



## Chart knows the market not technician

By CK Wong 2005.010.01

<http://www.ck-wong.ca/Money%20Matters/technical%20chart2.pdf>

### Introduction

In the last piece I discussed that from pure mathematics perspective it is doubtful that there is a possibility to do chart reading for the market. This is exactly the kind of quasi-scientific thinking that kills new ideas and creates unwarranted skeptics on oversimplified facts. In this piece, I am trying to do find the science in the chart reading. The conclusion already announced in the title.

### Simple Chart Reading

Simple chart reading uses the trend line to forecast the market movement. This is just trying to do a complicate analysis using a very short pencil. As all mathematicians know interpolation or extrapolation has nothing to do with the future.

Other than using trend line, people uses patterns to forecast; head and shoulder, trading channel, RSI, etc. The cleverest minds use super-computer to find the relationship of charts and market and find nothing. This could be true but the question is whether the required parameters are all included in the consideration.

Although all these people seem to use extreme complicated method to do analysis, they are not. They have to properly defining the parameters before the work. Otherwise, it is the same as reading market using trend line.

### Input

Apparently, the input for market forecast need something related to the history of mass psychology, business model, trading pattern and significant events. Mass psychology defines how a group of people would behave. For example, if bond goes up, the stock will come down (most of the time). If a company raise dividend and can sustain it the share price goes up. However, if the yield just spike up for a one time special dividend (e.g. Sears Canada pays special dividend for selling the credit unit), it may not raise but lower the share price.

Long and short term share price could be used to tell the future. If it includes the trading volume it is also vital. I always wonder could we find out whether we could find out when those shares purchased at low price have sold out to someone. Without the volume how could you determine that? If RSI gone up to 99 but only 1 share exchanged, can you call it a peak?

Look at those Toronto Venture Exchange stocks, they jump up and down 40-50% like a kangaroo. But the price is only a few pennies. Could it compare HSBC goes up or down 40%? One formula does not fit every stock.

What we have discussed here are a few examples that most technicians do not quantify their analysis.

## What is a chart?

The most common are the pattern, the MACD, the RSI, various oscillators, and average lines. Let's examine what are these charts doing.

MACD, RSI and various oscillators combined historic data and updating it every day. This likes the training of a neural network to create output. When training a neural network multiple set of parameters tuned to provide the best ability to represent a live model. MACD, RSI and oscillators have been fine tuned in last centuries by many technicians to match the market optimally. This process is mechanical.

The average lines viewed together with the share price. The relative position of these entities tells the story. The relationship becomes an engineer that spits out the future.

I am trying to draw a parallel between the technical charts and neural network. If this holds it can explain the difficulty of chart reading (or training the neural network in our brain). When it works it works miracle. When it doesn't no one knows where is the problem.

In the neural network community, a story was circulating when the British Army using the technology to develop an automatic friend or foe identification for tanks. When the first iteration of the system put to field test rather than the lab something went very wrong. The recognition could be described as totally random and chaotic. After some painful investigation, they found that daytime picture of tank was the common theme of friendly tank. It is just the famous saying: garbage in garbage out.

## Output

If we accept chart is the result of a neural network than interpreting it is just interpreting the value spit out from a neural network. The value is a number. What does it represent is up for your to interpret.

So let me introduce another branch of mathematics, fuzzy logic. This mathematics computes things in range. For example, 0 to 0.7 is bad and from 0.5 to 1 is good. Please note the overlap of range. This is just like the same chart pattern can mean two things.

## **Bottom Line**

It is not the benefit of doubt that I give it to chart. I believe chart is a tool in evolving and fine tuning. The challenge is how to fine tune and how to mechanically interpret the chart. It may not be possible all the time. With time going on, with the combination of fundamental, the analysis becomes a science. However I believe the number of parameters and output are so complicated that the interpretation is really an art.

The great technician Ron Meisels once said in ROBTV interview about a very popular high tech stock that the fundamental was not there, there was no change in the stock's long-term status. He might try to please the host to mention fundamental but if fundamental is not there the rest doesn't matter. It would be more accurate to read a chart with the fundamental which serves as a guide.