

# Moving Average

**The moving average measures  
the average price of the past  
number of periods**



- Longer time period for moving average, the smoother the MA

- Shorter moving average is more sensitive to the price fluctuations

# General Parameters

Short	5, 10, 15, 20 periods
Medium	34, 50 periods
Long	100, 200 periods

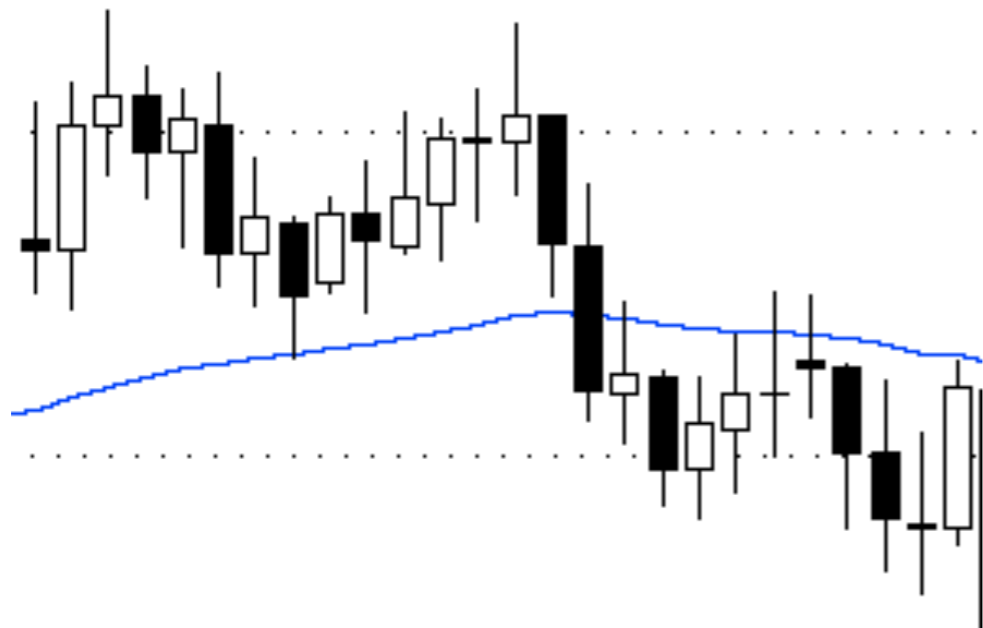
**Simple v Exponential**

# Moving Averages

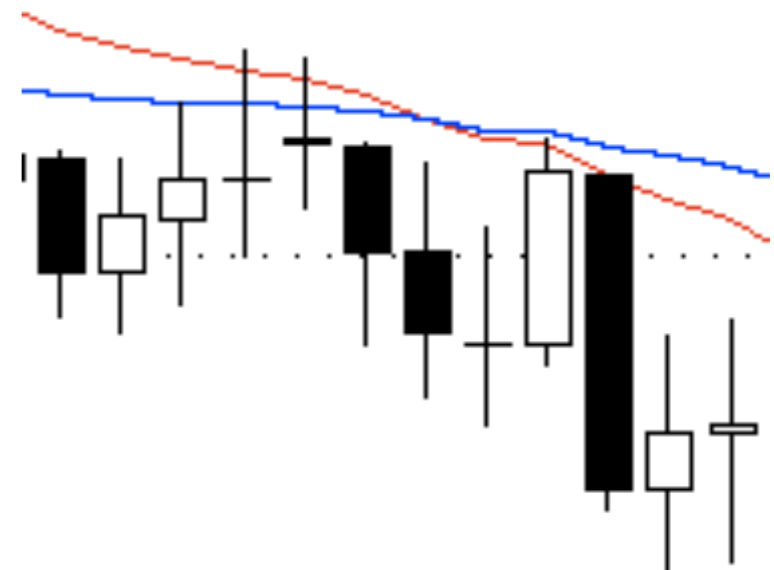
- 1) an indication of the direction of the trend
- 2) a support and resistance levels of prices
- 3) a confirmation of reversal of trend or continuation

