Human behavior is predictable. The reason being, when it comes to money, people exhibit few common type of behavior. When we look at historical price chart of any asset, the highs and lows show nothing but a human desire and fears in action. It has been evident that market sentiment constantly swings between optimism and pessimism and that is why there is always an opportunity to capitalize on crowd behavior.

The most basic assumption of Technical analysis is "History Repeats Itself". Historical analysis plays a crucial role in determining future price action. With the help of historical price movements, volume characteristics, price patterns and number of newly found studies one can capitalize the opportunity to earn money in the market.

Rather than focusing on complex indicators or famous moving averages we have tried to explain some left out or neglected topic of technical analysis – Time Cycles.

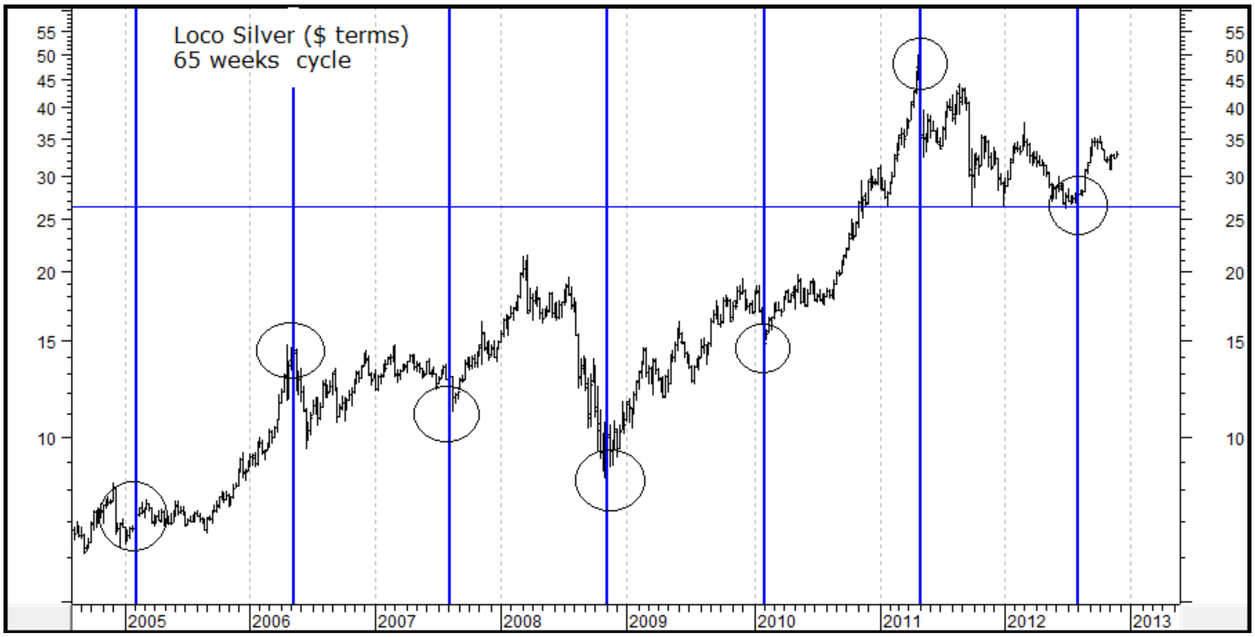
Time Cycle

A cycle is an event, such as a price high or low, which repeats itself on a regular basis. Cycles exist in the economy, nature and the financial markets. The basic business cycle encompasses an economic downturn, bottom, economic upturn and top.

Cycle theory asserts that cyclical forces, both long and short, drive price movements in the financial markets. Price and time cycles are used to anticipate turning points. Even though there is evidence that cycles do indeed exist, cycles change over time and even disappear at times. While this may sound discouraging, trend is the same way. There is indeed evidence that markets trend but not all the time. Trend disappears when markets move into a trading range and reverses when prices change direction. Cycles can also disappear and even invert. Do not expect cycle analysis to pinpoint reaction highs or lows. Instead, cycle analysis should always be used in conjunction with other aspects of technical analysis to anticipate turning points.

