

**A COMPREHENSIVE REVIEW OF TRADING STRATEGIES: IN SEARCH AN  
EXCELLENT STRATEGY FOR TRADERS IN  
THE INDONESIA STOCK EXCHANGE**

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**ABSTRACT**

*For all of capital markets, trading strategies through online system is very important. Most players in stock trading are seeking a strategy that appropriate to their expectation about profit. They concern about a prediction of taking profit in one or two days trading in the stock exchange. For those who expect high profit in short time, may be a day or a week, trading strategies are very crucial and most wanted thing. Traders use a trading strategy to help make wiser buying or selling (entry and exit) in order to minimize the risk while maximizing profit. Besides, with a proper trading strategy traders can eliminate emotional bias that brings the unbearable risk. They can use the system operate within the parameters that familiar enough by traders. The parameters can be reliable because the system is set based on the historical analysis and real world market studies (forward testing based on backward testing). Hence, an appropriate trading strategy can have confidence in selecting the timing to entry and exit of stock trading. This article is aim to review some strategies that most traders practicing in some stock exchange. This article adopt the meta-analysis approach in extracting some of trading strategies which is popular in daily stock trading all over the world such as entry at break out trend (buy high and sell higher), buy on weaknesses and sell on strength (BOW and SOS), Cut Loss at 5%, select the stock at up trend, etc. These samples of stock trading strategies programs are presented on the online publication by the securities companies. Those programs are crated in theoretical and practical approach explanations by some securities companies all over the world. Therefore, it is very crucial for all traders to be familiar with those systems to minimize the risk while maximizing the profits.*

*Key Words: stock trading strategy, online system, players in stock trading, expectation about profit, buying or entry, selling or exit, stock exchange, forward testing, backward testing, historical analysis, BOW, SOS, etc.*

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## BACKGROUND

To all of stock exchange the most interesting thing for the stock traders is the strategy program that could maximize their profit with the minimal risk. Each stock trader must have expectation to get the maximal profit in the level of the measurable risk. Therefore, each stock exchange is demanded to provide a strategy program that could satisfy the requirement of users. It is necessarily to fulfill the expectation of each investor (Mackinlay, 2011).

The technical analysis increasingly for a long time was increasingly beneficial for the traders of stock, while the fundamental analysis has been left behind. Even theoretically the fundamental analysis still often was believed in by its truth, but more impractical in the use for the stock trading where the transaction happened in the daily or the minute (Kavajecz, and Elizabeth, 2004).

As being said by Grinold & Kahn (2011) that the movement of the stock prices can be modeled as a time series with random components and serial correlation information. The movement of the stock prices modeling based on the past data with the method of statistic increasingly reinforced the scientist's belief in the use accuracy instrument the technical analysis. Therefore, the correlation information or trading pattern becomes the scientific foundation of technical analysis.

Now the technical analysis has experienced the development that was very fast along with the development of information technology. At this time the development of information technology has enabled to make use of mathematics and statistics that can be programmed, so as made the technical analysis is very useful for the players of the stock trading (Keller, 2008).

For all stock exchanges the most interesting product that can be marketed is the clarity of the maximum risk upon traders will to accept. Traders of stock expect they can maximize their profit while taking minimum risk. If they believe that the stock exchange is able to fulfill such expectation, they must be glad to participate in the stock trading. This condition is called the up trend of individual stock in which the prices of a stock is increasing more often than it's decreasing (Racette, Tim, 2011).

The most mentally hazardous for traders is the timing to entry in the uptrend condition. Traders very frightened if they were wrong in determining the timing to buy a stock. Based on the experience of most stock traders experienced the big loss because of not using a proper strategy in determining the time to buy, when to sell, and when to be waiting (Racette, Tim, 2011). As being explained by May (2011), that trading is not gambling or the game, but a real business. Therefore, a stock trading should not regarded as the speculation action, but a pure business.

The objective of this article is determine what kind of strategy that can be used by traders in fulfilling their expectation to minimize the risk while maximize the profits in the stock trading. This article uses a meta-analysis of some famous strategies that founded by researchers in search the best strategy which is able to satisfy the traders' expectation (King & Jun, 2006). Although the method of meta-analysis could not put forward the statistical testing deeply, but this method could express results of the empirical research that has been tested of their validity and reliabilities. In this meta-analysis some of the known strategies will be compared in order to proof the power of the strategy. (Lo, Mamaysky, and Wang, 2000).

## RESEARCH METHOD

Meta-analysis was used to make the comparison of various results of the empirical research in the stock trading. This method could reveal widely how respectively the study about the strategy in the stock trading was practiced. Meta-analysis can compare comprehensively various results of the empirical research; hence the descriptions about the development of the strategy in the future can be traced sharply. Nevertheless, this method has limitations in the matter it did not emphasize the testing of statistics from each one results of the empirical research to be compared (King & Jun, 2006).

