

Finalizing the Trends in Stocks, Commodities, Cryptos & Forex Currencies using Data Ware Housing & Renko Bricks

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Abstract— As investor or trader the taking the long or short decision is very crucial and almost 90 percent of people lose their entire or some money in stock markets. The main intention behind writing this article is to help the trader or investor to take their decision among the various financial instruments like Stocks, Commodities, Crypto currencies as well as Forex Currencies. In this article i am transforming the traditional charts to Renko Charts and adding some other technical indicators along the with concept of Data Ware housing, which is irrespective of time series.

Keywords: Buy, Sell, Long, Short, Stocks, Crypto, Forex, Renko Charts,MACD,RSI,EMA

I. INTRODUCTION

The problem's nature, prior research, the paper's objective, and its contribution should all be explained in the introduction. For ease of comprehension, the contents of each part may be provided.

The **problem** now a days is after the **Corona Virus attack** in 2018 the world and economic crisis so many people got awareness about stock market trading crypto investment, as well as trading in commodities and forex markets so many people involved in financial markets to earn money but unfortunately **due to lack of trading knowledge experience and volatile markets they are losing their Hard earned money** in the financial markets.

The **objective** of writing this research paper is to recover loosed money and gain decent and massive profits by trading and investing using the Renko Bricks that will help to finalize the trend of any financial instruments like stocks, commodities, cryptos, forex. We will use large data ware houses like investing.com and tradingview charting platform for mining the data from data ware houses.

II. Renko Brick Construction

The Renko is a Japanese Word used for Bricks used in wall construction in this paper we are summarizing the renko bricks that consisting of the parameter as its height and this **height** we are considering as the no of Points movement of a stock,commodity or any other suitable financial instrument.

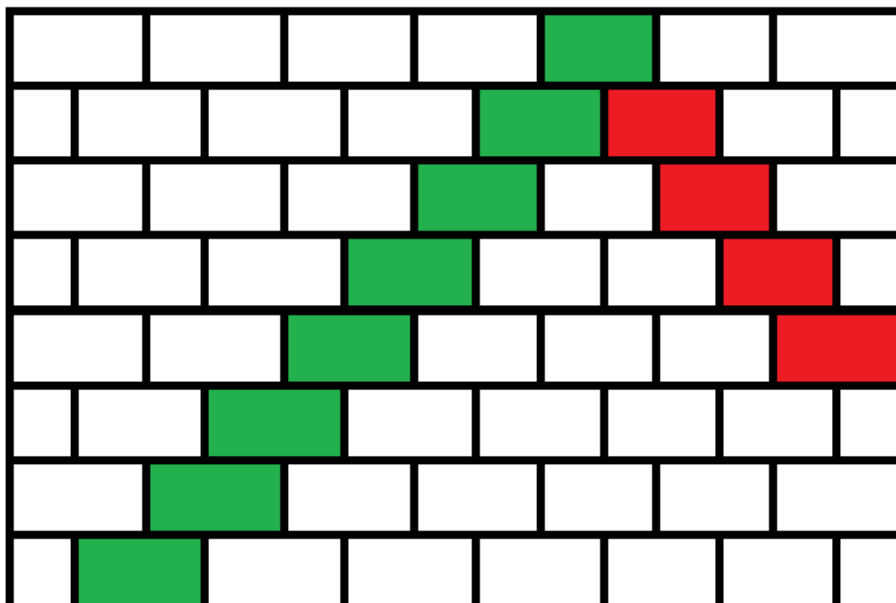


Figure 1.1 – Renko Brick example Showing in Green (Uptrend) & Red (Down)

The Figure 1.1 shows the Normal Wall and two colours one is green and red, The Green Colour we are using for Up trending Market instrument and Red is for Down Trending Market instrument.

