

The Second Lost Decade: an Update of the Secular Bear Market in Equities

In 2009, we [published an article](#) identifying the secular bear trend in equities that began in the year 2000 and came to the conclusion that it was far from over. This piece updates those opinions. In addition we now have the August data which provides us with a good case that the S&P Composite has begun a primary bear market. That may or may not mean that the March 2009 lows will be taken out, but it definitely does imply that prices will be lower next spring than they are now in early September 2011. Let's start by updating you on our views of where we are in the secular bear.

Secular Trends in Equities Since 1800

Chart 1 shows the course of the US stock market since 1810. The solid and dashed waves approximate the secular trends in this absolute price series. A couple of turning points may look inconsistent, such as the 1949 low being used instead of the actual low in 1932. Please bear with us as an explanation will follow later. It's reasonable to ask the question of whether the 1900-1921 and 1966-1982 periods were really "bear" markets when prices experienced a trading range. The answer is simple. If you had bought stocks in 1900 and held them until the last bottom in 1921 you would have lost 75% of the original purchasing power value.

Secular Trends Since 1800

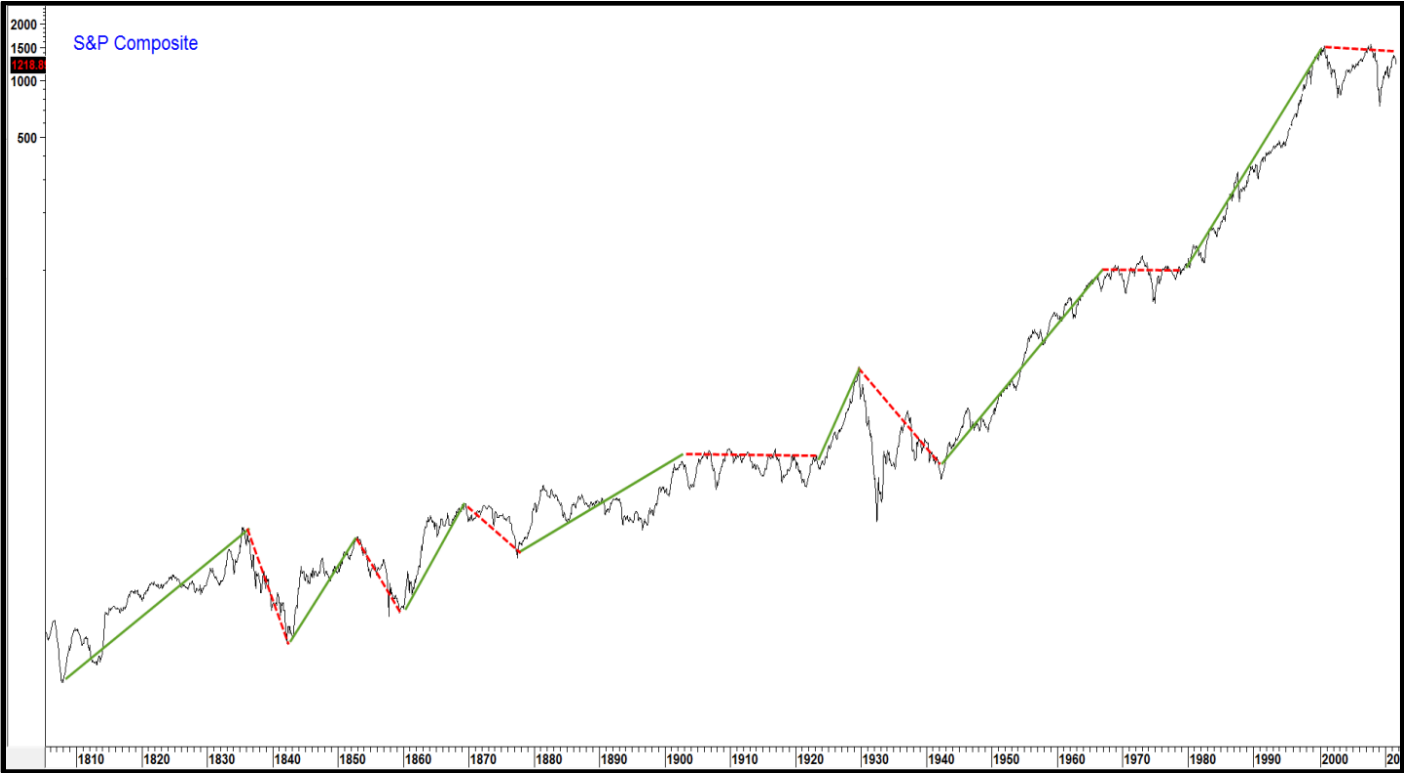


Chart 1

Since the damage in real purchasing power is a serious one we prefer to express prices in inflation adjusted terms when considering secular trends. Another reason is that inflation adjusted prices make these long-term swings easier to spot. In that respect **Chart 2** shows the stock market adjusted for inflation. It clearly demonstrates that the 1900-1921 and 1966-82 "trading ranges" really were in reality a disaster.

The Characteristics of Secular Bulls versus Secular bears

Secular bull markets are enjoyable because primary trend corrections are short and shallow and each successive peak is higher than its predecessor. They definitely reflect the belief that a rising tide lifts all boats, which in a practical sense means that investors are repeatedly bailed out from their mistakes. As a result confidence builds over an extended period and grows to excessive levels around the peak. At that point everyone thinks themselves to be an investment genius. Decisions considered to be irresponsible and careless at the start of the trend are hailed as perfectly routine as it matures.

The old conservative rulebook, learned at great expense during the previous secular bear, is thrown out as investors embrace the new era thinking that “this time is different.” One of the early results of a secular bear is to expose careless mistakes, financial excesses, and inevitable fraud that accompanies the aftermath of a long-term boom period. Secular bears are characterized by lower equity peaks and troughs in successive business cycles as real purchasing value is slowly eaten away.

