

Part 3, Final Report: Major Market Reversal Model

This is the third and final report on my major market reversal model. This portion of the model focuses on the domestic and international economy.

I've gone back and looked at the major causes of each recession, bear market:

YEAR OF BEAR MKT	RECESSION	CAUSE 1	CAUSE 2	CAUSE 3	FED RAISES RATES	DERIVATIVES	OIL UP	HIGH P/E	HIGH DEBT/ LVRG	BAD CPTL ALCTN
2008	YES	Real Estate Bubble	Collapse of Financial Markets (Lehman Bros)	Consumer Too Much Leverage	Y	Y	Y	NO	Y	Y
2001	YES	Tech Wreck	911	Corporate Scandals	Y	N	Y	YES	N	Y
1998	NO	Asian Conatgian	Russian Defaut	LTCM	N	Y	N	YES	Y	Y
1994	NO	Mexican Peso Collapse	Orange County Bnkrptcy		N	Y	N	NO	Y	Y
1991	YES	Gulf War I	Banking Liquidity	High oil prices		N	Y		N	N
1987	NO	Falling dollar, rising inflation & interst rates	Potential oil supply disruptions due to Iran-Iraq War	Derivatives	N	Y	Y	NO	Y	N
1984	NO	Strong GDP	Volker raises rates		Y	N	N	NO	N	N
1981	YES			STAGFLATION	Y	N	Y	NO	N	N
1976	NO	Inflation		STAGFLATION	Y	N		YES	N	N
1973	YES	Oil Embargo	Inflation	STAGFLATION	Y	N	Y	YES	N	N
1968	NO				Y	N		YES	N	N
1966	NO				Y	N		YES	N	N
1961	YES	Kenndy - steel prices	Cuban Missle Crisis		Y	N		YES	N	N
1953 TO 1954	YES	Economist predict depression			NO BEAR MARKET				N	N
1949	YES	Overheating Economy	Inflation	Strikes		N		YES	N	N
1929 TO 1932		LEVERAGE	BAD ECON PLCY	DFLTN		N		YES	Y	Y
1919 TO 1921				DFLTN		N		NO	Y	Y
1914	WWI									

The yellow highlighted areas are bear markets with NO recession.

Major Causes of Recessions and Bear Markets

The main causes of recessions and bear markets include:

- Restrictive monetary policies, rising rates
- High oil prices
- Rising inflation
- Too much debt
- Bad allocation of capital
- Late phase of cycle
- Derivatives have played a role in most bear markets and recessions since 1987

Below is a current reading of my model of the economics section, there are several red flags:

CHART/PRICE ANALYSIS	RED FLAG	THIS CYCLE	WEIGHT	SCORE
Economic Indicators				
Inflation	High	low	2	0.5
Interest Rates	Rising High	Might be rising	2	0.75
Phase in economic cycle	Average cycle, 4 to 5 years	Mature, 6th year	1	1
Monetary Policy	Restrictive	Restrictive to accomadative	2	1
Fiscal Policy	Restrictive	Restrictive	1	1
Yield Curve	Short higher than long	normal	2	0
Credit Spread	Widening	Starting to widen	3	3
Oil	High, rising	Reverse of normal	3	2
Allocation Decisions	Problems		3	2
Debt Levels	High		2	1
External				
ME, Europe, China, Japan....	Where: ME, Europe, China, Japan, Venezuela, Russia, Brazil, Canada, Australia	ME, China, Greece & EU	3	2.5
Allocation Decisions	Problems: Real Estate, state enterprises		3	2
Debt Levels	High: China, Japan, Europe		2	1.5
TOTAL			29	18.25