# Moving Average Signals

MA crosses price

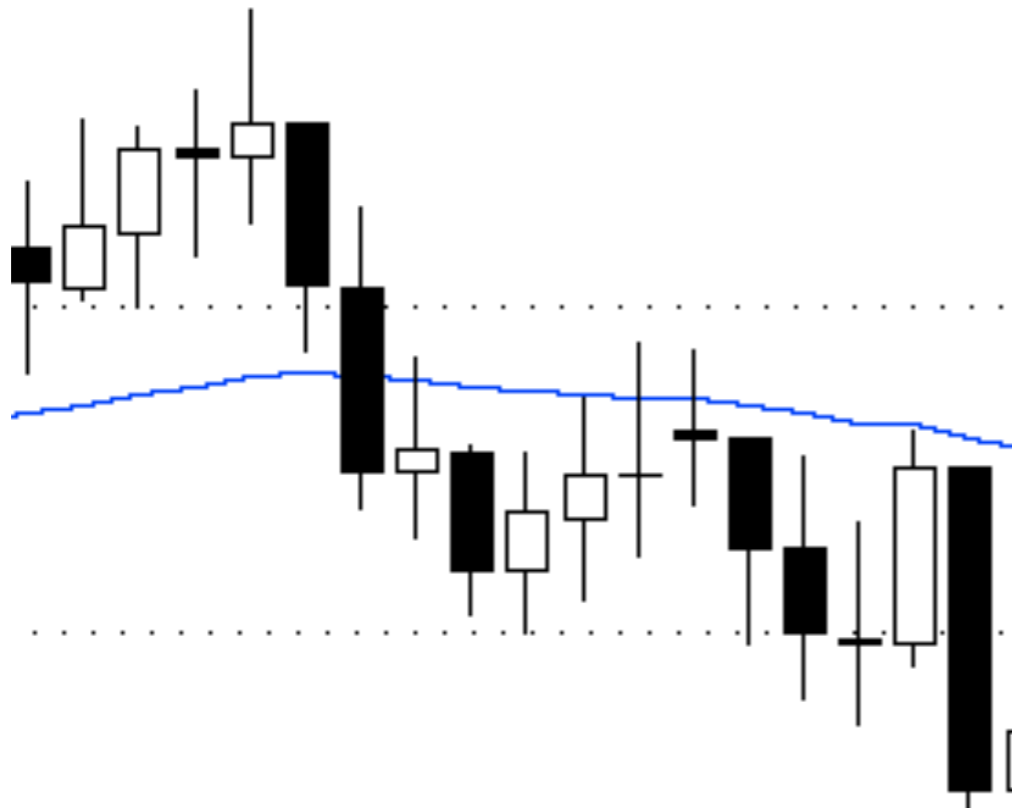


MA crosses MA



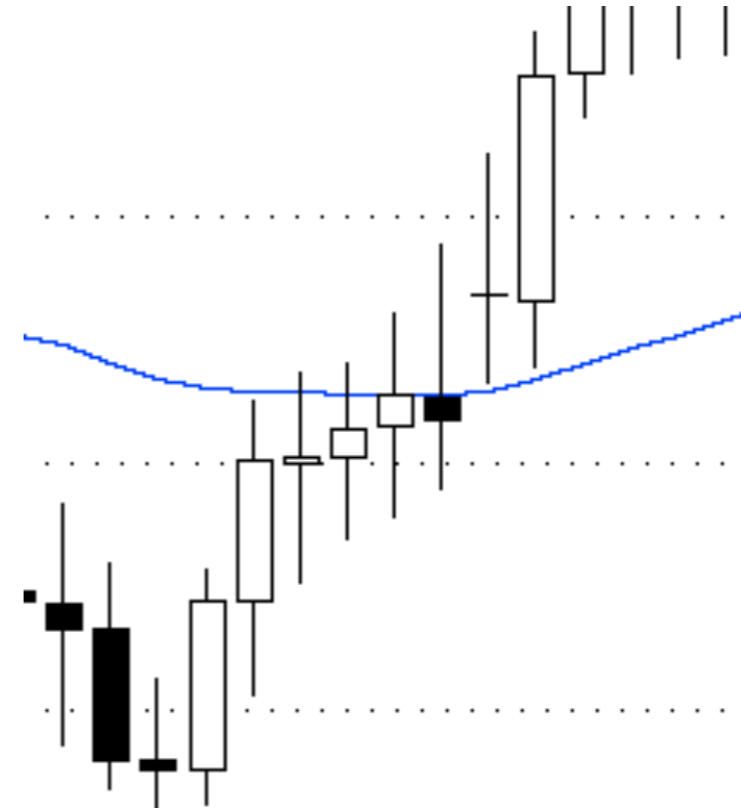
# Price crossover

Bearish crossover



Prices cross down from above

Bullish crossover



Prices cross up from below

^STI - Daily 8/2/2002 Open 1505.52, Hi 1515.55, Lo 1500.09, Close 1509.89 (-0.5%) EMA1(Close,50) = 1,592.71