Secular bulls lend themselves admirably to the buy hold approach, but an entirely different strategy is appropriate as the secular bear unfolds. Under this abusive environment offensive tactics during the relatively brief cyclical bull markets that run counter to the secular downdraft help to slowly build wealth. Portfolios are then protected by defensive tactics during the devastating declines that take place when the secular bear resumes.

US Stock Prices in Real Terms 1890-2011



Chart 2

April 2003 we published an article which posed the question “Whither the Secular Trend of Equities?” This piece laid out the case for the year 2000 being a secular or very long-term peak for the US stock market. The article forecast that equity prices would experience a wide multi-year trading range as sentiment unwound from the unrealistic assumptions that pushed valuations to record extremes. Since that peak equities have been unable to make any net progress and have lost considerable value in purchasing power terms. You may be wondering if enough time has elapsed to justify a reversion back to a buy hold approach or whether the tactical asset allocation strategy that has served so well during the opening years of the century is no longer appropriate. Unfortunately, the evidence indicates that the current secular bear is likely to ravage investors’ portfolios well into the mid-teens and probably to 2020 and

beyond. We offer a reliable opinion on when the next secular bull market will begin, because there are no known techniques suitable for consistently forecasting the duration of price moves in financial markets. However, we can tell you what sort of things to look out for based on what transpired at previous secular lows.

What Causes Secular Trends in Equity Prices?

We think there are two forces driving secular trends, psychology and excessive movements (in either direction) of commodity prices. Let's first turn to the psychological aspects.

An understanding of the secular trend is an appreciation of the fact that investors are continually undergoing long-term psychological mood swings, similar to the swing of a pendulum in a clock. Investors are cautious at the start of a secular bull market because they are mindful of the previous bear market disaster. Gradually they gain confidence as each successive cyclical bull market rewards them. This process extends as investors gradually lower their guard, eventually falling victim to careless decisions as they are sucked in by their own success and egged on by an ever more optimistic crowd around them. That means that when the trend reverses a dramatic correction follows.

The secular bear market is not caused by these careless investment decisions as they can be quickly and painfully corrected by the cleansing process of a primary bear market and deep recessions. The *secular bear* is more structural in nature. Typically a specific industry or economic sector will gain in popularity during the previous secular bull, often as a result of technological innovation. This results in a misallocation of capital that takes the form of substantial excess capacity, way more than at a normal cyclical peak which will take many cycles to correct.

Secular bear markets are characterized by these structural or long-term distortions that have their root in the prosperous times of the secular bull. Indeed, each secular bull is characterized by its own excesses. It was canals in the early part of the nineteenth century, railroads in the 1870's, manufacturing in 1929, technology in 1999, housing in 2007 and so forth. One of the bi-products of a skyrocketing stock market is the ability of firms to raise cheap capital. This not only results in risky mergers and acquisitions but leads to that excess capacity. Companies are therefore precluded from fully recovering until this surplus has been worked off or written down.

The previous secular bull, with its backdrop of growing confidence, also embraces fraudulent behavior, which is masked during the great investment boom. When prices "unexpectedly" start to slip and credit is no longer available such schemes and scams are quickly exposed. Governments and financial institutions play their part of course, as the stringent rules developed as a legacy of the previous bear are gradually relaxed during the uptrend and then rigorously reapplied during the downtrend. A key recent example might be the gradual easing of rules for mortgage approvals that helped fuel the real estate boom and subsequent crash. One of the structural problems associated with the current bear market is the need to work or write off much of that debt.

What do Bearish Secular Turning Points Look Like?

1. Sentiment

By their very nature such market turning points involve the kind of overconfidence among investors that is rarely seen and not repeated for a generation at least. In effect, it is necessary for secular peaks to be separated by sufficient time that people forget the mistakes of the past, and are therefore, in a position to repeat them. These mega turning points in the stock market can most easily be recognized by extremes in valuation measures. Indeed, secular trends in equity prices could well be described as very long-term trends in over and under valuation.

Unfortunately this is not an overnight process but requires prices to experience a huge drop over an extended period. The large decline is obviously discouraging as investors see their wealth slowly being eroded. However, it is the extended duration of the drop in real purchasing power that eats away the confidence of even the most optimistic

investors. Experience has shown that in order to correct the structural distortions built up in the previous secular bull it has been normal for the economy to undergo between four to six recessions before the bear is finally laid to rest. We'll examine the psychological aspects first by considering valuation, not as a fundamental measure but as one of sentiment.

The Shiller P/E Ratio

Arguably the most popular long-term measure of stock market valuation is the price investors are willing to pay for corporate earnings. In this respect please take a moment to look at the Shiller P/E series at the bottom of **Chart 3**. It is fairly obvious that this gauge of sentiment is continually moving from a position of excessive optimism to one of pessimism. Why at one time are fearful investors only willing to pay \$6.64 for \$1 of earnings, (i.e. at the 1982 Secular Bottom) while at another time they can't stop themselves paying \$44.20 for that same \$1 of earnings (i.e. at the 2000 Secular Peak)? The answer lies in the extremes of confidence or lack thereof, only seen at major secular turning points. Obviously investors are extremely confident at secular peaks otherwise why on earth would they be willing to pay such astronomic valuations. Similarly at secular lows they are so pessimistic that only fire sale prices will encourage them to buy stocks.

We have identified two levels of sentiment a reading of 22.5 or above as a proxy for optimism and a reading of 7.5 or below for extreme despondency. You can see that the P/E is continually swinging between these levels as highlighted with the arrows. While the absolute price level bottomed in 1932 the P/E for the post 1929 bear market was unable to really move away from the 7.5 area until 1949. That's why we classify this particular bear with that turning point. Notice also that once a bull market peak has been recorded with an extremely high P/E a new secular bull it has not been possible for a new secular bull to get underway until the ratio has moved back to or approached the 7.5 zone. Often it requires more than one move down to these basement levels.