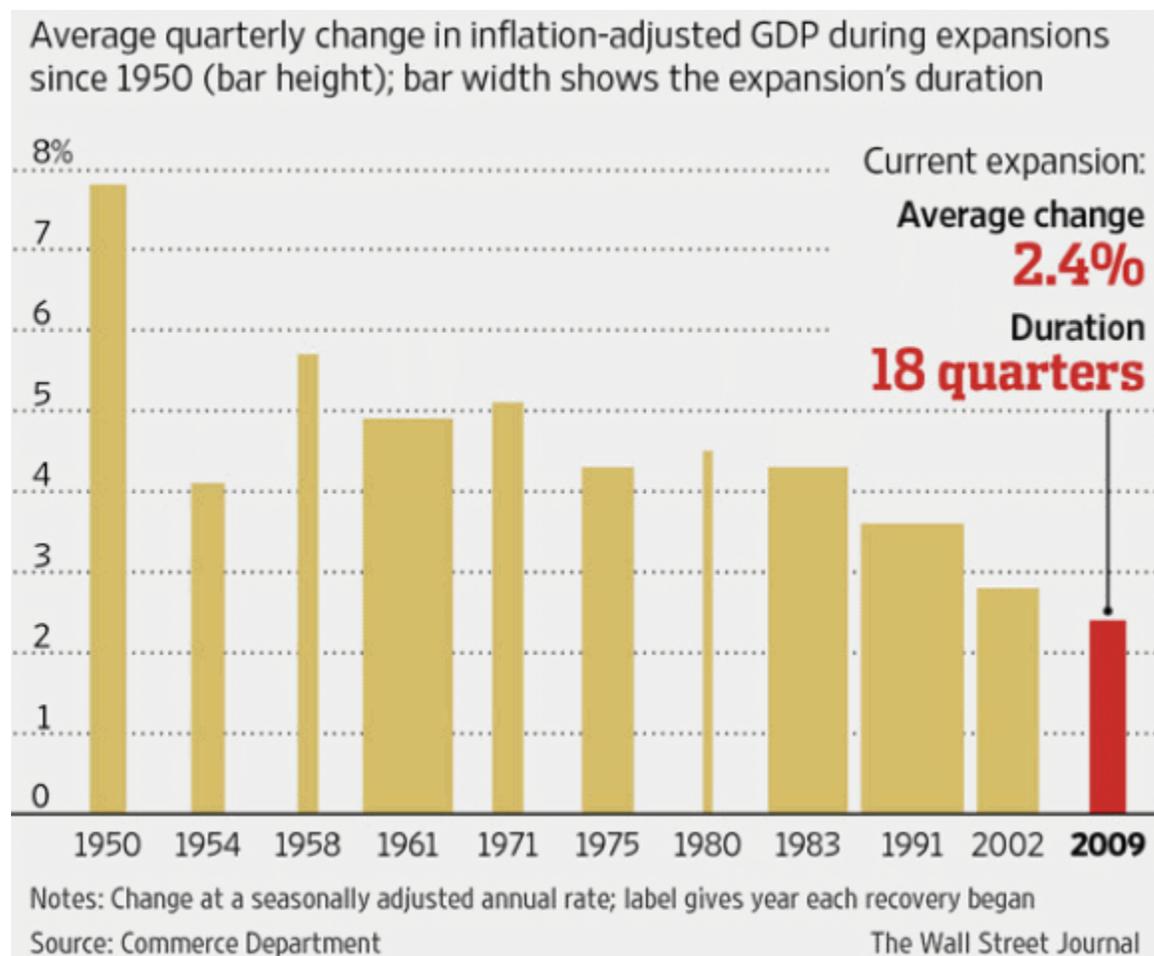
Most economic and market cycles end because toward the end of a cycle the economy is heating up and inflation is anticipated to be a problem so the Federal Reserve starts to raise rates. This

causes the economy to slow down, and then the sins of the economic cycle start to show up, for example:

1. 2008 too much leverage in housing, mortgages sold globally as tranches, derivatives
2. 2002, the bursting of the tech bubble (too much capital went into technology), Federal Reserve was raising rates
3. 1991, Gulf War I and high oil prices
4. 1987, derivatives, falling dollar, Iran Iraq war, rising oil prices

Age of Economic Cycle

Below is a chart that shows the growth and length of each expansion, cycle of the U.S. economy going back to 1950:

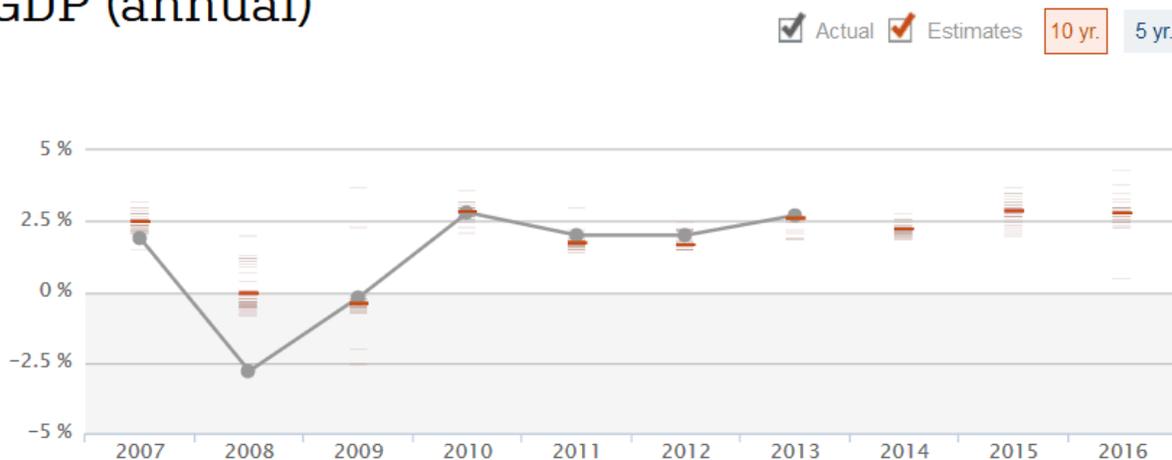


The average expansion since 1950 lasts about 5.5 years. The longest expansion occurred from 1991 to 2002 thanks to the technology boom of the 1990s. The shortest was the 1980 expansion, as the economy was recovering from the high inflation, oil spikes and oil supply disruptions of the 1970s.

Also, notice growth has slowed for each expansion since the 1980s. I wrote about the causes of the slowing of the U.S. economy in a Special Report about the “new normal”. [Click here](#) to read the Special Report.

Below is a chart that shows the forecasts and trends for this economic cycle, expansion:

GDP (annual)



GDP (annual)



This expansion started in late 2009, so this economic cycle is mature and aging.

The one benefit of slower growth is we don't get the normal inflation concerns where the Fed needs to raise rates to slow the economy and inflationary pressures.

Inflation, Interest Rates and the Federal Reserve

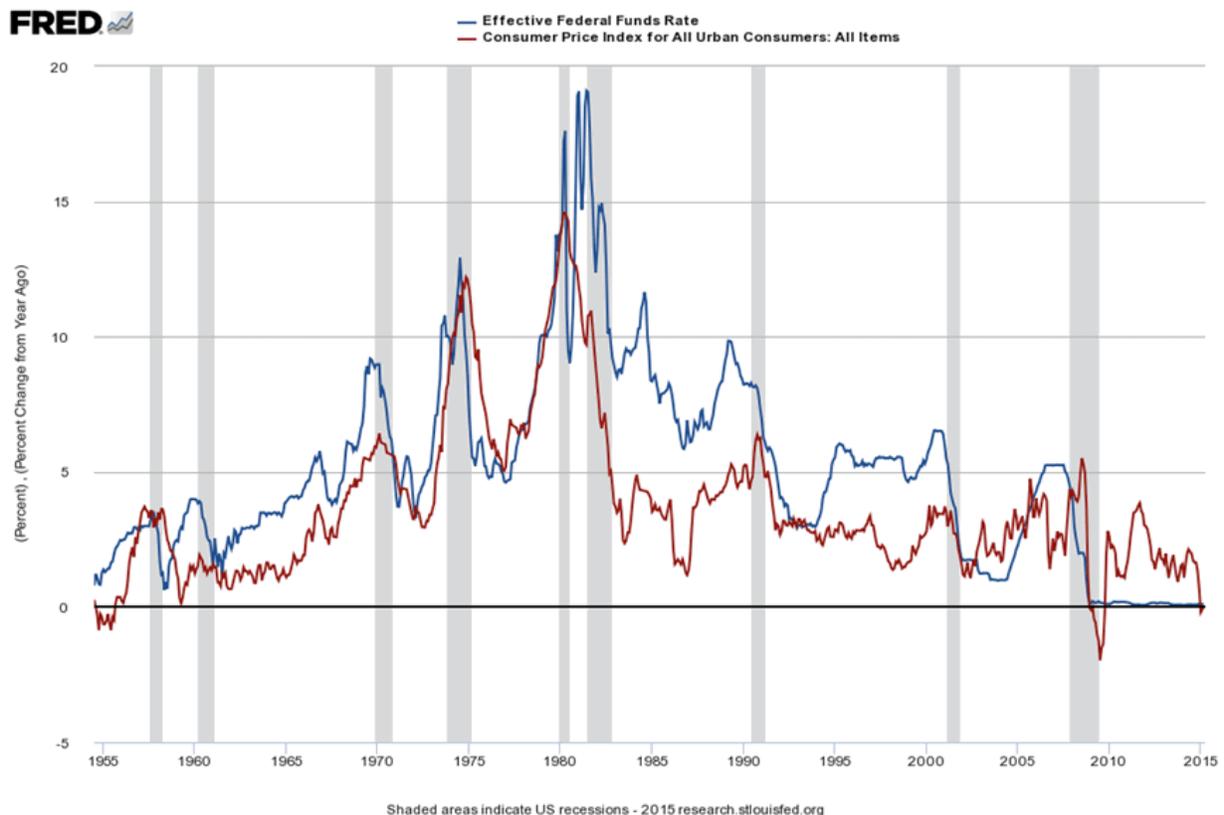
This cycle is very different than most cycles due to the Great Recession. Inflation and interest rates are at historic lows, especially this late in the cycle.