Now we will understand the very important concept about a **single brick formation**. The Single brick is formed when a certain no of points movement is happened in the Stock market. We will consider it as any random number like 1,2,3....or any fractional number or pips. Actually there are two methods for constructing the Renko brick

Types / Methods of Renko Chart Formation

1. Traditional (Fixed)
- 2 ATR Based (Variable)

Now we will understand the these two methods in very simple manner ,the first method named Traditional i.e. Fixed Points that means the Brick is formed with fix number like 5 points,7points ,10 points etc. But the the second method is ATR Based forms the bricks with Value based on ATR Value and this ATR Value is Varying all the time in Real Time Markets and the trader or investor gets confusion and problem of repainting the Renko Bars. Still we must know about the ATR – ATR Stands for Average True Range technical Indicator. we are not going in depth about ATR Based Renko because our intention is different. we have to finalize the trend using Fixed i.e. Traditional Renko Charts for earning massive profits and recovering the loosed money.

III.FORMULAS OF RENKO CONSTRUCTION

The Renko Brick and Formation of Entire Renko Chart Constructed using the **Caveman Algorithm** The algorithm uses **300 aggregated** bars of data on the chart (i.e. about a year for daily charts and about 5 hours on a minute chart) and comes up with a reasonable default value. So, the default range will be depending on the financial asset considered

The Below image describes clearly and explain the one Renko Brick. The Open Value and Closed value is shown in the diagram green brick indicates the move happened bullish and red brick indicates move happened bearish.

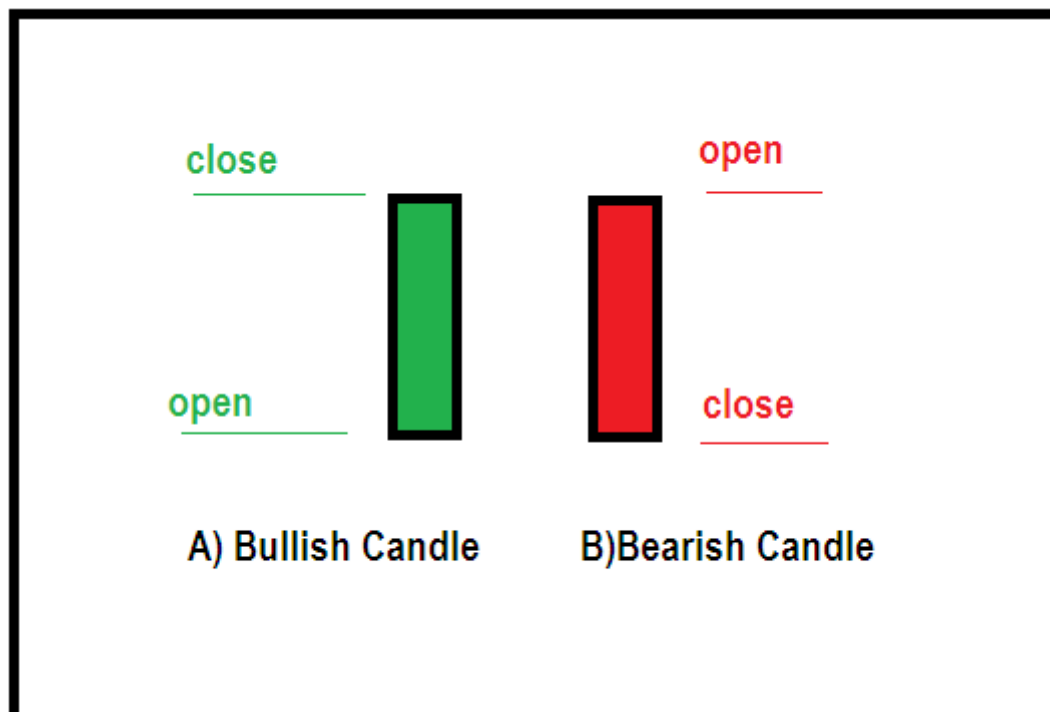


Figure 1.2 : Single Renko Brick Bullish and Bearish

The next part is to understand the brick height i.e. the most important part in this article the height of candle is nothing but number of points up or down move irrespective of time series.The Diagram below depicts the entire concept related to height of the candle.

