HISTORY OF TECHNICAL ANALYSIS

The rice market and Munehisa Homma

It was in the early 18th century that the system of pricing goods on an open market was established for the first time in Japan. Japan was at the last stage of the warring age and Hideyoshi Toyotomi (1536 - 98) was wining virtual control of the country.

As part of his strategy for the national unification, Hideyoshi began constructing a castle in Osaka situated in the geographical center of Japan by gathering workers and craftsmen from many parts of the country. Those people pushed up Osaka's population from 70,000 to 170,000, and this caused food problems, in particular, a rice shortage.

Hideyoshi solicited help from local lords and in no time rice of different qualities came to Osaka from many parts of the country. This arose the need to grade the rice, which created the surveyor and the rice market. The first surveyor's' representative was called Yodoya and the market was opened on his yard. The surveyor ranked rice in terms of quality. The graded rice was distributed through proper channeles. Surveying was carried out by inserting a tool into the straw rice bag, and as the year wore on, the surveying technique improved.

The place and persons for surveying first appeared in the castle town of Hideyoshi's predecessor Nobunaga Oda (1534 - 82). Nobunaga is said to have planned a shift to the currency economy feeling that an economy based on rice would not last long. However, he found the casting method of his day unsatisfactory to produce coins that were sufficiently durable in large amounts. So he imported Eiraku coins from Ming of China hoping to make the coins the pillar for a currency economy he envisioned. His ordinance is said to have included descriptions of the coin market and the coin appraisal standard, e. g. "Two defective coins worth one normal coin."

As the years wore on and Nobunaga was replaced by Hideyoshi, the money market was replaced by the rice market. As population remained relatively stable, the supply and demand position of rice depended on the conditions on the supply side such as weather. As the Osaka castle took more than ten years to construct, there were some years of unusual weather. This caused uneveness in quality and price, resulting in a grand drama in Yodoya's yard.

One of the leading players of the drama was Munehisa Homma, a resourceful merchant hailing from a northern town of Shonai-Sakata. In those early days, Homma had his own communications network in which he posted a man every four kilometers for the entire distance from Osaka to Sakata, and let them climb the rooftop at the prefixed time and send signals by waving flags. This was possible when wages were very low, but his was an innovative idea. The history of technical analysis in Japan seems to trace back to this man of ideas.

It was unfortunate, however, that Japan's technicians in those days typified by Homa did not disclose their knowhow, handing it down to their direct decendants only. As a result, even geniuses' ideas were burried in oblivion. Nevertheless, some books have survived including a well-known book published in 1755 under the title of *San-en Kinsen Hiroku* (Three-monkey record of money).

The analytical method of the technicians representing Homma must have had a strong ring of normal discourse. Their method boiled down to "Buy when the share price declines and sell when it rises." The low price was judged not by some index or indicator but by certain circumstantial evidence. This is where normal discourse steps in. The key was how to assess the "bearish atmosphere all around." The comment that "Volume has declined considerably" is a modern-day analytical judgement. In those days there were no statistics available.

Then what knowhow did those pioneers have? They probably started with the recording of trading volume. As cross trade was generally practised, the one-price-for-one-article rule did not work yet. Therefore, records must have differed with the method, thus, making the records of informative value. In the notebook, figures must have been recorded at first. Then they were changed to marks as in the charts *tome-ashi, hoshi-ashi* and the *ashikiri-ashi*.

This represented the appearance of the bar chart that indicated a high and low. The marks used in those days seem to have been something close to a table rather than a graph, but the marks were a kind of knowhow that made the charts easier to look at than before.

Recording price changes in the form of highs and lows must have been an innovation in technical analysis. The notebook used for this purpose was of the Japanese type in which characters were written vertically and a chart's movement and proceeded from right to left.

Appearance of the 200-day average

It is after the Tokyo Stock Exchange was opened more than 100 years ago that technical analysis began to be used. Many devices and knowhow developed from rice transactions came to the fore all at once. As the method to record changes in stock prices, which is the starting point of chart analysis, there were the ikari-ashi and the *in-yo*-ashi for the time-series method, and the *kagi-ashi*, which is the predecessor of P&F and the *neri-ashi* for the non-time series mono-dimentional method. The *in-yo ashi* is also called the *rosoku* (candle)-*ashi*, which was invented by the Diamond Publishing Company (The late Mr. Makino Morizo). It is not clear how the mono-dimentional method came into being, but it was developed as a strategic chart that focuses on the change of prices. The composer of the well-known tango music *La Compulsita* is not known. In Japan there have been many unknown authors. Likewise *kagi-ashi's* author is unknown. In a sense this suggests that really good things are made by the times.

At this point, Nippon Technical Analysts' Association wishes to clarify one thing—the root of technical analysis in the world, particularly in the United States and Japan.

The question is whether the analytical methods, which developed separately in the U.S. and Japan, turned out to be similar to each other because imaginative latitude is limited in this area or whether the analytical method in one country developed first and then was disseminated to the other country. We took the latter view in our book "History of Japanese Charts" for various reasons. But on the occasion of the translation of this book into English, we would like to ask this question to the MTA members. For their reference, the rice market in Osaka opened in the period of Kyoho (1716-39), while the United States won independence in 1776.

In reconstructing itself after World War II, Japan modeled itself after the United States in many respects. The Tokyo Stock Exchange reopened four years later, in May 1949. Formation of the stock price was based largely on the American growth theory which emphasized fundamentals. Securities firms competed with each other to establish research departments and their offices were full of fundamental analysts. Even in those days, however, some people continued to analyze markets in the traditional manner, but their numbers were small.

In the 1960s, chart analysis began to attract attention again. The United States was in the midst of the Golden Sixties and the Dow Jones Industrial average was rising toward $1,000. In Japan, securities markets were in a serious slump, with stock prices plunging. Kyodo Shoken and Hoyu Kumiai were established, and it was feared that Japan's Dow Jones average would fall below ¥1,200. About this time, the Japanese translation of Joseph Granville's *A Strategy of Daily Stock Market Timing for Maximum Profits* (1960) was published by Diamond Publishing Company in Tokyo. As the environment of the stock market was severe, many people, dissatisfied with the conventional fundamental analysis, read this book and calculated the 200-day moving average.

Whether fortunate or not, the 200-day average boom was short-lived, because the economic upturn that started in 1965 helped revive fundamental analysis. The market in the U.S. had more than matured, developing into a two-tier market, while in Japan the market continued to be bullish across the board. In January 1973, the world stock market collapsed, a year ahead of the worldwide recession triggered by the oil crisis.

The revived technicol onalysis

In the postwar years, the Japanese economy had grown generally faster than the economies of the United States and European countries, at least until the structural recession that was caused by the oil crisis. Naturally the growth stock theory based on fundamental analysis prevailed, while technical analysis was practised by fewer people and its development thus faltered.

Under these conditions, the oil-shock-induced structural recession gave a huge boost to technical analysis. The limit of growth was pointed out in many quarters as structural rather than temporary, so that the attitude toward stock investment had to change.

The general attention was again drawn to cycle, and timing became the most important factor. In 1978, the Nippon Technical Analysts' Association was established. That the membership increased from 16 that year to 100 shows that technical analysis had developed in response to social needs. After the prolonged recession following the oil crisis, many developed countries of the world managed to emerge from the trough but did not necessarily return to their growth course. All these countries are now in the gripe of disinflation, finding it difficult to cut interest rates further in the midst of budget deficits and exchange rates. The situation suggests that timing is still important.

(Hiroshi Okamoto)