Normally interest rates reflect at least inflation. Inflation has averaged about 1.8% this cycle, so interest rates are abnormally low. The Fed recently raised rates for the first time in almost ten years. Its goal is to normalize interest rates. It's expected that the Fed will raise rates about three to four times in 2016. This could be very disruptive to the markets, and economy.

To stimulate the economy, the Federal Reserve will normally lower rates making it an easier decision for businesses to expand and consumers to purchase big ticket items. This cycle, the Fed lowered rates to .25%.

If the U.S. has a financial crisis, our Federal Reserve will not be able to lower rates enough to stimulate the economy. We could have a prolonged recession because the Fed has run out of effective monetary bullets, especially lowering rates to stimulate the economy.

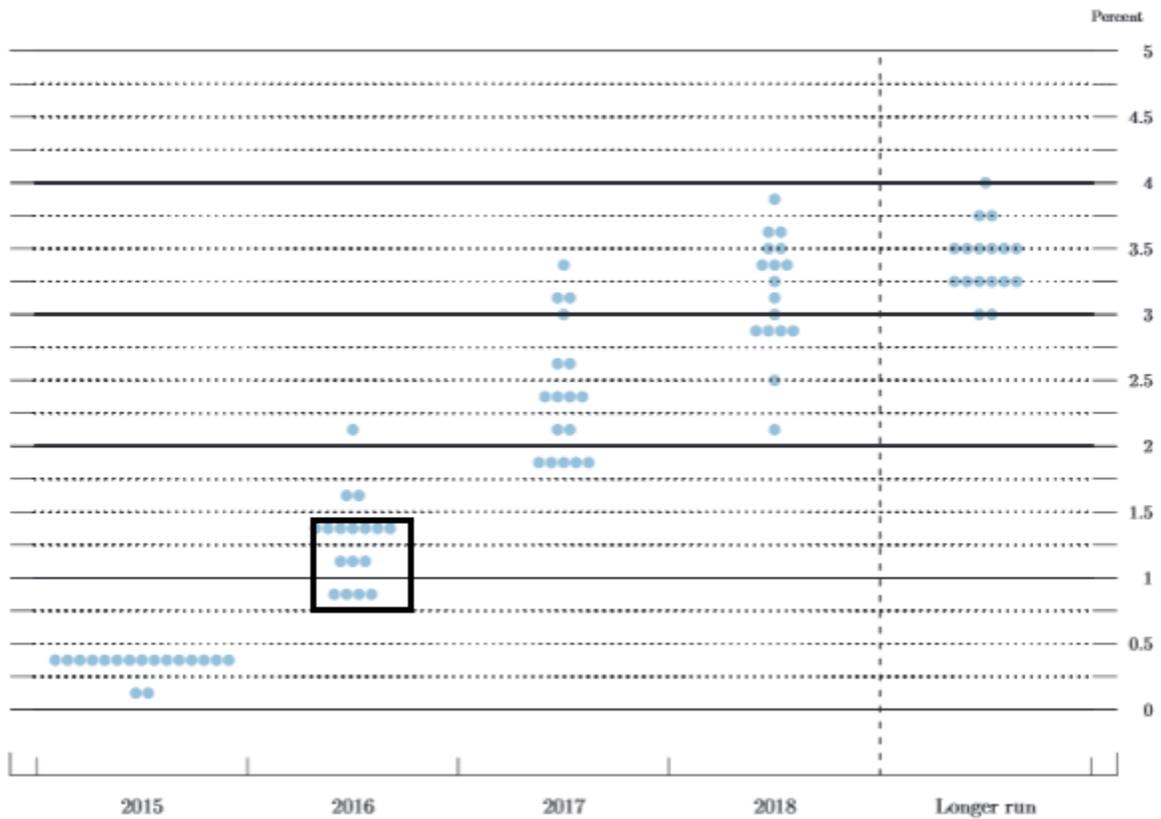
Below is a chart that shows the Fed Funds rate and CPI (inflation):



