus, ten years from now, any of the three P/E assumptions could be possible.

If profit margins return to the historical average, corporate profits in 2016 will be 10% higher than their lofty levels today. That represents 1% annual growth on average.

Now we have a series of basic scenarios using the EPS outlook and P/E alternatives. The annualized returns do not include dividends (currently less than 2%) or transaction costs. Obviously, these scenarios are only a subset of all the potential outcomes; yet they do begin to frame a picture of the future based upon the insights of history and the past consistency of financial and economic principles.

These scenarios are presented in Figure 6, The Outcome Matrix. The two assumptions for EPS are presented in the columns and the three assumptions for P/E are presented in rows. For each combination, we can see the S&P 500 Index value and the annualized rate of return from early 2007 (based upon the S&P 500 Index at 1,400).

None of the scenarios provide the base for historically average returns—after adding dividends to the best case, it still remains just short of 10.4%. Keep in mind that the best case scenario for 2016 requires that P/E's remains fairly high at 23 and that EPS in 2016 will be at its currently high percentage level in relation to the economy. Yet, if inflation is contained while EPS adjusts to historical margin levels, the total return would likely be less than 6%.

The most negative scenarios reflect typical secular bear market conditions as P/Es decline and offset earnings growth. If this cycle can remain a "bear-in-hibernation" (without P/E declines), returns for the next decade would be fairly modest. The optimistic scenarios require that profit margins remain at historic highs and reported, unadjusted P/E ratios increase to the low 20s. In reality, the historian is betting on scenarios reflecting a reversion of profit margins; hope has its wager on a new era for the business cycle.

The results in the Outcome Matrix below are consistent with the performance historically during secular bear markets—periods that start with relative high P/Es (valuations). As we see in *Unexpected Returns* and throughout the Crestmont Research website, above-average returns generally require rising P/Es (the recognized historical average of 10% actually includes significant P/E expansion and includes the benefits of starting at low valuations). The return profiles for the next decade may be disappointing for some, yet if inflation remains low, we do have the potential for reasonable real (after-inflation) returns. Since that has not happened in the past, most will recognize the challenges of the current environment and will position their portfolios to perform well beyond what the market will passively provide.

Figure 6. The Outcome Matrix

	EARNINGS PER SHARE			
	$90		$136	
PRICE/ EARNINGS RATIO (P/E)	S&P 500 INDEX (2016)	ANNUAL RETURN[1]	S&P 500 INDEX (2016)	ANNUAL RETURN[1]
23x	2,068	4.0%	3,137	8.4%
15x	1,348	-0.4%	2,046	3.9%
10x	899	-4.3%	1,364	-0.3%
(1) Annualized return from 1,400 in early 2007 before dividends				
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THE SOLUTION

As described in chapters 9 and 10 of *Unexpected Returns*, the goal is to use absolute return-oriented "rowing" investments, rather than more passive relative return "sailing" strategies. Although the stock market will provide shorter-term periods of solid returns over the next decade, it will also have offsetting periods of declines. Unlike secular bull markets where the upswings far outweigh the downdrafts, the current environment is set for a much more modest (and likely disappointing) result. Rather than acquiesce to the mediocre returns forecast by the analysis above (and supported by the CBO and others), investors can take action and develop their portfolios to profit regardless of the overall market direction. Although market timing may be an option for some, it is generally not a good option for most investors.

CONCLUSIONS

There is a business cycle that has endured for more than a century. It generally delivers three to five years of above-average growth before experiencing a year or two of pull-back. We have had a solid run over the past five years that now leaves profits well above its historical relationship to the economy.

Several factors now indicate that a period of decline may be upon us. This is confirmed by current forecasts by Standard and Poor's, economists at the Congressional Budget Office, and others. It does not necessarily portend a decline in the market over the next five to ten years, although several plausible scenarios do include that possibility. More likely, we're set for the typical period that follows super-charged eras like the 1980s and 1990s—when returns are roughly breakeven for a decade or two.

As an analogy, winter is not a time for farmers to hibernate; rather it's a period to approach crops differently. Today's investors have so many tools and techniques available to them to actively "row" and invest like institutions, thereby seeking relatively consistent returns with a lot less disappointment risk.

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