1,860.0

1,800.0

1,740.0

1,680.0

1,620.0

1,560.0

1,500.0

February

March

April

May

Jun

Jul

August

1,592.71

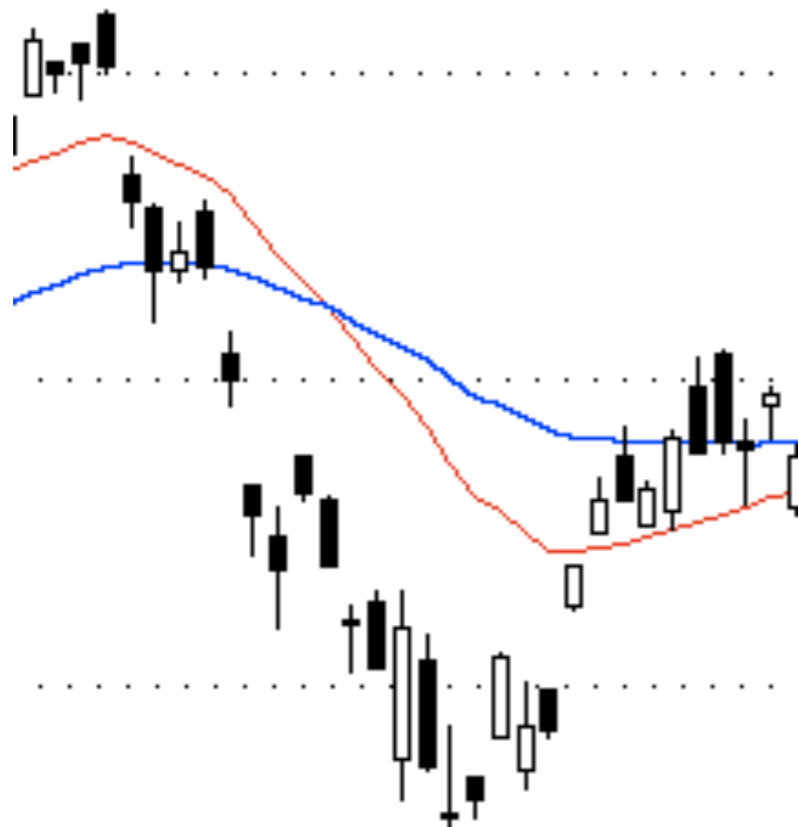
1,509.89

^STI - Daily 10/20/2006 Open 2681.67, Hi 2686.89, Lo 2672.61, Close 2686.43 (0.7%) **EMA1(Close,50) = 2,559.78**