Deflated US Stock Prices versus the Shiller P/E Ratio



Chart 3

Table 1-1 (below) summarizes the key turning points as well as other secular bear characteristics. Notice that at the beginning of secular bear markets the average P/E ratio is 31.5, in contrast the average at the end of these periods which is 6.9.

	Time Frame	Duration	# of Recessions	Starting P/E	Finishing P/E	Decline (Inf. Adj)
1	1901-1920	19 Yrs 6 Months	6	25.2	5.1	-69%
2	1929-1949	19 Yrs 9 Months	4	32.6	9.1	-67%
3	1966-1982	16 Yrs 6 Months	4	24.1	6.6	-62%
	Average	18 Yrs 7 Months	4.7	27.3	6.9	-66%
4	2000-Present	11 Yrs 1 Months	2	44.2	?	-39%

The most recent observation as we go to press (August 31, 2011) offers a Shiller P/E reading of 20.23. We may have traveled a long way from the 2000 historic overvaluation peak (P/E 44) but clearly it is not close to the historic norm seen at secular lows. The current dividend yield (2.25%) on the S&P tells the same story. It is currently more overvalued than the average peak of around 3% and is a long way from 6.5-7% normally seen at secular lows. Note also that the P/E has just crossed below the 22.5 level. Previous examples have all been flagged with the small brown arrows. Those bear markets speak for themselves.¹

Another method of measuring value (psychology) was created by Yale economics professor and Nobel laureate James Tobin, hence the name Tobin's Q Ratio **Chart 4**. The Q Ratio is the total price of the market divided by the replacement cost of all its companies. A value greater than "1" indicates stock prices sell above their replacement cost and are therefore expensive, while a reading below this level tells us that the market can theoretically be bought for less than replacement cost. If an individual corporation sells for less than "1" that means that it is cheaper to buy than build it. Secular bear markets generally bottom when the ratio declines to a bargain level of around .3, or when stock prices sell for just 30% of replacement value. The latest reading at the end of 2010, of 1.03, was considerably higher than that seen at the average secular low of .32.

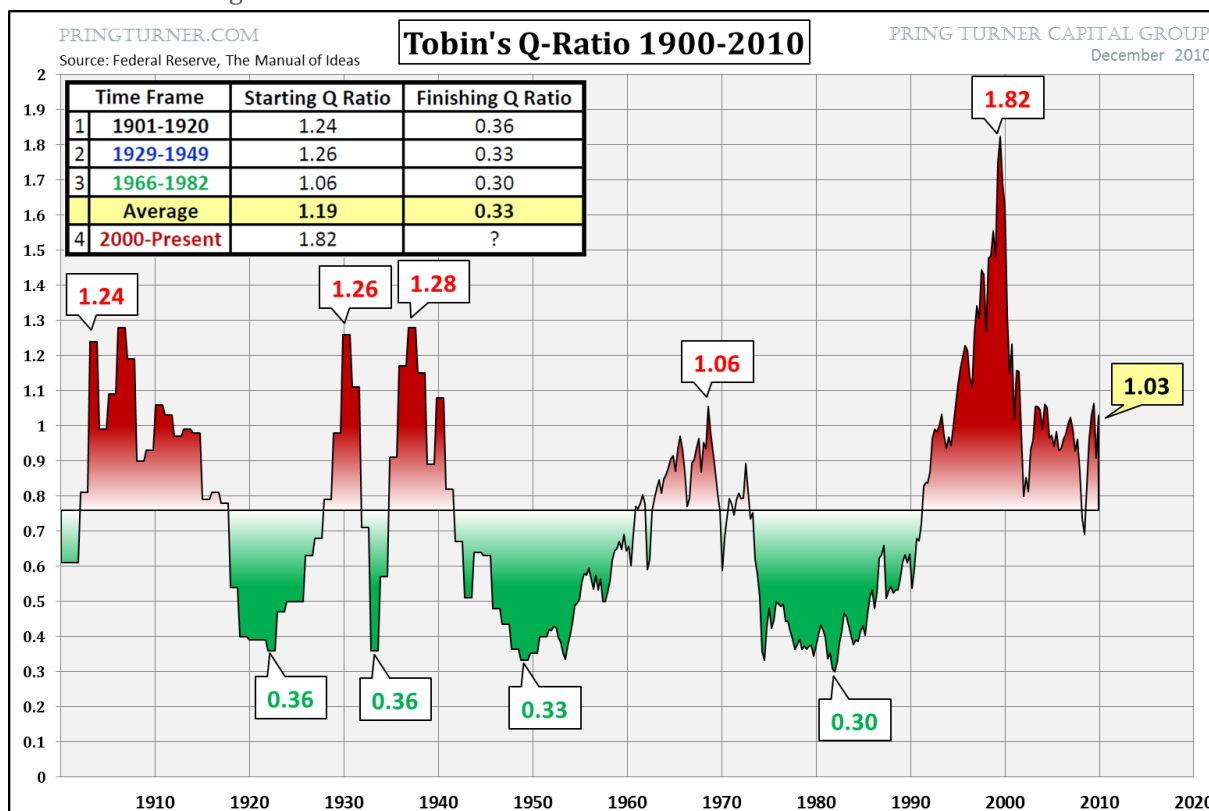


Chart 4

¹ Noted Economist Robert Shiller uses a proprietary 10-year average P/E ratio to smooth out the volatile business cycle effects on earnings. This data can be found at <http://www.econ.yale.edu/~shiller/data.htm>