Inflation and interest rates have been falling since the early 1980s. Notice that most of the time, the Fed Funds rate is higher than inflation. Since the Great Recession, the Fed Funds rate does not reflect inflation. Investors/savers who loan their money out want to be paid at least the rate of inflation. Many savers/investors have not kept up with inflation.

Also notice in the above chart, inflation has fallen below zero during this economic cycle. The Federal Reserve has lots experience and tools to deal with inflation. It has less tools and experience dealing with deflation. Deflation has been a concern here in the U.S. and globally.

Below is the latest federal funds rate forecasts from the Federal Reserve.



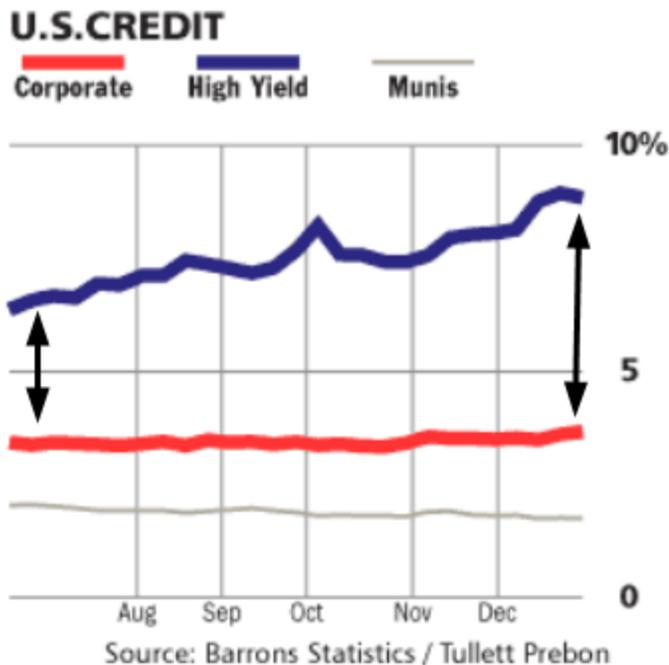
Most Federal Reserve members forecast rates to be ½ to 1% higher next year.

If this happens, the raises could be disruptive to the markets and economy as it has been in the past.

The prospect that the Fed will continue to raise rates is a red flag.

Credit Spreads and Yield Curves

Credit spreads are widening and this is a red flag. Below is a current chart of credit spreads:



The chart shows how high yield rates are rising, and the spread between corporate and high yield rates is widening. This normally means that investors are probably selling their high yield bonds because of fear of defaults. This normally occurs as we near a recession.