# MA Crossover

Bearish crossover



Shorter MA crosses down Longer MA

Bullish crossover



Shorter MA crosses up Longer MA

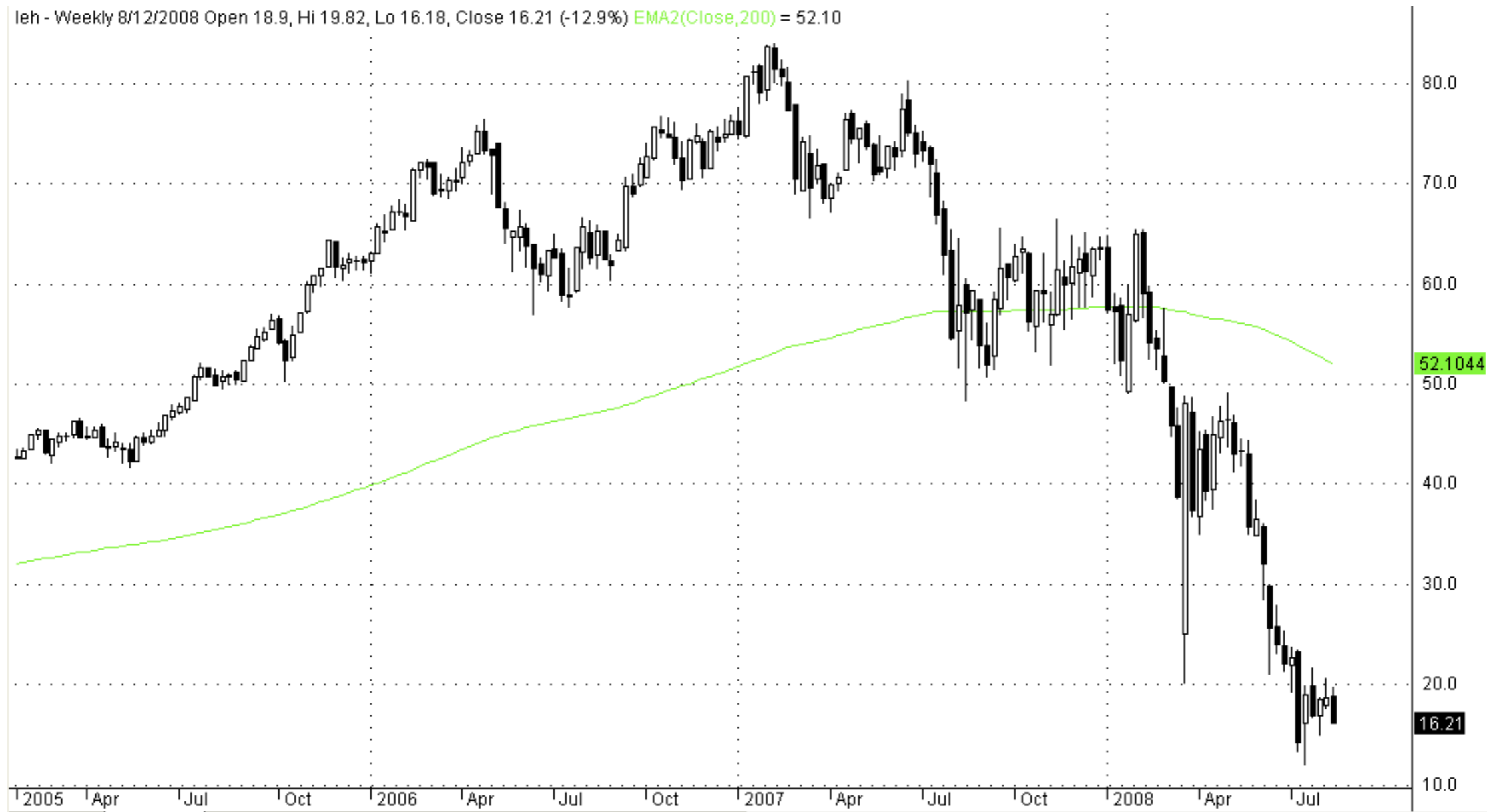
^STI - Daily 12/28/2007 Open 3452.18, Hi 3463.38, Lo 3441.96, Close 3445.82 (-0.9%) EMA1(Close,50) = 3,514.99, EMA2(Close,20) = 3,464.69