2. The Role of Unstable Commodity Price Trends

The long-term trend of commodity prices appears to have an enormous effect on the direction of the secular trend of CPI adjusted stock prices. This relationship is shown quite clearly in **Chart 5**. The series in the upper panel shows real stock prices since 1871. The secular bear markets since 1850 have been flagged with the dashed red arrows. It is fairly evident that all of them, with the exception of the 1929-32 experience, have been associated with a background of rising commodity prices. The relationship is not an exact tick by tick correlation but the chart clearly demonstrates that a sustained trend of rising commodity prices sooner or later results in the demise of equities. The one exception to this relationship, in the 1929-32 period, was caused by instability of a different sort, where commodity prices experienced unusual volatility, but this time on the downside. After that, sharply rising commodities resulted in an extension of the secular bear. From 1949 until the mid-1960's commodities experienced a trading range and equities were in a secular bull market. The solid green arrows show that a sustained trend of falling or stable commodity prices is positive for equities as all six secular bulls developed under such an environment. This point is also underscored by the opening decade of the last century. It has been labeled a secular bear, but real equity prices were initially quite stable as they were able to shrug off the gentle rise in commodities. Only when commodity prices accelerated to the upside a few years later did stock prices adjusted for inflation sell off sharply.

Inflation Adjusted Stock prices versus industrial Commodities

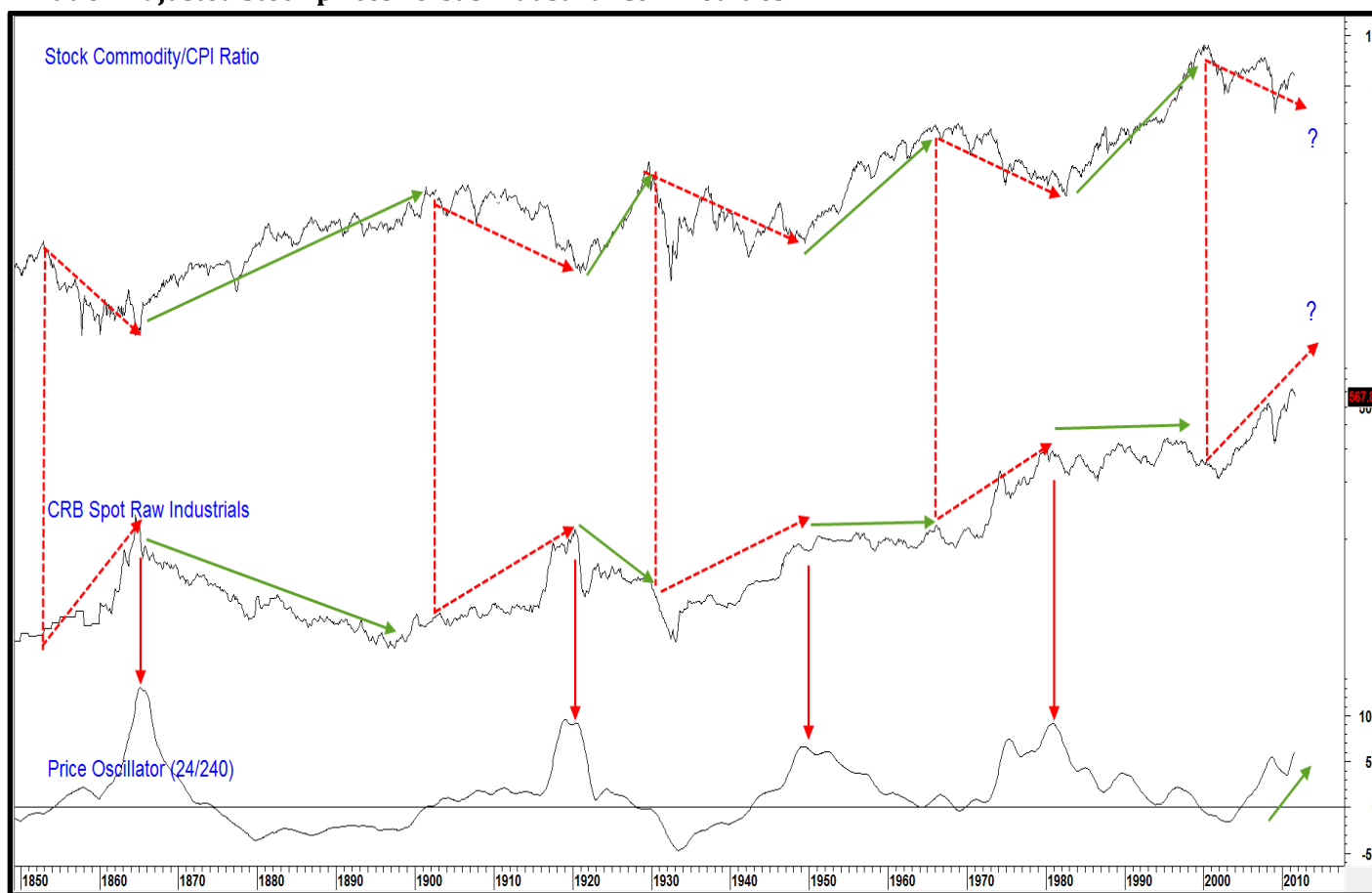


Chart 5

A useful approach for identifying a secular peak in commodity prices and therefore secular low in equities is to calculate a price oscillator or trend deviation measure. In this case the parameters used are a 24-month (2-year) simple moving average divided by a 240-month (20-year) average. The downward pointing arrows indicate that reversals from an overextended position have offered four reliable signals in the last 150-years or so. The oscillator also peaked in 1975 and 2010 but this proved to be a temporary respite for both the secular equity bear and the

commodity bull market. Also, they say timing is everything and the average secular commodity bull has encompassed 23-years. The current one began in 2002 and is only 9-years old.

How Long and Deep are Those Secular Bear Markets?