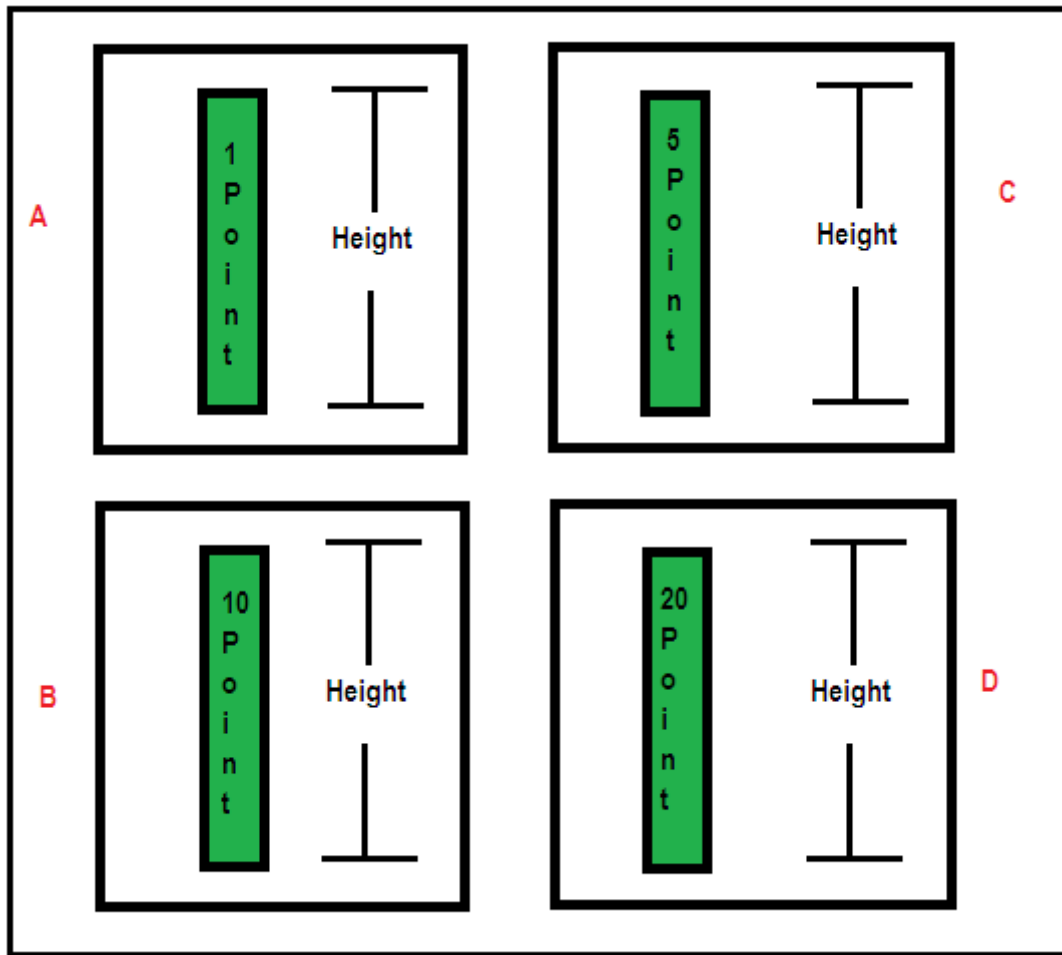


Figure1.3 : Describing the Height of the Brick A)1 Point B)10 Point C) 5 Point D)20 Point

IV. COMPARISON AND WITH NORMAL CANDLE AND RENKO BRICKS

Now we will compare the Traditional Candle Charts and Renko Brick Charts for Some Random Instrument like Nifty, Bank Nifty, Currencies like EURUSD,GBPUSD. We are using Investing.com website as Data Ware House for applying the charts

Diagrams and typography MUST be either computer-drafted or hand-drawn in India ink to produce a high-quality final output.