3,900  
3,800  
3,700  
3,600  
3,500  
3,400  
3,300  
3,200  
3,100  
3,000

3,514.99  
3,464.69  
3,445.82

# MA as a support or resistance



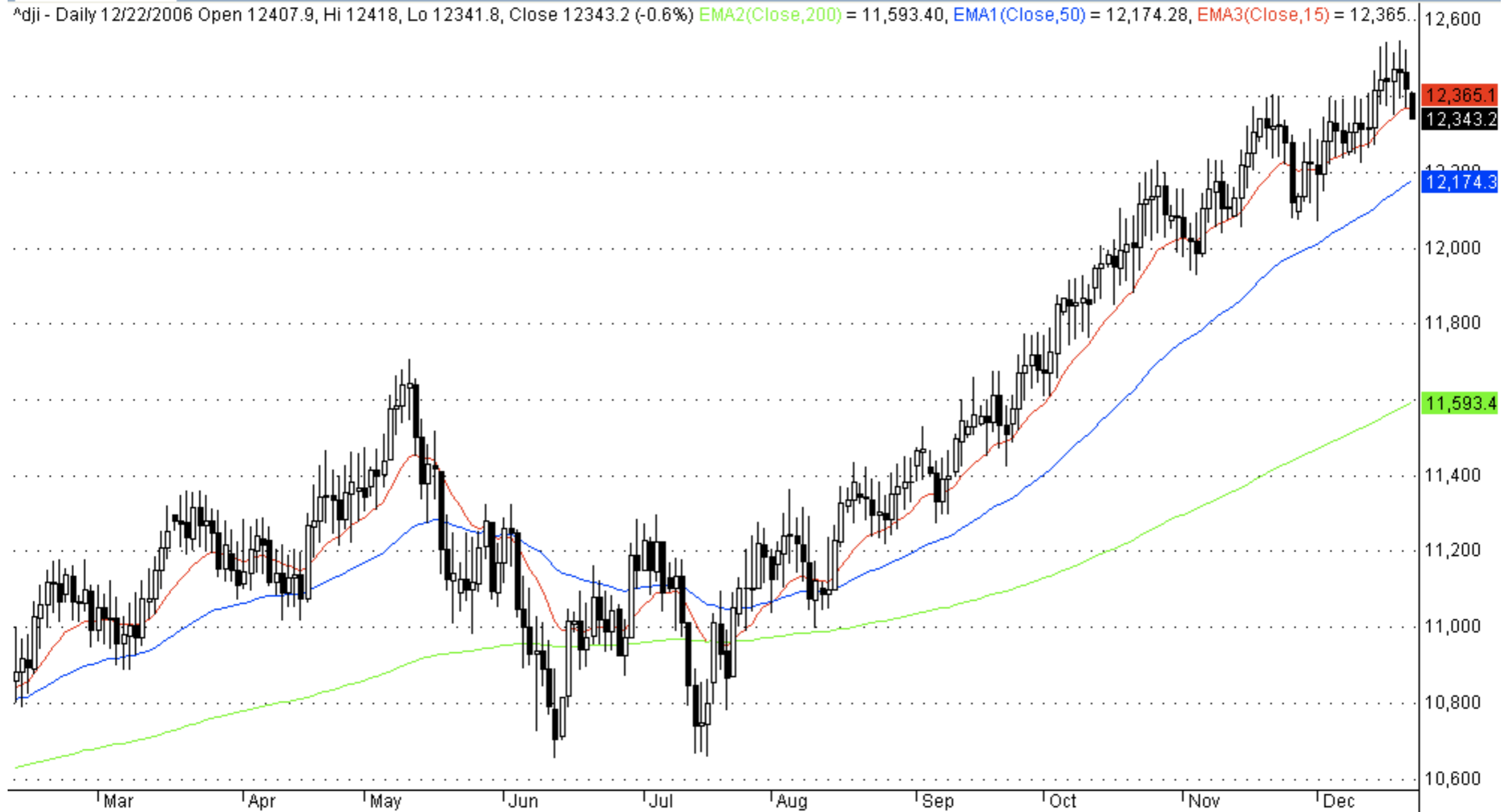
ge - Daily 3/28/2008 Open 36.4672, Hi 36.6551, Lo 36.1111, Close 36.21 (-0.6%)  $EMA2(Close,200) = 35.66$ ,  $EMA1(Close,50) = 34.63$



