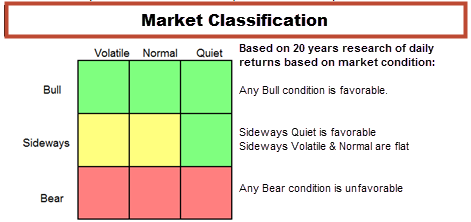
Memo for: Record

Subject: Market classification system (IP007)

Date: 17 Sep 10

Author: Ken Long

1. I classify the market (SPY) in 2 dimensions:
   1. Price: compared to the 200d MA
   2. Volatility: comparing today’s ATR% to the last 100
2. Price dimension: Bull, Sideways or Bear
   1. Bull: Price is more than 2% > 200d MA
   2. Sideways: Price is within +/- 2% of the 200d MA
   3. Bear: Price is more than 2% below the 200d MA
3. Volatility: Volatile, Normal, Quiet
   1. Volatile: today’s ATR% is more than 1 StDev higher than the average ATR% of the last 100 days
   2. Normal: today’s ATR% is within +/- 1 StDev of the average ATR% of the last 100 days
   3. Quiet: today’s ATR% is more than 1 StDev less than the average ATR% of the last 100 days
4. This creates 9 potential market states (see chart below):



1. Based on this classification system and a test period of the last 16 years:
   1. Tomorrow, on average, is favorable when today’s market condition is any Bull or Sideways Quiet
   2. Tomorrow, on average is flat when today’s market condition is Sideways Volatile or Sideways Neutral.
   3. Tomorrow , on average, is down when today’s market condition is any Bear.