The data was gathered from various sources that provided the program strategy for stock trading, both from overseas and domestic. The data that was chosen was what latest and was used by many trading practitioners in the stock exchange. Data collection in this research used the selected internet facilities that connected in an online manner from various providers (Pring, 2002).

This method provides an overview of generally about the context of research by means of a combination of quantitative results and analysis of empirical studies. The advantages of meta-analysis are: 1) More objective than other methods; 2) Focus more on the size of an effect than the discovery of empirically; 3) Allow the combination of various forms of the results of the comparison of results of studies with other significant results were obtained; 4) Lets see the big picture of the results of research; 5) Provide answers to the questions or arguments resulting from the conflict results obtained from different studies; 6) More objective than the review literature in non-quantitative (Kusumawardhani, 2011).

## DATA ANALYSIS

This article adopts the meta-analysis research methodology in social phenomena (King & Jun, 2006). The data in this article was collected from several of strategy creators. They are offering the strategy to users all over the world. Some of these strategies then are comparatively analyzed and reviewed. Every strategy was analyzed and compared with others in search the best one. Each strategy has a specific trading advice as it happens. This meta-analysis try to report mixed both the hypothetical and empirical results. The assumption is that a trader follows the advice exactly as presented. This process is generally called go-forward testing (Keller, 2007).

Trading strategies that we collected here are traded in real brokerage accounts. We use the execution of the strategies in a particular stock exchange as the basis for our analysis. In this article not all trades from all strategies have been traded in real accounts. Thus all results here must be regarded as mixed both hypothetical and empirical testing. However, go-forward testing is useful to traders in looking for the best strategy (Camillo, 2008). The comparative powerful of some strategies can be traced in the table 4.1 below.

Table 4.1 the Comparative Powerful of Some Strategies

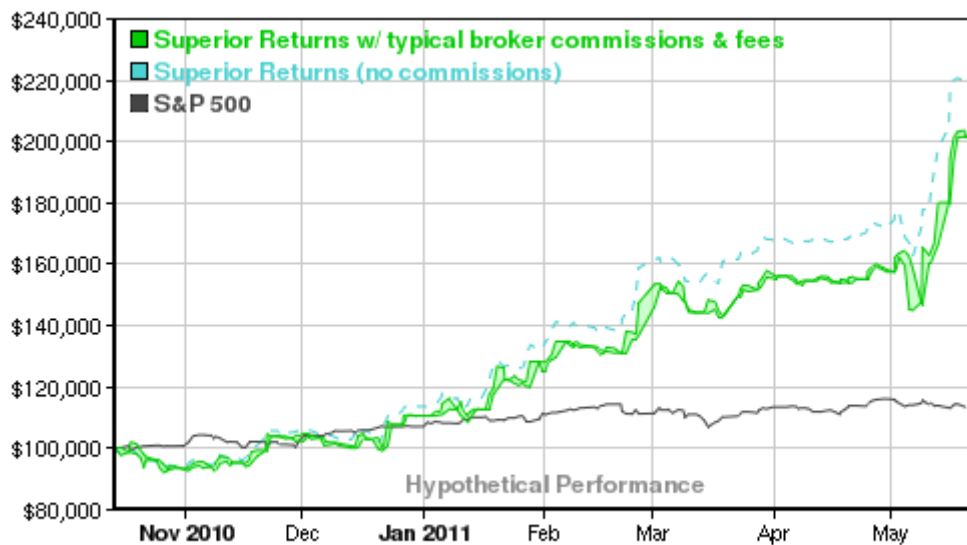
No	Name of Strategy	Correlation	Average Trading Day	Number of Trades
1	Topaz NQ100 M	<b>-0.020</b>	4.6 days	2,001
2	Cyclical Model	<b>-0.097</b>	1.1 weeks	221
3	Stock Swing Trader	<b>0.191</b>	4.0 days	590
4	Rainier	<b>0.191</b>	1.6 days	590
5	INVERTERATE	<b>0.094</b>	3.1 days	253

Source: Strategies Creators Online, 2011.

The coefficients of correlation at the table 4.1 describe the powerful of forward-testing each strategy. The table above shows the correlation between S & P 500 and the prediction about the prices movement of stocks. Higher correlation means more powerful prediction than the others. In this comparison the Rainer Strategy is the most powerful in application of stock trading.

Beside these strategies, some other strategies also offer the interesting values about their application in the real stock trading. For example, the Superior Return Strategy. This strategy also shows its superiority among other strategies systems which are promoted. The performance of the strategy is presented on the chart 4.1 as below.