In freely traded markets the size of any particular mood change is often related to the level and extent of the emotion experienced in the previous trend. Thus it is normal for a 4-6-week rally to be followed by a 2-3-week correction or a primary bull market lasting 2-years to be followed by a bear lasting 1-year. The swing to the downside can be roughly proportionate, but since it takes longer to build than to tear down bear moves normally take less time to unfold. The previous secular low in *absolute* prices developed in 1974 and the high was registered in 2000- a 26-year record secular bull run. That fact, together with the record levels of overvaluation at the peak in 2000 suggests that the current secular bear will be greater in magnitude and duration than the average.

Previous post 1900 *inflation adjusted* secular bear markets have lasted about 18-20-years. This was true for the 1901-20 and 1966-82 bears but only works for the post 1929 drop if we regard the period between 1932 and 1949 as a trading range. Indeed, in 1949 inflation adjusted prices were not much above the 1932 low and neither was the P/E multiple. Taking the year 2000 as our peak, even allowing the best (shortest) case the 16-year bear between 1966-82 would project a low in 2016.

Chart 6 shows the current bear overlaid on the average of the three previous ones. As of August 31, 2011 we have obviously come a long way in terms of magnitude, but a projection based on the average duration of these and the current Japanese long-term bear would suggest that a new secular bull will not emerge until at least two more (post 2008) cycles have transpired.

Secular Bear Markets Compared

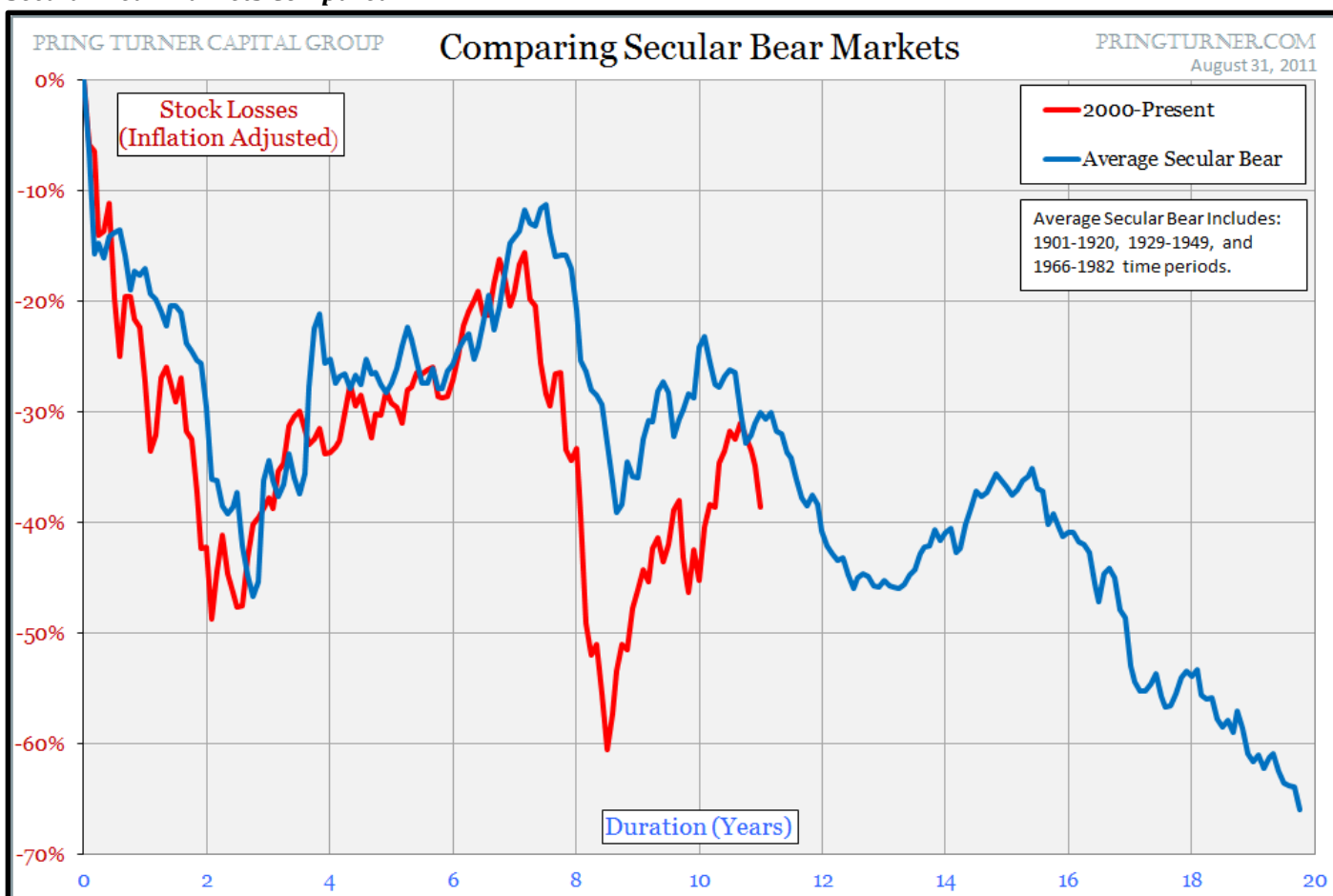


Chart 6

A simple approach that measures the stamina of investor psychology involves the number of recessions required to correct the previous bullish excesses. In prior secular bear trends, this has averaged between four and six. Since the year 2000 only two economic contractions have been experienced. Allowing for the best case scenario of four recessions would again suggest that in 2011 we are barely half way through the current secular bear cycle. Recessions have been flagged in **Chart 3** by the red highlights.

Is the Next Cyclical Decline Already Underway?

Given the 15% decline since the April peak in the DJIA it is not unreasonable to ask the question of whether the next leg in the secular bear is underway? There is no certitude in the forecasting business but the correct answer is probably yes!

