Technical Analysis...Does It REALLY Work?

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What Is Technical Analysis?

Before we even start with this question, if we perhaps consider first the question **why** would we want to analyse the market?

Take the stock in figure 1 as an example. If we were to buy and hold the stock (MMM) for a calendar year from 2 January 1997 at $83.13 until 31 Dec 1997 and sell at $82.06 we would have made a small loss of a little over a dollar per share.

If however we were to apply some technical analysis to guide our buying and selling we may make the trades illustrated in figure 2 with the details shown below:

Trade	Date	Share Price	Profit per Share	
A	25 Feb 1997 - Buy	$86.50		
	17 Mar 1997 – Sell	$88.75	$2.25	2.60%
B	22 Apr - Buy	$84.50		
	30 Apr – Sell	$99.12	$14.62	17.30%
C	4 Sep – Buy	$93.00		
	11 Sep – Sell	$89.75	-$3.25	-3.49%
D	26 Sep – Buy	$89.63		
	16 Oct – Sell	$94.88	$5.25	5.86%
E	10 Nov – Buy	$93.75		
	9 Dec – Sell	$95.50	$1.75	1.87%
			Total gain =	24.14%

The entry criteria in this example is set by applying Dow Theory to short-term price movements in order to detect the beginning of an upward price trend. Our exit was determined by a trailing stop-loss. This is a rudimentary but (in this case) effective means of determining our buy and sell points. For those of you not familiar with the concepts of stop-losses and Dow theory, fear not...these and other important analysis techniques will be explained in our newsletter series.

Notice that our analysis wasn't infallible, we made 5 trades and one of them turned out to be a dud where we took a small loss.

Figure 1 – 12 Month buy-and-hold Approach to trading this stock – 3M, 1997

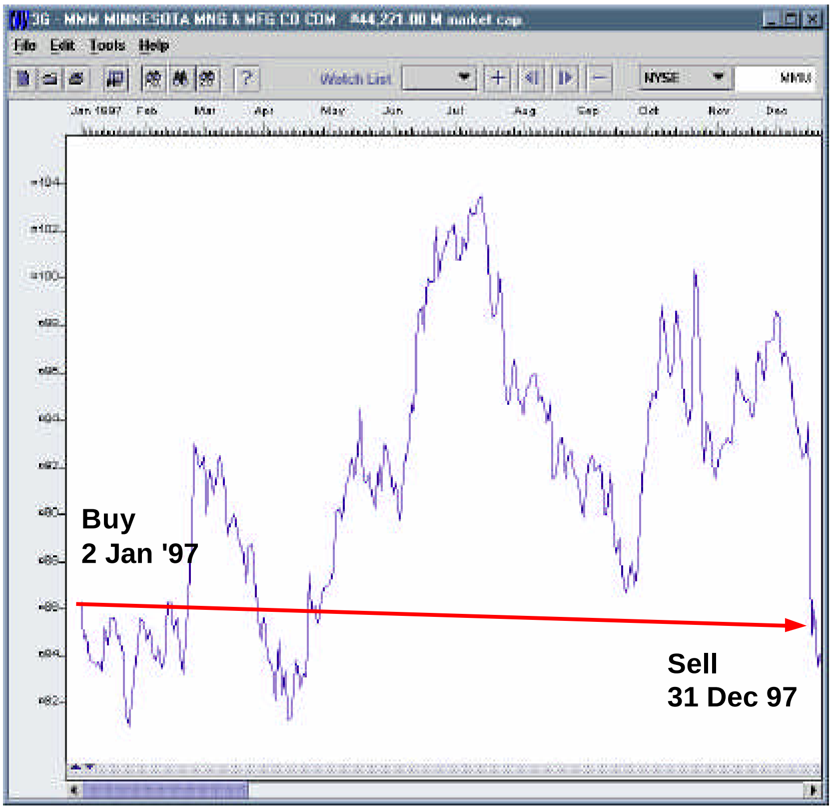
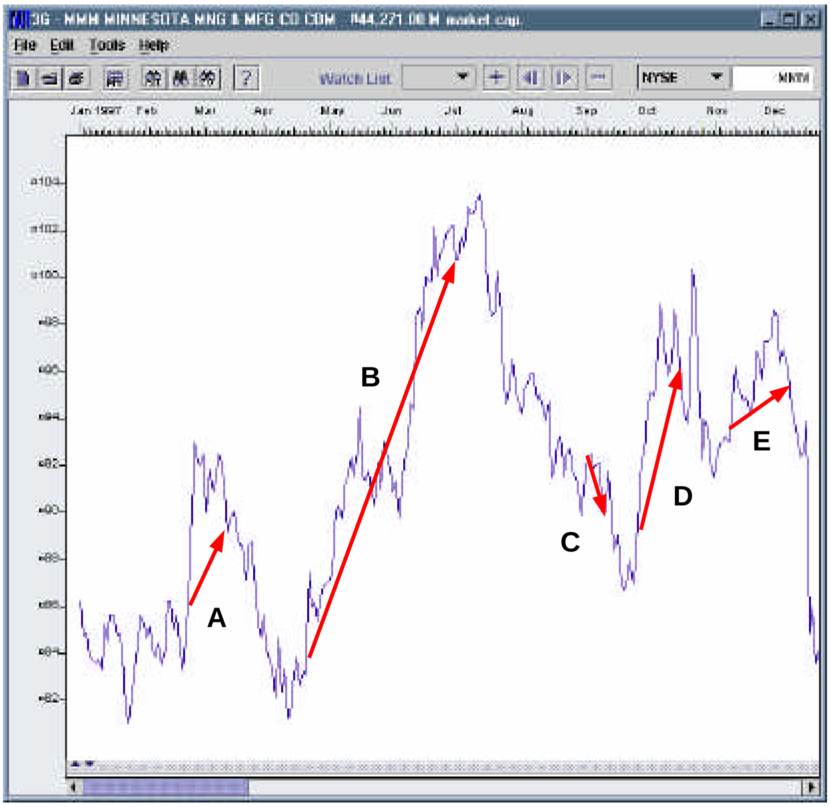