Given below are two time cycles (Silver and BSE Sensex) which are still active and seem to be working well:

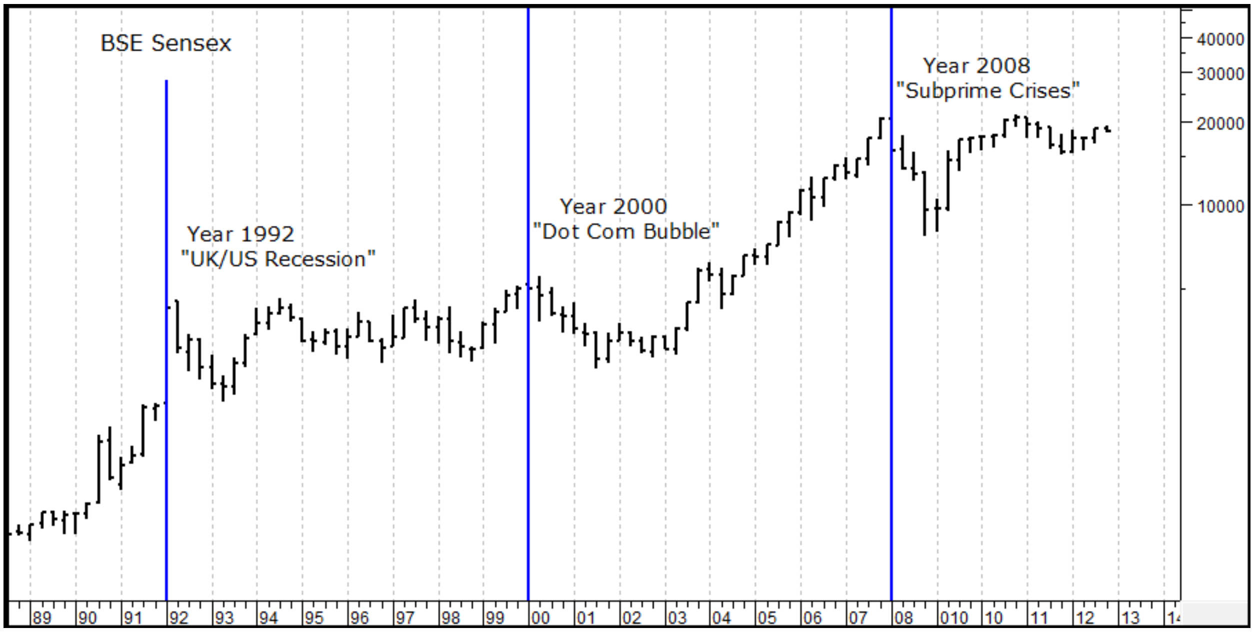
Silver - 65 weeks cycle



Source: Metastock

As seen on the daily chart, Spot Silver ($ terms) has made a significant top/bottom after every **65 weeks** (major turning points encircled).

Sensex - 8 year cycle



Source: Metastock

As shown on the quarterly chart of BSE Sensex, after every 8 years index had made a significant top and has then given a sharp fall.

1. Year 1992 – Which marked the biggest recession in UK in early nineties (Sensex fell by 57%)

2. 8 years later - Year 2000 – Widely known as Dot Com Bubble (Sensex fell by 57%)