How does the 2009-2011 rally stack up to its predecessors?

Let's start off with some simple statistics comparing the average business cycle associated bull market with the current one. We'll call them "bull dog rallies". The average duration of all bull dogs since 1903 is 33.8-months. Taking March 2009 as the low and April 2011 as the high that translates to 26-months (26.75 on a Friday close basis to be precise). Let's say we hit a new high in October. That would bring the duration close to 32-months, not far from the norm. The average bull dog magnitude was 45%. This compares to the difference between the April 2011 high of 12,810 and the April 2009 low of 6626, which was 95%. This beats the previous (1932-37) record of 78% meaning that it's already passed all meaningful expectations. We can parse the numbers some more by excluding the "big three" rallies of 1932-37, 1942-46 and 2002-2007 which would be justified by the principle of alternation. Simply stated, that principle means the market rarely experiences identical characteristics back on back. In other words the 2009-2011 bull market is unlikely match the big three in the duration category. By excluding the big three, the average bull dog was 26.8-months. Remember the March 2009-April 2001 advance was 26.75-months! We are not expecting precision here but an October, or beyond, high would place this rally well into the upper echelon of the non-big three duration hall of fame. Remember, in magnitude terms it's already a record. Finally, if the current secular bear follows the path of the average of the three previous ones a turn to the downside would fit in on a very timely basis.

The Response of Equities to Changes in the Money Supply

A useful approach that identifies how cyclical movements fit into secular trends is to compare real equity prices with the ratio between the S&P and money supply (M2). The concept is based on the idea that an expansion in the growth rate of M2 eventually has a stimulatory effect on the economy and vice versa. Investors in equities discount future business activity of course, but it is not until the ratio rallies that they are actually responding to the stimulatory effects of an expansionary monetary policy. This series certainly reflects the secular trends of the last hundred years. The red dashed line in **Chart 7 (next page)** is a ninety six month moving average of the ratio. That represents 8-years or just over two business cycles worth of data. A useful exercise is to observe when the ratio crosses above or below its moving average as that typically confirms that a new secular trend is underway. The chart also shows that it is possible to construct down trend lines for the secular bears.

When these lines are violated a reasonably timely signal of an emerging secular bull is given. The ratio is currently well below the line and the MA, so it continues to signal a secular bear. Note also that when the 24-month ROC of the ratio reverses direction from above the 50% level a cyclical bear market is usually signaled. Recently this series triggered another sell signal. The good news is that it is already down to the equilibrium level and is therefore half way to the minus 50% level, reversals from which have offered great cyclical buy signals. These have been as flagged by the small green arrows.

CPI Adjusted Stocks and the Equity/Money Supply Ratio



Chart 7

What are the technical indicators saying?

One of our favorite and consistently accurate moving averages is the 12-month time series. The center panel of **Chart 8 (next page)** shows the relationship between the S&P Composite and its 12-month MA. In this instance the S&P has been plotted as a monthly average, as opposed to an end of month close. The dashed red line tells us when the Index is below the average by a factor of -5%. In every instance since the 1950's when this has happened this technique has accurately identified a primary bear market. That does not mean that the crossover cannot be followed by a worthwhile rally. Indeed in 1957 experience the Index rallied back above the MA, but the overall period was still a bear market.

The series in the bottom panel of the chart represents the Raw Coppock data. Edmond S. Coppock developed a long-term smoothed momentum indicator. In technical circles its accuracy in calling bull markets is legendary. The series in the bottom panel is the raw series without the smoothing. Presented in this way the jagged action occasionally lends itself to trendline construction. When these lines are violated accurate signals of major trend changes are signaled. With the exception of 1987 each of the previous ten signals offered valid indications of a change in the primary trend. Last month saw another sell signal.

