Lecture №7
Introduction to Technical Analysis
Dow Theory

As you could observe in the previous lectures, trading on the financial markets relies on the ability to predict the movement of prices, determine the possibility of trends changing, as well as to monitor the current situation and emerging changes which can influence the reversal of future events. Different methods of analysis were created during the trade development of financial markets to help predict the market successfully, that is, to have a profitable trading. From this lecture we begin to study these methods and the first one of them will be **Technical analysis.**

Before we start learning about the methods and means used for technical analysis of currencies, commodity and other markets, it is necessary to first determine where the technical analysis started from and what it really represents. In the middle of the 19^{th} century a rapid development of organized marketplaces began, where the trading participants made deals with various materials and intangible values according to uniform rules. A differential peculiarity of such markets is that a trading participant is not interested in who the deal counterpart is in 99% of the cases, but in the price and volume. The exchange is a classic organized market.

This trading system sharply increases the possibilities of participants to make deals – something called market liquidity. Therefore, a lot of trading participants had the chance not only to buy or sell certain goods for an appropriate price, but to sell it even more expensively — to trade at the market. Succeeding in this is no picnic; it is necessary to forecast the market behavior in the future — to make a good prediction and thereunder to sell, buy or even opt to do nothing.

In the first instance there were as many forecast methods used by market participants as the participants themselves. As time passed, some of methods faded while others became popular. Eventually, the methods of market analysis divided into two extensive branches: fundamental analysis and technical analysis. What do these mean? Fundamental analysis uses factors for market predictions closely related to the trade subject — economic, politic, etc. Technical analysis is based on the research of crowd behavior that is already known, taking into account all the factors that make the market. From the viewpoint of technical analysis there are a number of patterns to confirm market behavior (in fact, the crowd of traders). The technical analyst does not try to understand why this creature has a pulse of 20 beats per month, while it responds to a prick made by a needle in five minutes (that is what an analyst fundamentalist does). He simply notes all these facts and uses them for prediction of this creature's behavior in the future.

Technical analysis is not considered science presently. Everybody thinks so because it is intuitive to many professionals that the regularities of market behavior have not been explicitly defined yet. Generally, technical analysis is only a convenient tool for market data presentation. To read this data is a skill, although the word 'science' appears more often in literature about technical analysis. For example, the well-known analyst Tomas Demark called his book *Technical Analysis: A New Science*.

The basic data for technical analysis consists of only two characteristics. They are the **commodity price** and its **transactions volume**. Moreover, even these two characteristics by themselves are not interesting; we are instead interested in their behavior in time. It is considered that a chart of price and transactions volumes made with an asset over a definite period of time presents the history of market behavior accurately enough to provide all the things you need to analyze and predict market behavior.

Why has technical analysis so popular among professionals for more than a century? Because it is extensive, flexible and useful in many ways. See for yourself:

- The methods of technical analysis are suitable at any market, whether it is about soybeans trading, corporative shares or currencies (at each market some methods work better, others – not as well, and some of them do not work at all);
- an experienced stock trader works at many markets all at once, trying to fatten his or her

profit and decrease losses, so he/she has no time to analyze thoroughly each of them, while the technical analysis is the only way to follow all markets of interest as one;

- nowadays, there are so many methods of technical analysis that the analysis by itself can be regarded as a building block, using parts of which any person can create his/her own unique system;
- Finally, technical analysis is a creative work which can sweep over anyone, but with a reasonable approach realize a solid profit.

Technical analysis is research of the market dynamics by means of diagrams in order to predict the future trend of price movement.

The term ‘market dynamics’ includes three main information sources which the technical analyst has at his disposal - price, volume and open interest. Due to the fact that it is rather difficult to determine the actual volume and open interest at the foreign exchange markets, the major source for us will be the price. Here is another definition:

Technical analysis is the study of past price movements to predict future ones. The price movement is the most important statistics in the world of technical analysis, as it is the only exact measure of investors’ sentiment, reflecting the conjunction of supply and demand.

The technical analysis by itself is free of win-win trading secrets and is **not** panacea for traders. However, it can help the calm and serious-minded trader see a realistic picture of what is happening at the market, therefore making adequate decisions. In this technical (as in any other) theory there are some basic postulates.

At the basis of the technical analysis theory lie ideas formulated by one of the major developers of modern technical analysis - Charles Dow. He invented the world's most famous stock index, Dow-Jones.

Let us examine these postulates in more detail; there are three of them.

Market movements are considered by everyone.

This postulate is the most important in technical analysis. Its meaning is necessary for the adequate perception of all analysis methods. Its main point is that any factor influencing the cost of security - economic, political, or psychological - is previously taken into account and reflected at the price chart. In other words, for any price change there is an appropriate change in the external factors. The main consequence of this factor is the necessity to monitor and study the dynamics of price movements. Analyzing price charts and a great deal of additional indicators, a technical analyst can see that the market itself indicates to him the most likely direction of the movement. This factor conflicts with the fundamental analysis, which focuses on the study of the factors after the analysis of which conclusions according the market motion appear. So, if the demand is outgrowing the supply, then the fundamental analyst makes a conclusion that the price has increased. The technical analyst also makes the vice versa conclusion that if the price increases, then the demand is outgrowing the supply.

Prices move around directionally.

This assumption was the basis for the establishment of all technical analysis methods, insofar as the market affected by trends (unlike the chaotic market) can be analyzed. There are two consequences from the fact price motion is subjective to trends. Firstly, the current trend will more likely stay in progress and will not become its own opposite, so by this consequence a chaotic market motion is excluded. The second consequence is that the current trend will grow until a movement in the opposite direction begins.

History repeats itself.

The technical analysis and studies of market dynamics are closely connected with the study of human psychology. Thus, graphic price models which have been identified and classified in the last hundred years reflect the most important features of the psychological market state. First of all, they indicate what kind of the moods — bullish or bearish – currently dominate the market. And if in the past these models worked, there is good reason to assume that they will work in the future, because they are based on human psychology which does not change as the years go by. It is possible to represent the last "history repeats itself" postulate in a few more words - the key to understanding the future lies in retrospection.

Test

1. Which two branches of analysis exist?
2. What is technical analysis?
3. How do you understand the postulate “History repeats itself”? Give examples of everyday life.
4. What is the main object of technical analysis studying?