3. Again 8 years later – Year 2008 – Widely known to us as Subprime Mortgage Crisis (Sensex fell by 63%)

4. Next cyclical year to look out for – **Year 2016** – will it work or not only time will tell us!

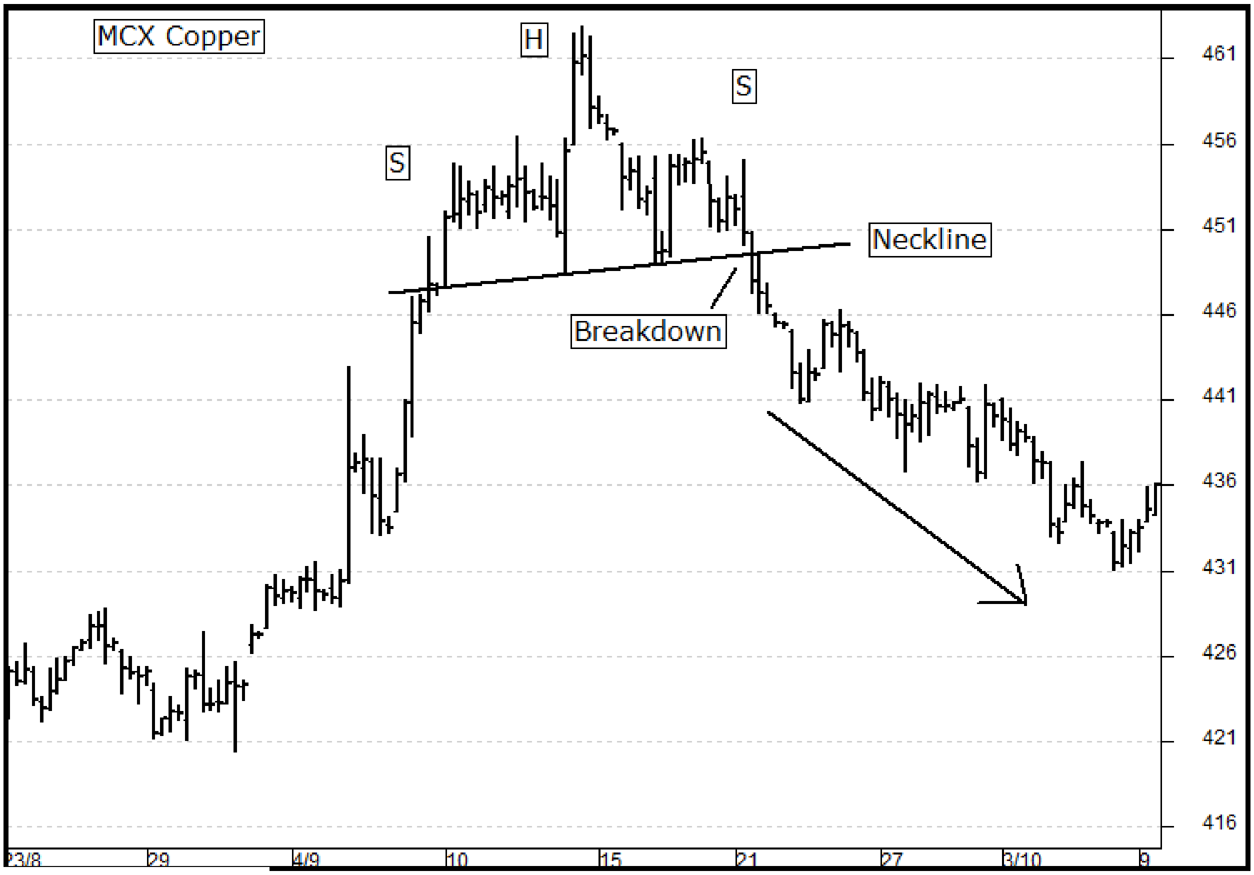
Reversal Price Patterns

A **Price pattern** is a pattern that is formed within a chart when prices are graphed. In stock and commodity markets trading, chart pattern studies play a large role during technical analysis. When data is plotted there is usually a pattern which naturally occurs and repeats over a period. Chart patterns are used as either reversal or continuation signals.

A price pattern that signals a change in the prevailing trend is known as a reversal pattern. These patterns signify periods where either the bulls or the bears have run out of steam. The established trend will pause and then head in a new direction as new energy emerges from the other side (bull or bear). For example, an uptrend supported by enthusiasm from the bulls can pause, signifying even pressure from both the bulls and bears, and then eventually give way to the bears. This results in a change in trend to the downside. Reversals that occur at market tops are known as distribution patterns, where the trading instrument becomes more enthusiastically sold than bought. Conversely, reversals that occur at market bottoms are known as accumulation patterns, where the trading instrument becomes more actively bought than sold. As with continuation patterns, the longer the pattern takes to develop and the larger the price movement within the pattern, the larger the expected move once price breaks out.

1. Head & Shoulder
2. Double Tops / Bottoms

Head and shoulders



Source: Metastock

Head and Shoulders formation consists of a left shoulder, a head, and a right shoulder and a line drawn as the neckline. The left shoulder is formed at the end of an extensive move during which volume is noticeably high. After the peak of the left shoulder is formed, there is a subsequent reaction and prices slide down to a certain extent which generally occurs on low volume. The prices rally up to form the head with normal or heavy volume and subsequent reaction downward is accompanied with lesser volume. The right shoulder is formed when prices move up again but remain below the central peak called the Head and fall down nearly equal to the first valley between the left shoulder and the head or at least below the peak of the left shoulder. Volume is lesser in the right shoulder formation compared to the left shoulder and the head formation. A neckline is drawn across the bottoms of the left shoulder, the head and the right shoulder. When prices break through this neckline and keep on falling after forming the right shoulder, it is the ultimate confirmation of the completion of the Head and Shoulders Top formation. It is quite possible that prices pull back to touch the neckline before continuing their declining trend.