Figure 2 – Trading the stock applying technical analysis



This simple example highlights the potential for gains from using analysis methods to ensure you go long (buy) close to a trough or low point, and short (sell) close to the peak or high point. Notice that all the trades were entered slightly **after** each trough and exited slightly **after** each peak. In the case of trade ‘C’, the peak happened to coincide with our entry point which will occasionally be the case.

Many people only ever own shares in one or two large corporations because they want security and can be reasonably sure that the big stocks ‘will always hold their value’. Analysis of even just your single favourite stock can provide tremendous value; when the stock starts moving down, take your money out and put it into the bank ready to buy back in when it reverses and moves up.

Analysis of financial markets is conventionally divided into two generic streams: **technical analysis** and **fundamental analysis**. Both approaches are quite different in their methodology and they both have relevance to analysing stocks. They can be applied independently or concurrently for the purpose of managing your portfolio.

Although we will focus on Technical Analysis, it is convenient to start with a description of fundamental analysis.

Fundamental Analysis

This is the more intuitive of the two approaches to analysis. **Fundamental Analysts look at the underlying (or intrinsic) value** in a company and compare this to the current price. If the intrinsic value is greater than the current price then the stock would be expected to increase in value; if the intrinsic value is above the current price then the stock can be expected to decrease in value.

The fundamentalists want to know if the management team is adequate, whether the growth is above industry average, whether the profitability is above industry average, how their financial ratios stack-up against other players in their industry… A great deal of research effort goes into producing this information to which most Brokers or Licensed Financial Advisors will have access in order to make recommendations to their clients.

In summary, the Fundamental Analyst wants to know if the company is under-priced or over-priced, hence whether to buy or sell.

Technical Analysis

This is a little more abstract for the novice investor. **Technical Analysts look for indications of future price trends** based upon historic price and volume trends. They are not concerned with the intrinsic value of the security, rather how the market is responding to forces of supply and demand.

Martin Pring in his book *Technical Analysis Explained* defines technical analysis in the following terms:

> "…The technical approach to investment is essentially a reflection of the idea that prices move in trends which are determined by the changing attitudes of investors toward a variety of economic, monetary, political and psychological forces. The art of technical analysis – for it is an art – is to *identify trend changes at an early stage and to maintain an investment posture until the weight of evidence indicates that the trend has reversed.*"

The last sentence above effectively defines technical analysis…to trade profitably you:

(1) Identify an upward trend change as early as possible and enter the market, and

(2) Identify a trend reversal downward as early as possible and exit the market.

This objective is often reduced to the simple 'buy low, sell high'. That statement alone is not sufficient instruction in the analysis of markets however you should not forget this simple objective should you venture into the world of complicated 'black-box' analysis models.

What Approach To Use?

It is often said that fundamentals are useful for determining **what** to buy, technicals for determining **when** to buy.

Many respected and vociferous proponents of fundamental and technical analysis claim their chosen approach is far more effective. While fundamental and technical analysis are often treated as polar opposites, they are actually closely related. Technicians generally do not dismiss the relevance of fundamentals; one of the basic assumptions of technical analysis is that price represents agreement of all market participants on the fundamental value of the security at that time.

One thing that cannot be disputed is that trading is an individual experience and your approach must fit your personal objectives and personality. Some traders take a relaxed long term approach while others prefer the intensity of day trading.

If you are approaching retirement with a diversified investment portfolio containing cash, stocks, bonds and real estate, you may place greater emphasis on security and value modest but reliable capital appreciation. You may choose to buy stocks based upon fundamental analysis recommendations from you broker. In this case you can perform some basic technical analysis of stocks your broker recommends and provide entry and exit timing instructions. *As an aside you should always remember that your broker makes his money by executing your orders, **not** from making you rich.*

If you are someone in their early thirties with a smaller stock portfolio, you may be taking a more aggressive stance and actively analysing a complete market sector, or a complete exchange and using a range of tools to select your stocks. You may also have some leveraging from margin lending or derivatives. You may be using technical analysis exclusively to decide upon stocks and entry/exit decisions.

