**Senior Capstone Project**

Evaluating Success of Technical Analysis Investment Strategies

Chapter 3: Relative Strength Index



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**Background**

Relative Strength Index is another popular technique in technical analysis. Similar to bollinger bands it looks to identify when there is an opportunity to enter the market when equities have been overbought or oversold. The RSI is a moving oscillator and falls between a value of 0 and 100. It is typically plotted below the line of an equity to get an overview of the movement of the stock. An asset is overbought when the value is greater than 70 which implies a sell signal and an asset is oversold when the value is less than 30 which implies a buy signal.

**Base Model**

Use n days for the time period where you are looking at average gain/average loss. It is typical to use 14 days as recommended by J. Welles Wilder but longer and shorter time periods are also utilized.

**#### Methodology**

1. Difference the data

2. Track average gain/loss where gain is the positive movement from day to day and loss is the negative movement

3. Create the RS via the average gain/average loss

4. Create the RSI value by 100 - (100/(1+RS))