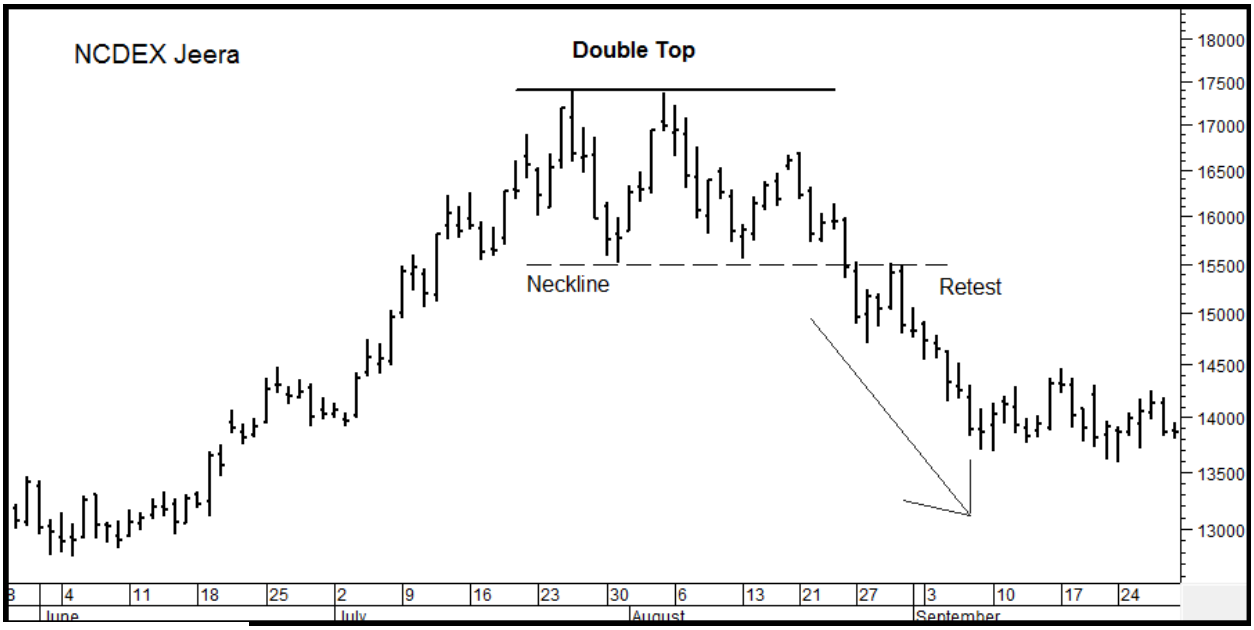
As shown above, MCX Copper formed a Head & Shoulder formation (H – Head, S – Shoulder) in late September and gave a sharp fall after breach of neckline.

Characteristics

- Most of the time Head and Shoulders are not perfectly shaped. This formation is slightly tilted upward or downward.
- One shoulder may appear to droop.
- On many chart patterns, any one of the two shoulders may appear broader than the other which is caused by the time involved in the formation of the valleys.
- The neckline may not be perfectly horizontal; it may be ascending or descending.

Head and Shoulders is an extremely useful tool after its confirmation to estimate and measure the minimum probable extent of the subsequent move from the neckline. To find the distance of subsequent move, one should measure the vertical distance from the peak of the head to the neckline. Then measure this same distance down from the neckline beginning at the point where prices penetrate the neckline after the completion of the right shoulder. This gives the minimum objective of how far prices can decline after the completion of this top formation. If the price advance preceding the Head and Shoulders top is not long, the subsequent price fall after its completion may be small as well.

Double top



Source: Metastock

The double top is a frequent price formation at the end of a bull market. It appears as two consecutive peaks of approximately the same price on a price-versus-time chart of a market. The two peaks are separated by a minimum in price, a valley. The price level of this minimum is called the neck line of the formation. The formation is completed and confirmed when the price falls below the neck line, indicating that further price decline is imminent or highly likely.