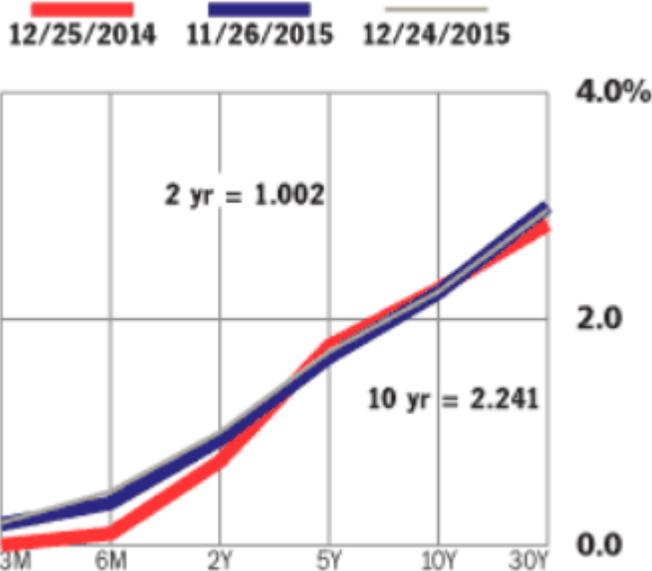
Analysts and economists will point out that many energy companies have issued high yield bonds, and because oil prices are below breakeven points investors are selling their energy high yield bonds due to fear of defaults. There have already been over a dozen energy company bankruptcies, most of them are very small companies.

It is true that junk bonds in the energy sector is a major concern, but investors are selling their high yield bond funds and ETFs causing more high yield bonds to sell off, thus lower prices and higher yields.

The yield curve is not a problem and probably won't be. When short-term yields move higher than long-term yields (aka inverted yield curve) it tells investors that short-term yields are rising because of inflation pressures. Short-term rising rates should slow down the economy easing inflationary pressures. Long-term rates don't rise as much under this scenario. Historically inverted yield curves are an indicator of a potential recession.

Here is the current chart for the yield curve:

U.S. TREASURY YIELD CURVE



The current yield curve is normal, with long-term rates are higher than short-term rates.

It's hard to imagine that short-term rates could move higher than long-term rates in this slow growth, low inflation environment.

Oil Prices and the Middle East

For the past four decades, many cycles ended caused high oil prices due to strong economic activity or oil supply disruptions due to wars, conflicts in the Middle East.

This cycle is very different, oil prices are down substantially. Lower oil prices should help the consumer and many countries and industries that are dependent on oil.

The oil industry is important to our economy because it provides many high paying jobs, and the oil our economy needs (we still import about 6 million barrels of oil a day). The U.S. oil industry, similar to many oil nations and international energy companies, are struggling to survive with these very low oil prices. Currently oil prices are lower than many oil company breakeven points. Most oil companies had losses this year, and is one of the reasons for the poor performance of the markets. Oil company debt is becoming a concern as written about in the section above.

There are many reasons for lower oil prices that I will analyze in a future monthly issue. Most analysts believe oil prices will be higher if we don't have a recession, especially if we have oil supply disruptions from the oil rich Middle East. The Middle East is more volatile and dangerous than normal.

The fall in oil prices is part of a larger problem the global economy faces.

International Risks are Rising

Most of the risks the U.S. economy and markets face are external, and are red flags, especially debt levels and poor allocation of capital. I wrote an article earlier this year about the reversal of a major global trend, the China and commodities boom. [Click here](#) to read the article.

Below are excerpts from the Special Report:

In the 2000s, the major economic trends were China and the global financial crisis.