S&P Composite and Two Indicators

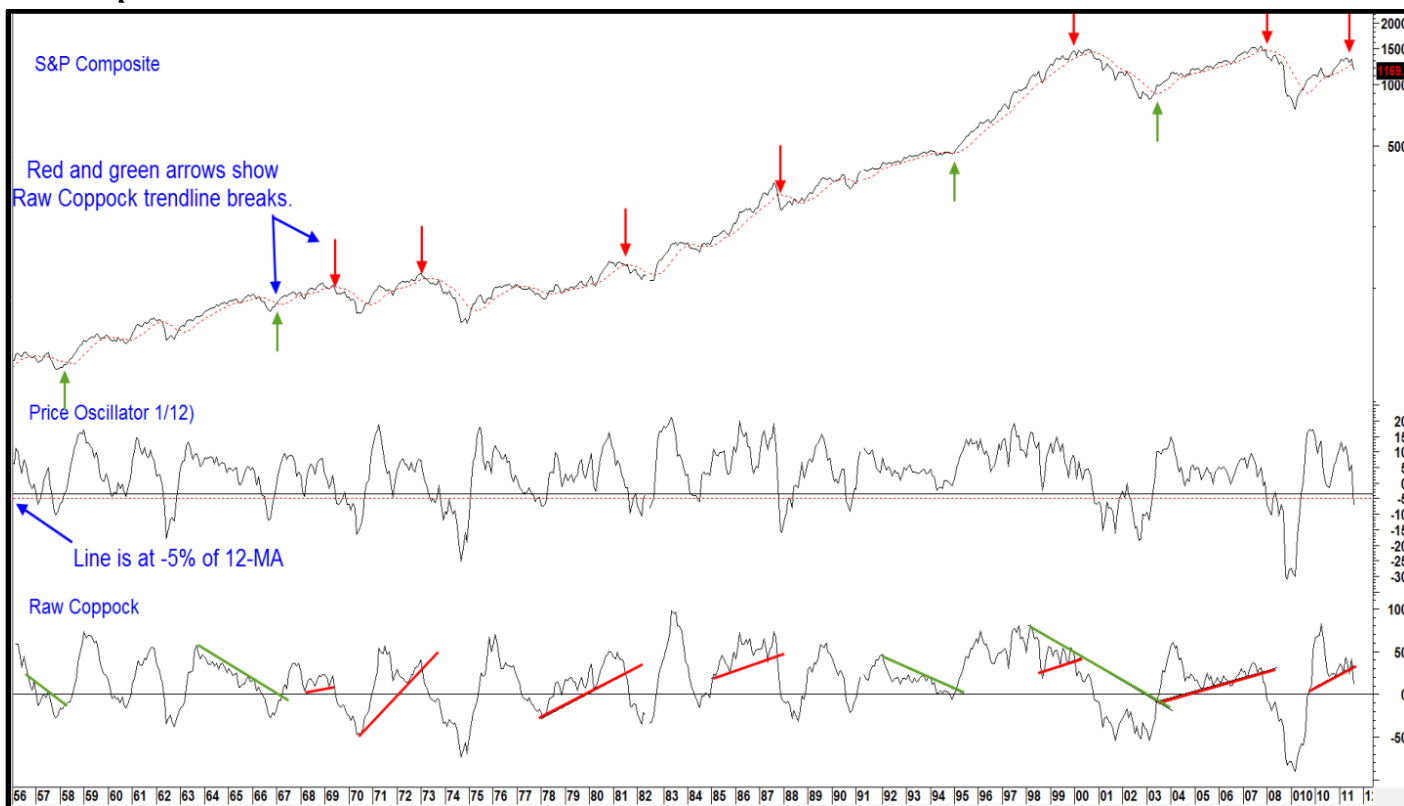


Chart 8

The KST (smoothed long-term momentum) of the inverted dividend yield has also been a pretty good indicator in the last hundred years or so (Chart 9).

S&P Composite and Inverted Dividend Yield Momentum

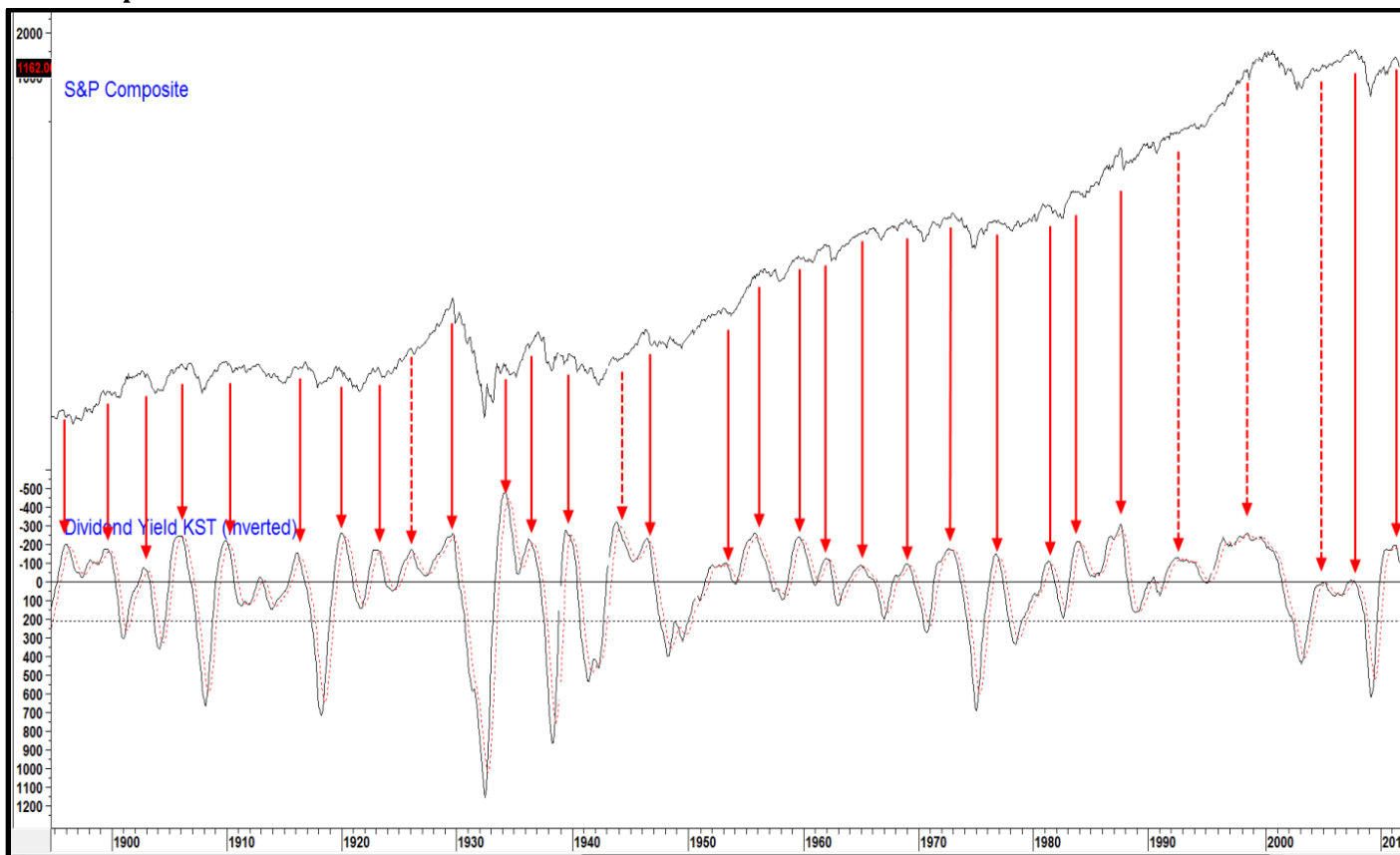


Chart 8

The solid arrows show that when it has reversed direction from a moderately overstretched position an important decline or correction has typically followed. The dashed arrows indicate failed signals, of which there were five. This compares to the 25 successful ones. This momentum indicator has once again reversed, so another bearish signal has been triggered.