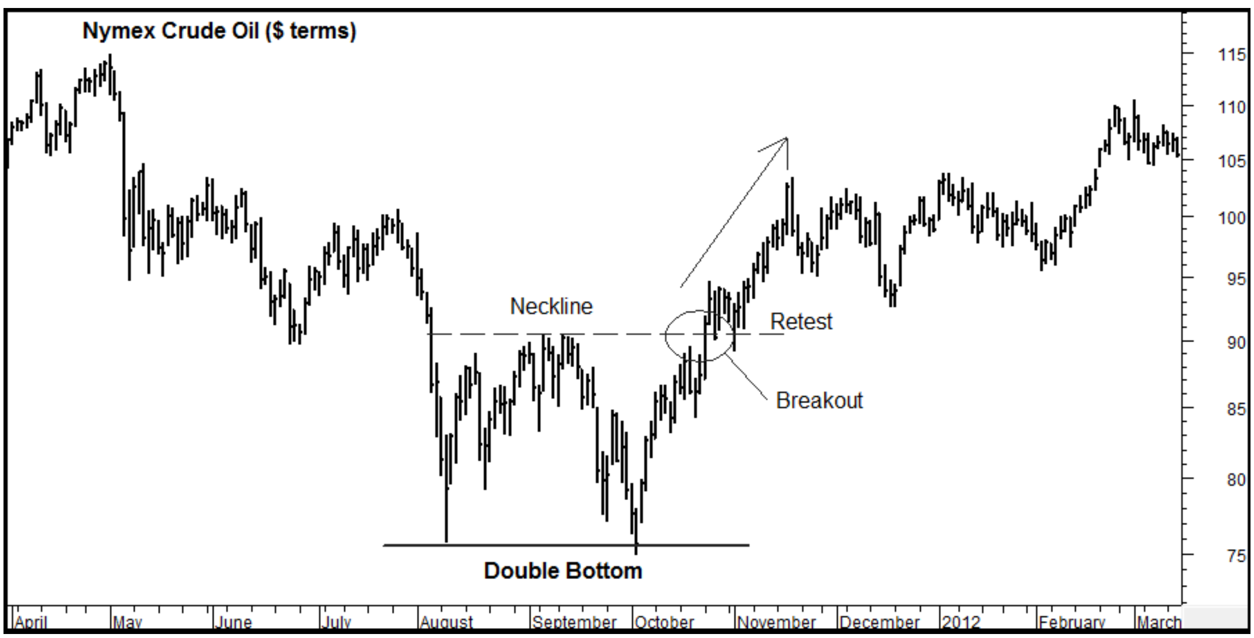
The double top pattern shows that demand is outpacing supply (buyers predominate) up to the first top, causing prices to rise. The supply-demand balance then reverses; supply outpaces demand (sellers predominate), causing prices to fall. After a price valley, buyers again predominate and prices rise. If traders see that prices are not pushing past their level at the first top, sellers may again prevail, lowering prices and causing a double top to form. It is generally regarded as a bearish signal if prices drop below the neck line.

The time between the two peaks is also a determining factor for the existence of a double top pattern. If the tops appear at the same level but are very close in time, then the probability is high that they are part of the consolidation and the trend will resume.

As shown above, NCDEX Jeera formed a Double Top in late August and gave a sharp fall after breach of neckline.

Volume is another indicator for interpreting this formation. Price reaches the first peak on increased volume then falls down the valley with low volume. Another attempt on the rally up to the second peak should be on a lower volume.

Double bottom



Source: Metastock

A double bottom is the end formation in a declining market. It is identical to the double top, except for the inverse relationship in price. The pattern is formed by two price bottoms separated by a peak defining the neck line. The formation is completed and confirmed when the price rises above the neck line, indicating that further price rise is imminent or highly likely.

Most of the rules that are associated with double top formation also apply to the double bottom pattern. Volume should show a marked increase on the rally up while prices are flat at the second bottom.

As shown above, NYMEX Crude formed a Double Bottom in late August and gave a sharp rally after breach of neckline.

Conclusion:

To sum up, Time Cycles play a very crucial role in technical analysis, as there are very few technical tools which help us projecting time as to when a particular asset price might change its major trend. Technical analysis has been in existence for more than 300 years now and yet very simple and commonly known price patterns still works precisely in the market.

Technical analysis is nothing but a combination of Mathematics, mass crowd psychology & few common things observed in the market for years!

Prerana Desai
Vice President- Research
prerana.desai@kotakcommodities.com

Dharmesh Bhatia
AVP Research- Technical Analyst
dharmesh.bhatia@kotakcommodities.com

Faiyaz Hudani
Sr. Research analyst- Spices, Grains
faiyaz.hudani@kotakcommodities.com

Amit Sajeja
Sr. Research analyst- Technical Analyst
amit.sajeja@kotakcommodities.com

Sudha R. Acharya
Research analyst- Edible Oil, Pulses
sudha.acharya@kotakcommodities.com

Ajay Baheti
Associate Research- Technical Analyst
ajay.baheti@kotakcommodities.com

Madhavi Mehta
Research analyst- Energy, Bullion
madhavi.mehta@kotakcommodities.com

Priyanka Jhaveri
Research analyst- Base Metals
priyanka.jhaveri@kotakcommodities.com

RegisteredOffice: Kotak Commodity Services Ltd., Nirlon house, 1st Floor,Dr. Annie BesantRoad, Opp. Sasmira, Worli, Mumbai - 25