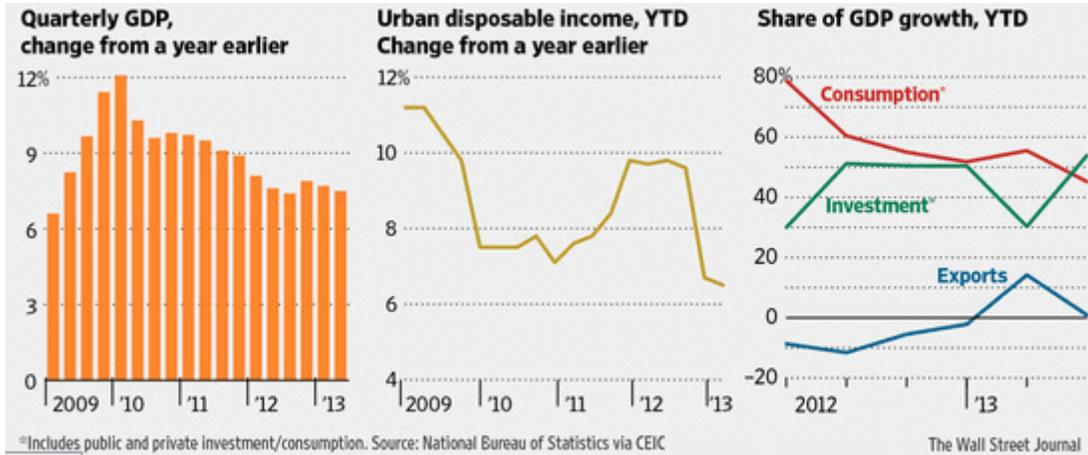
China's growth and global central bank money printing as a remedy to the global financial crisis caused a repeat of the 1970s inflation hedges and real assets as the preferred investments. There are many signs that these two trends are reversing.

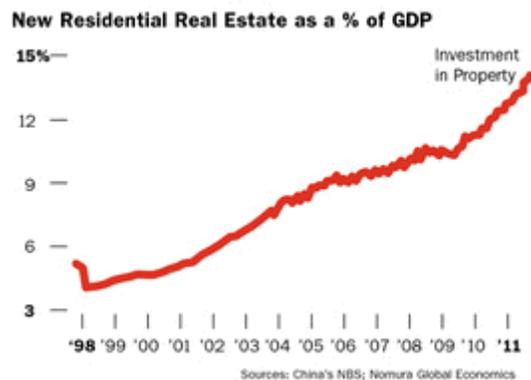
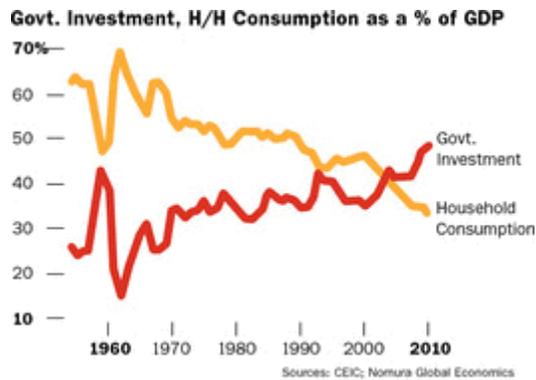
China has been a major trend for the 21st century. The economic growth of China has been unprecedented.

China has grown from near zero to about half the GDP of the U.S.

China's growth has basically been driven by manufacturing, government spending in infrastructure, and real estate development.

China's economic story is in transition: it's slowing and the government is trying to shift it from a manufacturing and export driven economy to a consumer driven economy like the U.S. and Japan. The U.S.'s economy is about 70% consumer. Below are the current trends for China:





China's growth is slowing. It's going to be harder for China to grow at its past pace because of the law of large numbers.

The charts show that the transition to a consumer driven economy is not going well. China does not have the safety nets that the U.S. has, so the Chinese save a lot more, and they tend to want to invest their savings into real estate.

The slowdown in the Chinese economy, and also the transition to a consumption economy has caused a reversal in commodity prices. China is not buying the quantity of iron ore, copper, lumber.... as it has in the past.

Below is a 15-year chart of the Dow Jones Commodity Futures Index:



Let's review the chart:

- *As China's voracious appetite for most commodities grew in the early part of the century, commodity prices more than tripled during the period.*
- *Prices collapsed during the financial crisis, and the long-term bullish trend line was broken.*
- *Prices did recover.*
- *As China's growth is showing signs of slowing, and as it tries to make its transition to consumption, commodity prices resumed its bearish trend. The index and many commodity prices are down about 50% from its peak. Most commodities are in bear markets.*
- *Commodity prices need to find a bottom and then consolidate, similar to what prices did in 2009, 2010.*

If the Chinese economy continues to decelerate, then the impact on commodities and resource economies, countries (Canada, Australia, Russia, Middle East, Africa, Latin America...) could cause more economic and market stress, especially those countries that have high debt.