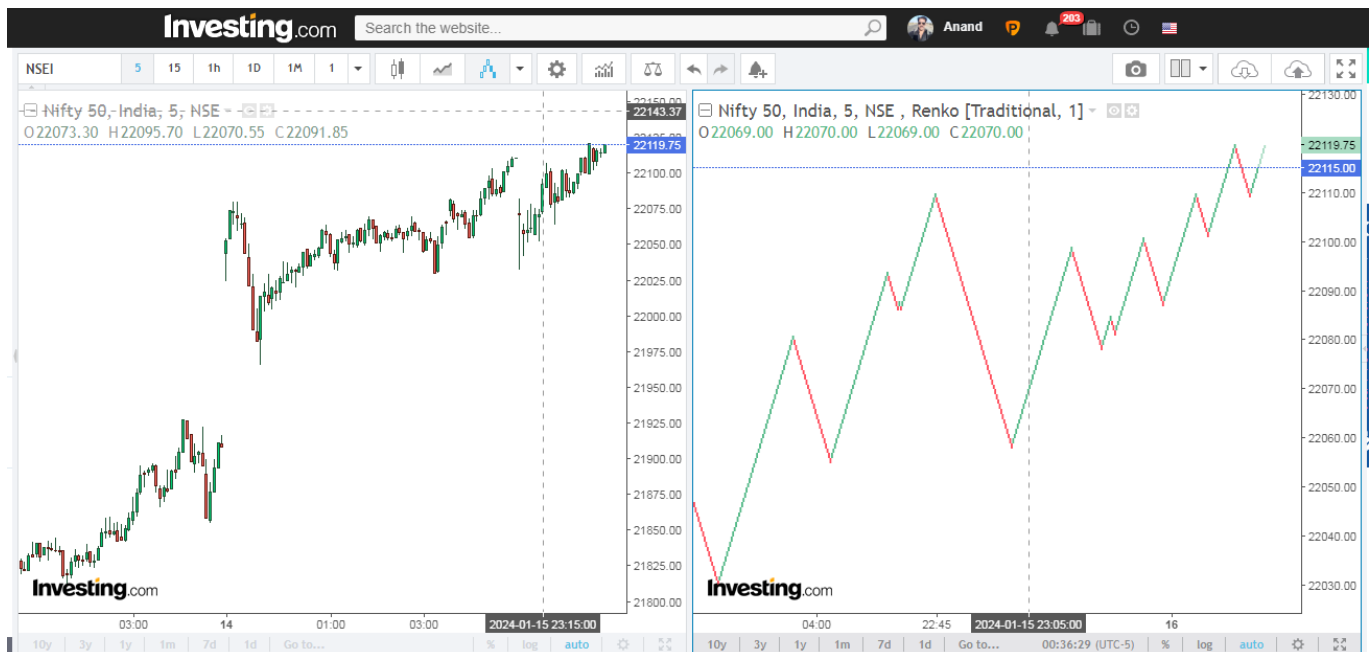


Figure 1.4 Comparison of NIFTY

There are two charts in the Above diagram and left hand side contains the normal charts of candlesticks and right hand side chart contains the Renko Bricks. The Trader or Investor can easily identify or the trend or which the current movement is going on.