The vertical lines in **Chart 10** flag cyclical peaks in the S&P Composite. If you look to the left you will see that they are consistently preceded by a top in the AMEX Brokers Index. The same is true, but more so, for the broker relative strength line in the bottom panel. You can see that a bullish trendline break in the relative action supported a good general market between 1990 and 2006. However, since 2007 this relative line is been falling to the extent that it is now decisively below its 1992 – 2011 up trendline. This suggests that brokers will underperform for many years to come and since they discount the market just like the S&P anticipates the economy this is a very negative sign.

S&P versus the Amex Brokers Index and its Relative Action

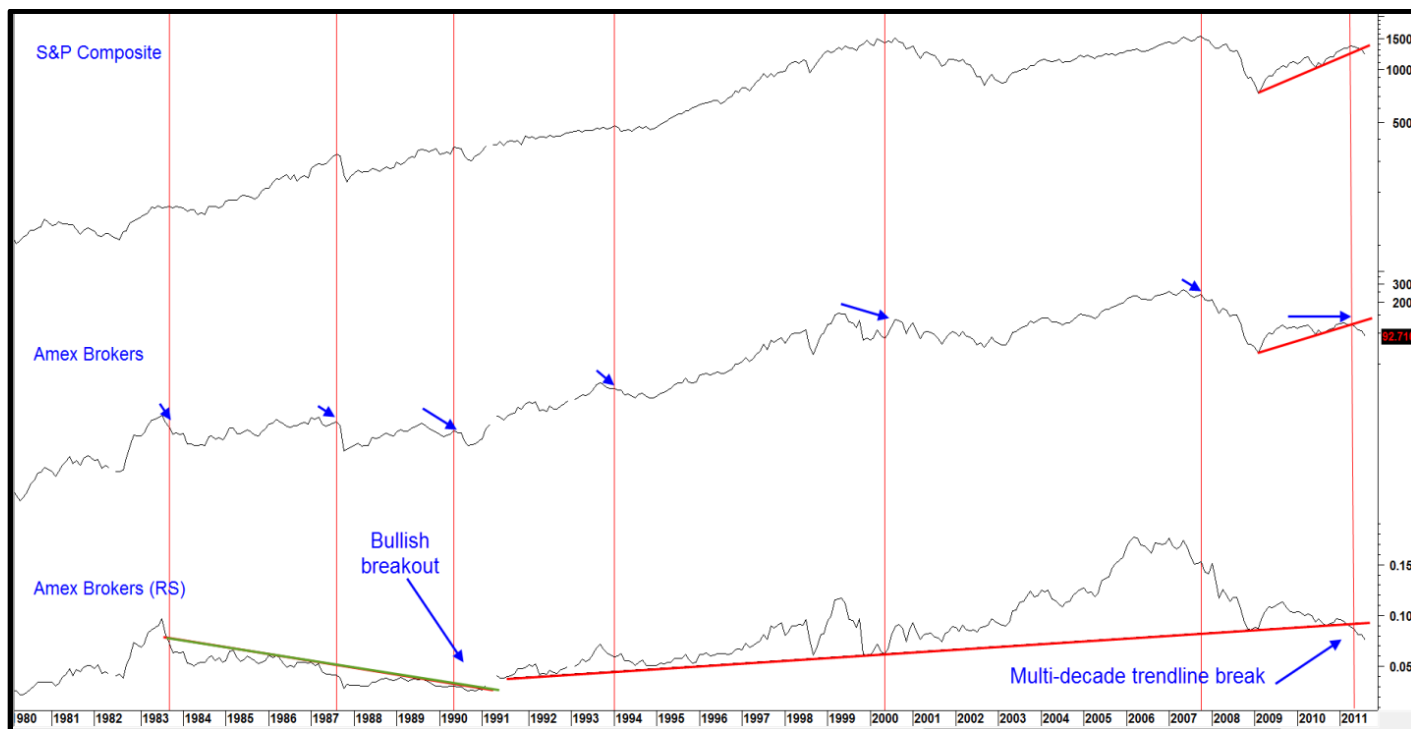


Chart 10

Conclusion

Current readings in virtually every benchmark that reliably signals a secular bear market low tell us that the Secular bear that started in 2000 has a lot further to go. In terms of time the 11-year period falls way short of the average 18-19 years of the three previous bears. The Shiller P/E, at 20.23, is closer to the 22.5 top zone than the secular bargain basement 7.5 readings typically seen at bottoms. Current dividend yields at 2.25% versus 6.5-7% and the Tobin Q Ratio 1.03 versus .3 round out the picture. Secular bear trends typically experience 4-6- recessions before they run their course but the current one has only experienced two.

By the same token several indicators that have proved reliable in the last 50-100-years are signaling that a new primary bear market is underway. Before it is over a serious challenge of the March 2009 bottom is likely. In the meantime several sentiment and momentum indicators have reached the kind of levels that ought to trigger an intermediate rally or trading range. Occasionally oversold conditions are relieved by some spark or surprise. An unexpected move from the Europeans, the Fed or even the President could be the fuel for a temporary sharp rally back to the early August levels. However, history shows that counter-cyclical price movements such as this are notoriously difficult to play and should be left to professionals.

The overriding conclusion is that we are in a secular bear market that has much further to run and that the cyclical trend has now also rolled over into the bearish camp. This is not a time for complacency but one in which risk should be stringently managed, as investment portfolios are re-balanced to a more defensive posture. If you are looking for a leading indicator go no further than the Athens General SE Index which fell to a multi-decade low in August.

Martin Pring

September 7, 2011