There is no clear 'best approach' to your trading. In general fundamental analysis proves reliable provided you have access to quality research. It is time-consuming to research a company yourself.

Does Technical Analysis Work, Or Is It Just Like Reading Tea Leaves?

There are a number of plausibility arguments for technical analysis:

- One is that the chart patterns represent the past behaviour of the pool of investors. Since that pool doesn't change rapidly, one might expect to see similar chart patterns in the future.
- Another argument is that the chart patterns display the action inherent in an auction market. Since not everyone reacts to information instantly, the chart can provide some predictive value.
- A third argument is that the chart patterns appear over and over again. Even if I don't know why they happen, I shouldn't trade or invest against them.
- A fourth argument is that investors swing from overly optimistic to excessively pessimistic and back again. Technical analysis can provide some estimates of this situation.

Of course you also have contrary opinions; 'coincidence', 'try astrology instead', 'tea-leaves are quicker'…

So, why consider technical analysis? There are volumes on this subject and dozens (hundreds) of individuals and organisations trying to take your money in return for them unlocking the mysteries of analysis. What you could do is take another look at the example in figure 2 and consider the definition we provided above:

> *To trade profitably you: (1) identify an upward trend change as early as possible and enter the market, and (2) identify a trend reversal downward as early as possible and exit the market.*

If you look at a typical chart, you can see portions that are trending upwards, some downwards and some just staggering sideways. In only about 20%-30% of a typical charts data will you find the trend unambiguous – clearly going up or down. You could infer that 20% of stocks at any given time are trending either up or down in a distinguishable manner. This is not quite true as if the market as a whole is going up then many more stocks will be rising, conversely if the market is going down then many more individual stocks will also be going down.

To find these trending stocks there are a number of tools available and, somewhat frustratingly, they will not often always agree with one another. Successful technical analysis relies upon a 'weight-of-evidence' approach to determine trend direction. Generally one would require say 3 pieces of evidence that a new upward trend exists before committing to a long position. This is where we apply a simple maxim for entering and exiting markets:

'…stop your losses and let your profits run'

Before taking a position in this new upwardly mobile stock, you need to consider how you are going to apply stop-losses to limit your risk and ensure you exit before the price has the opportunity to fall far. This also has an implication for the number of shares you purchase as you don't want to risk more than 2 or 3% of your portfolio value on this (or any other) trade.

Because technical analysis is imperfect (as is fundamental analysis), you want to ensure you have a sensible risk-management plan to limit downside risk. It can be easily shown that if you throw darts at a board to select your stocks, you can nearly always beat the market by applying simple but **very effective** risk management strategies.

In a later newsletter we will discuss issues of position sizing and risk management to explain how you protect your capital.

What's Required To Profitably Trade?

Successful trading has 3 pre-requisites:

1. **Knowledge**. This is the most important of the three. There are no free rides when it comes to analysis of markets as you need to understand the basics of analysis, the behaviour of markets and how to trade. Don't ever be too eager to trade, make sure you understand what you are doing before you start pouring your hard-earned cash into the market. To be successful you need to remove emotion from your trading and objectively apply your entry and exit criteria. You only usually win this psychological battle after the markets provide you a little 'loss-therapy'.
2. **Tools**. Computerised analysis tools certainly make your analysis job easier as they have the ability to drastically reduce your time managing your portfolio. An important point to consider; more knowledge will always outperform more sophisticated trading applications. Three or four proven indicators and the knowledge to effectively apply them will **always** beat a novice relying upon a 'black-box' software application alleged to give you only 'sure-things'. You can save a lot of time by filtering the market data for stocks that meet your criteria to greatly reduce the number of stocks to view.
3. **Data**. Whether you are using sophisticated analysis tools or hand-drawn charts, you need accurate and timely data available. Ideally at the end of each day (assuming you have a regular job and are not tearing your hair out day-trading) you want to have the data available early in the evening so you can spend 15 or 20 minutes to monitor your portfolio and select new stocks before settling into the evenings movie.

In Summary

- Technical analysis endeavours to determine future trends in price based upon historic market behaviour.
- Fundamental analysis endeavours to realise a profit by finding undervalued stocks that can be expected to rise to a value considered reasonable.
- Technical and Fundamental analysis are complimentary, often fundamentals are used to select **what** to buy and technicals used to determine **when** to buy.
- Technical analysis in conjunction with appropriate portfolio risk management provides maximum value in trading stocks; ensuring you enter at a sensible point and protecting your position once you have entered to limit risk.
- Successful analysis, regardless of approach, requires appropriate knowledge, tools and data.

References & Further Reading

The following texts are quite good for learning more about technical analysis and its application.

- Pring, M. 1997, *Introduction to Technical Analysis*, McGraw Hill
- Elder, A. 1993, *Trading For a Living*, John Wiley & Sons, New York
- Schwager, J. 1999, *Getting Started in Technical Analysis*, John Wiley & Sons
- Edwards, R. and Magee, J. 1992, *Technical Analysis of Stock Trends*, John Magee Inc, Boston