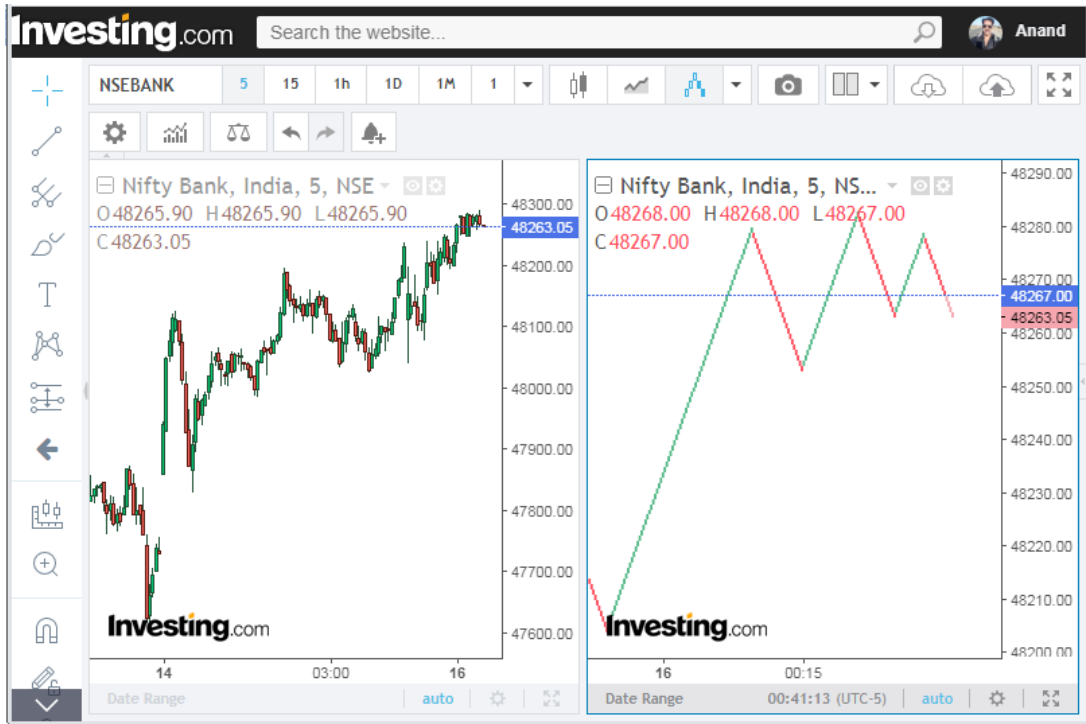


Figure 1.5 Comparison of Nifty Bank

The Above Diagram Shows Comparison of Financial Instrument Nifty Bank which Indian Benchmark Banking Index