China is now having to deal with the massive debt (282% of GDP), and their bad capital allocation decisions by its centrally planned economy. This is what normally happens at the end of a cycle, trend: too much debt and bad capital allocation decisions.

China does have about a \$3 trillion foreign reserve surplus, so this could help them, but they could continue to make bad economic and capital allocation decisions.

China will continue to play a major role in the global economy, but it won't be similar to its economic boom in the first decade of the 21st century.

Again, the major trend reversal of the China and commodity boom is a major risk to the global economy including the U.S.

Conclusion

My model is at 69%, the potential of a major market reversal. Here is the current reading of my model:

CHART/PRICE ANALYSIS	RED FLAG	THIS CYCLE	WEIGHT	SCORE
Major Reversal Pattern	Umbrella, Head & Shoulders, Triple Top, Double Top, Spike	Umbrella	2	2
Time to build top	More than 6 months	12 months	2	2
% Change since beginning of bull market	Greater than 60%	S & P greater than 200%	2	2
L-T trendline of decline broken	See filters below	No	2	0.5
Filters				
Two or more days below	If l-t trendline broken	No	1	0.25
Significant volume	If l-t trendline broken	No	1	0.25
% break 3% to 5%	If l-t trendline broken	No	1	0.25
Close both days at low	If l-t trendline broken	No	1	0.25
			12	7.5
Oscillators/Indicators				
MACD	Divergence	YES	2	2
Break below 200-Day Moving Average w/filters		S & P	1.5	1.5
Fundamentals				
P/E use historical	Greater than 17	Yes	2	2
Other valuation metrics	Dividend Yield, Price/Sales, Debt	YES	2	1.25
TOTAL			7.5	6.75
Economic Indicators				
Inflation	High	low	2	0.5
Interest Rates	Rising High	Might be rising	2	0.75
Phase in economic cycle	Average cycle, 4 to 5 years	Mature, 6th year	1	1
Monetary Policy	Restrictive	Restrictive to accomadative	2	1
Fiscal Policy	Restrictive	Restrictive	1	1
Yield Curve	Short higher than long	normal	2	0
Credit Spread	Widening	Starting to widen	3	3
Oil	High, rising	Reverse of normal	3	2
Allocation Decisions	Problems		3	2
Debt Levels	High		2	1
External				
ME, Europe, China, Japan....	Where: ME, Europe, China, Japan, Venezuela, Russia, Brazil, Canada, Australia	ME, China, Greece & EU	3	2.5
Allocation Decisions	Problems: Real Estate, state enterprises		3	2
Debt Levels	High: China, Japan, Europe		2	1.5
TOTAL			68	46.75

The red flags include:

- A long-term topping pattern that is in its 12th month of formation (the longer a formation takes to develop, the more serious the formation is)
- The topping pattern is an identifiable rounding top, umbrella pattern
- Breaking of the 200-day moving average, considered a long-term trend
- MACD diverged when the market was making new highs and confirming the right side of the umbrella long-term bearish pattern
- P/E has expanded from around 13 to about 17 during this cycle. A 17 P/E is high for a slower growing economy and earnings, and rising risks. Other valuation metrics also suggest the markets are fair to overvalued.
- This economic expansion and bull market are in the mature phase and are aging
- The Fed is starting to raise rates, and it could be disruptive to global markets and asset valuations
- Credit spreads are widening. Part of the reasons for rising high yield rates is related to the oil, energy bust.
- The reversal of the China and commodity boom and the economic problems this trend reversal is causing to the global economy and markets.
- Too much debt and bad allocation decisions made in China and some emerging market economies.

Because of the late phase of this economic and market cycle investors should consider:

- Raising cash
- Lowering the beta of one's portfolio
- Lowering the P/E of one's portfolio
- Making sure the debt levels of the stocks, ETFs, and mutual funds are low.
- Being ready to scoop up bargains when we have an inevitable bear market

I'm currently working on my 2016 economic and market forecast. It should be ready in a few weeks.