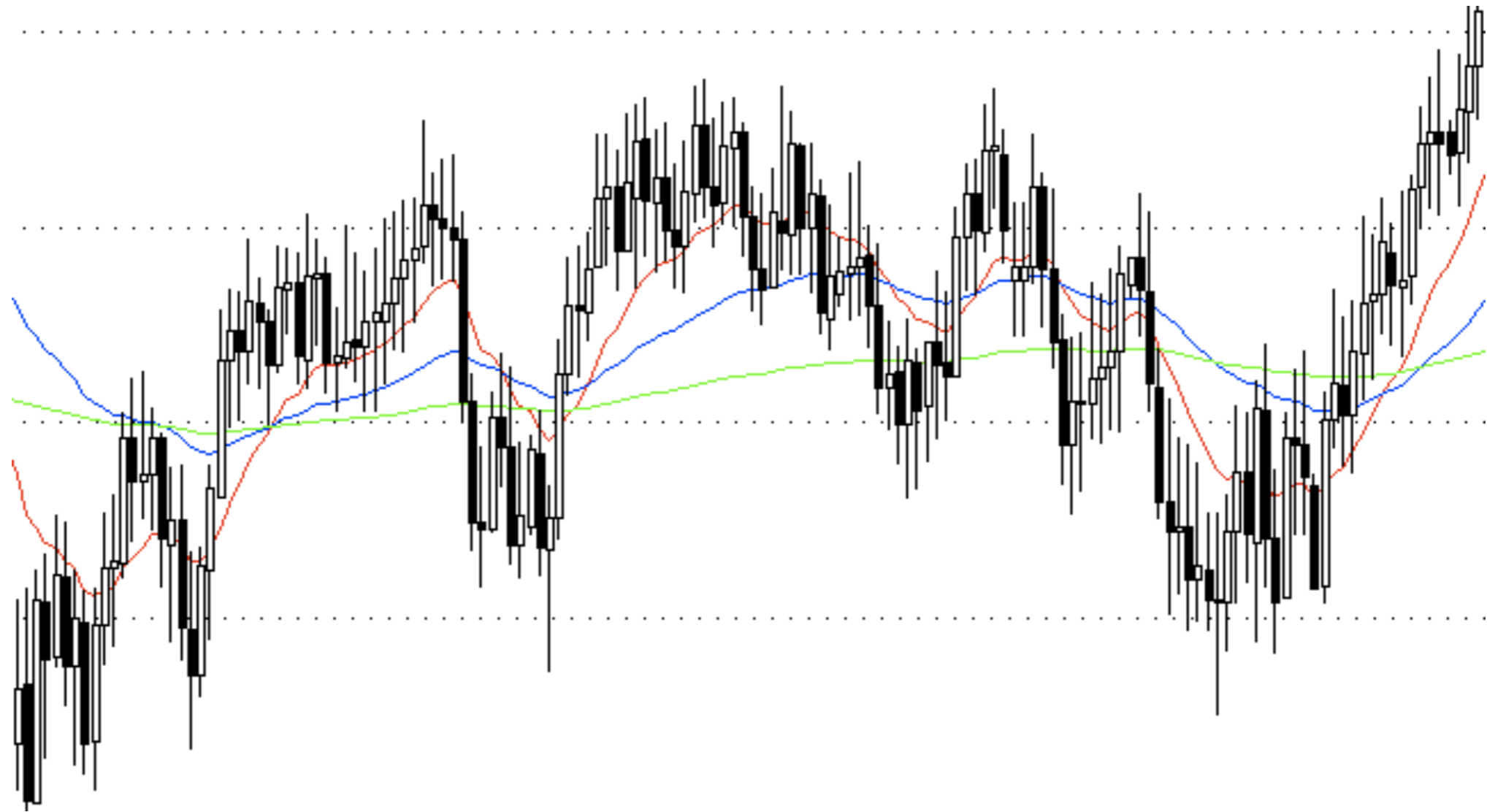
# General guideline

Signal	More Certain	Less Certain
Price Cross	Price crossing longer MA (e.g 200)	Price crossing shorter MA (e.g 15)
MA Cross	Using longer MAs	Using shorter MAs
SAR	Using longer MAs	Using shorter MAs

# Powerful signals



# Limitation



Moving average strategies do not work well in sideways markets