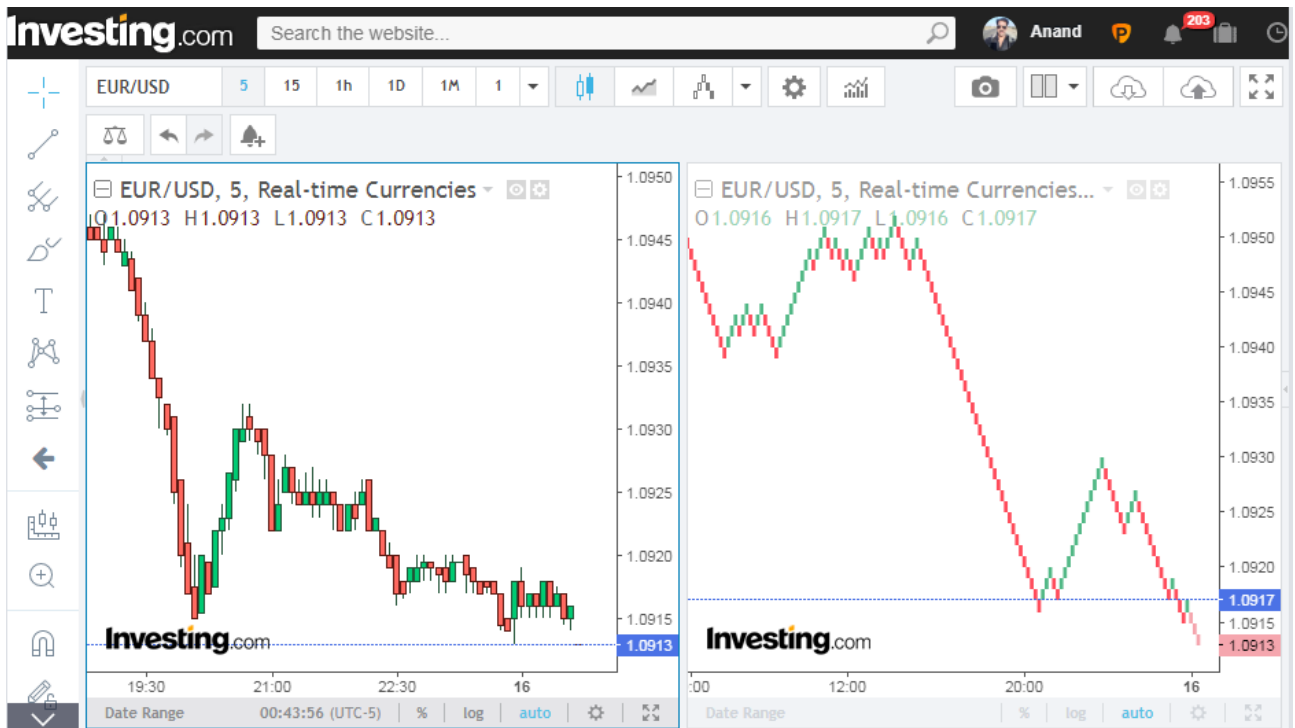


Figure 1.6 Comparison of EURUSD Forex Currency Pair

This Diagram Describing the Currency Financial Instruments from Forex Market Named EURUSD

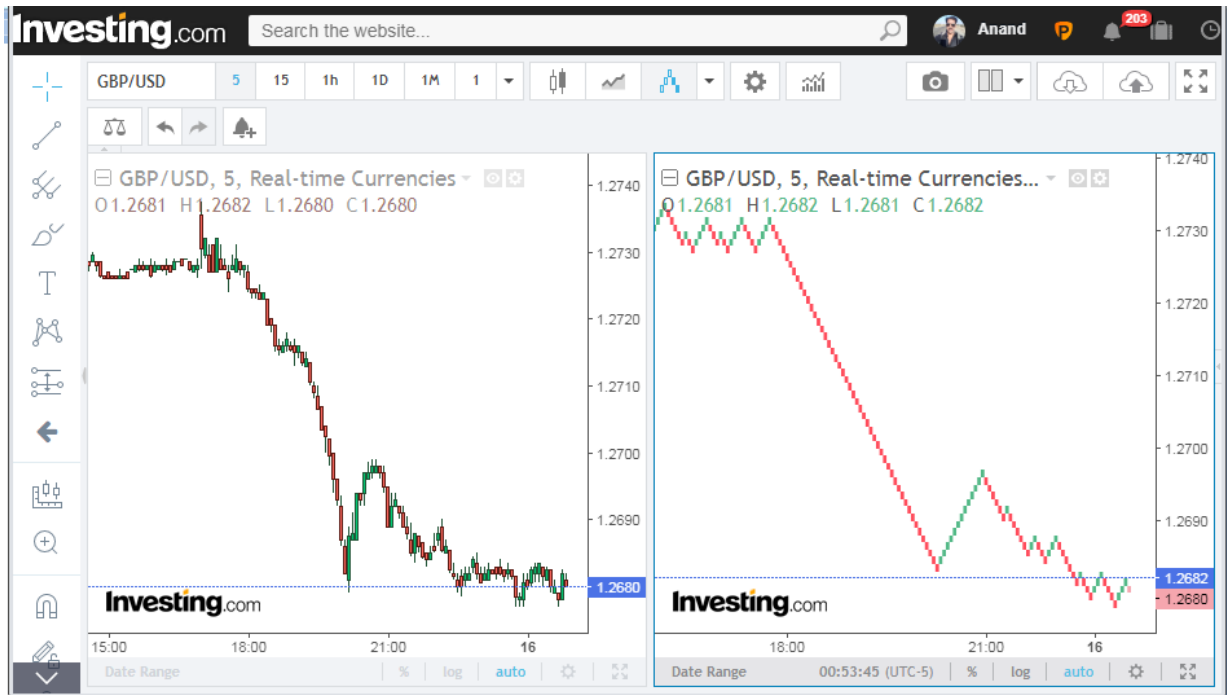


Figure 1.7 Comparison of GBPUSD Forex Currency Pair

This Diagram Describing the Currency Financial Instruments from Forex Market Named GBPUSD

The Above Diagrams discussed and compared the right side of the image shows the the Renko Bricks

Now will understand about the large data ware house of investment that handles and monitoring done by investing.com company

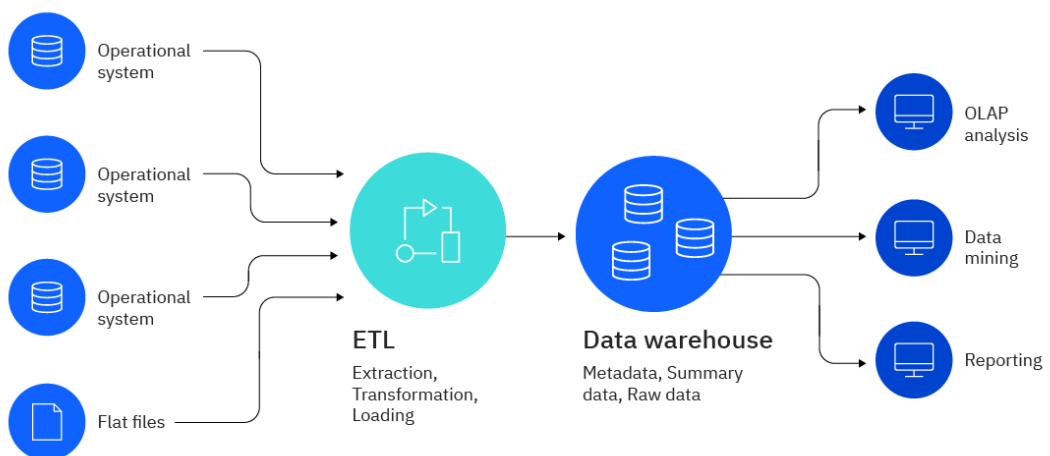


Figure:1.8 Data Ware House Architecture

DATA WAREHOUSE ARCHITECTURE

Generally the, data warehouses have a three-tier architecture, which consists of a:

1. Bottom tier: The bottom tier consists of a data warehouse server, usually a relational database system, which collects, cleanses, and transforms data from multiple data sources through a process known as Extract, Transform, and Load (ETL) or a process known as Extract, Load, and Transform (ELT).

2. Middle tier: The middle tier consists of an OLAP (i.e. online analytical processing) server which enables fast query speeds. Three types of OLAP models can be used in this tier, which are known as ROLAP, MOLAP and HOLAP. The type of OLAP model used is dependent on the type of database system that exists.

3. Top tier: The top tier is represented by some kind of front-end user interface or reporting tool, which enables end users to conduct ad-hoc data analysis on their business data.

V.CONCLUSION AND CONS

Before i come to conclude this research Article we have to understand very simple method to take underlying trading or investment decision on financial instrument. For finalizing the trend of any instrument we are using the moving averages technical indicators and that will be applied on any financial instrument. The very first Moving average of Exponential type which will be of 200 Period .this will be used to identify the long term trend if the brick are above the moving average and the moving average is pointing towards the upward direction by angle greater than 30 – 50 we can consider that instrument is in a strong uptrend. To take investment decision we will simply use another two moving average in combination with i.e. 20 & 50 Period and crossover and retracement between these two moving averages. as shown in the following figure.

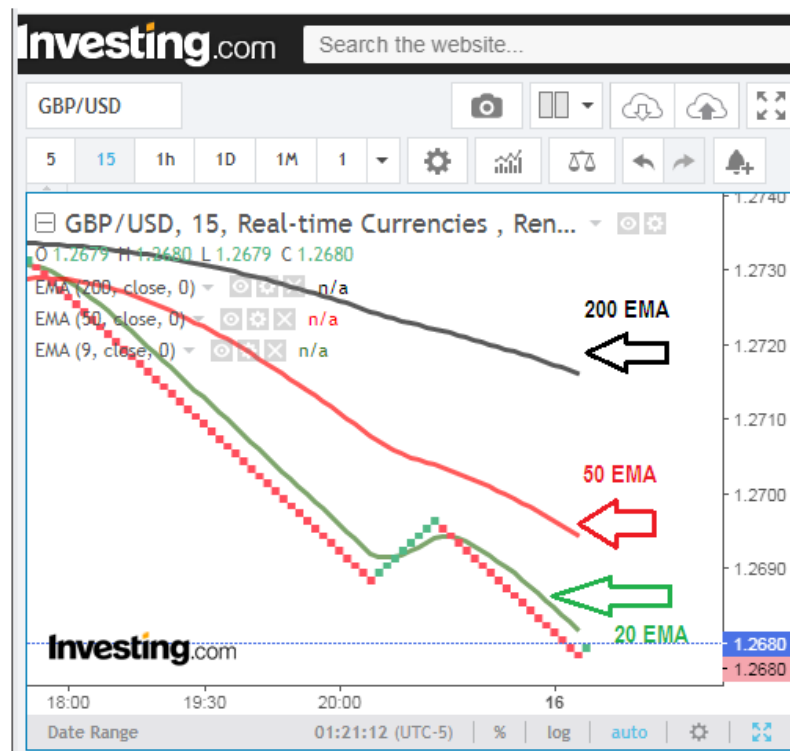


Figure 1.8 Final GBPUSD Chart with EMA Applied Showing DownTrend

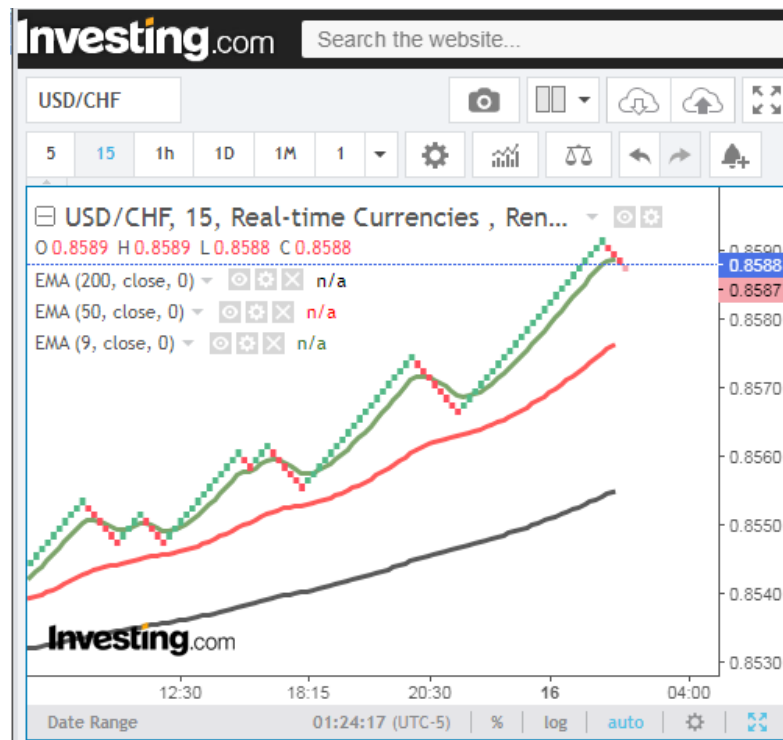


Figure 1.9 Figure 1.8 Final USDCHF Chart with EMA Applied showing Up Trend

If we see clearly the trader or investor can easily take their trade decision to buy or sell by applying the above methods mentioned and explained about the moving averages. I wish all readers to use the above methods and make huge profits and recover your losses if there are any and keep some passions with you to reach to your particulars goals.

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