#### 4.1 Superior Return Strategy



Hypothetical Results from Oct 14, 2010 to May 22, 2011 (221 days)

In the chart 4.1 above was shown by the superiority of the achievement system that was in this Return Strategy superior. Results that were received by the investor by using this strategy exceeded return that was expected for. Briefly speaking the results of investor return that received was far exceeded the achievement of the market return. However this strategy main drawbacks, 1) difficult to apply due to so many orders every day, and 2) because large number of open orders.

#### 4.2 The Topaz Strategy

This strategy is flexible and profitable, both short term and long term of stock trading. The beauty of this strategy is that trader can easily to manually manipulate any of the positions. This strategy performance can be traced as following charts.

The chart above shows a really superior system Topaz Strategy in helping the investor to maximize profits. It's explained that from 2008 to 2011 the return that were received by the investor who used this strategy were very high compared with the average results that was predicted.

### **The New Ambiroker Strategy**

Ambiroker Strategy implement on real trading at the end of 2010. The basic of the system is simple. This strategy uses the price fluctuation of good stocks which have both high market capitalization and market liquidity. The selection of stock is based on the up- trend of the stock prices in the longer period of time such as three up to six months. However in the period, daily trading prices will fluctuate up and down due to the market demand and supply.

It is common that after the stock prices increased it will be corrected to be going down due to profit taking action by some traders. Because of the market demand goes up, the prices will increase again and the trend still continues to increase. This strategy suggested to buy the stock when the time of trend of the stock price movement is increasing, and the position of buying is happened at the time of the stock price penetrated the line of resistant.

### **Modern Technical Analysis**

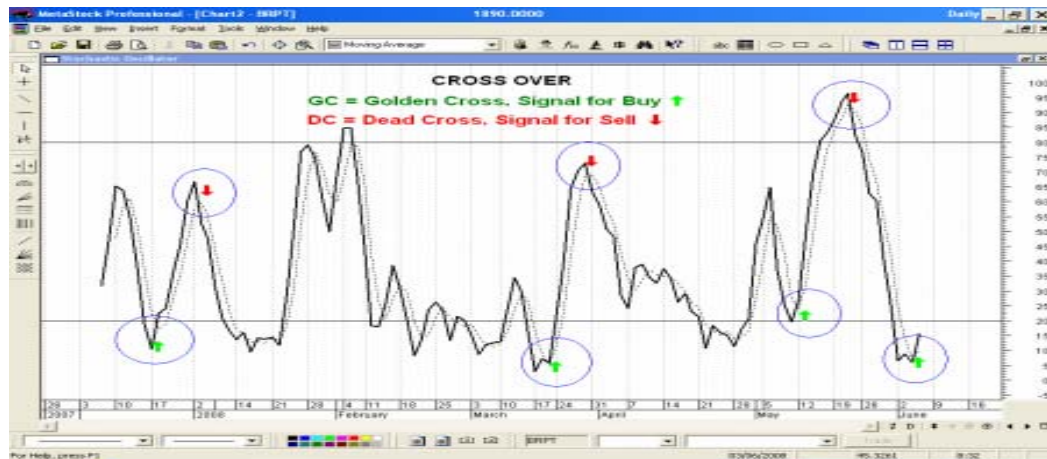
In modern technical analysis the indicators are time series data inputs that is processed to be output of charts of the prices movement of stock. The most popular indicator is candlestick chart that formed by combining the highest, the lowest, open and closing prices of stock. The most current innovation of candlestick chart right now is very easy to understand such as Ichimoku Chart. Ichimoku chart is very easy to apply, even by someone who does not educated enough. Ichimoku Chart drawing the prices of stock likes a painting. So, it is become more applicable to everyone (Keller, 2008).

An indicator offers a different perspective on how to analyze the movement of a stock price. From as simple as moving average which offers a relatively easy to the formula that is more complicated and requires an understanding deeply in interpreting the information generated (Aronson, 2006). Based on the complexity of the formulas used, indicators can provide a unique perspective in assessing the actions of price movement. In general, the indicator has three main functions, namely to give a warning, confirmation, and prediction (Lo, Mamasky, and Wang, 2000).

Warning function among others can be used to monitor the occurrence of penetration in the support/resistance line. Indicators are often used as a tool for confirmation of other analytical tools, for example, discovered the existence of penetration, can be confirmed by using the intersection (crossover) between two moving averages lines. Often the signals given by very obvious indicators but remain vigilant. For example, see the graph in which the indicators used briefly to give a buy signal, but the view of the action from the price movement itself form a descending triangle pattern with a series of price continued to decline, but it could be a signal given by the indicators used in the wrong. As usual in technical analysis, the ability to read more of the indicators tend to be art (art) rather than as something scientific (science).

One type of lagging indicators is the Exponential Moving Average (EMA). EMA is one of the indicators that are very popular and relatively easy to use. By using the average price, EMA is formed based on a series of price data on the chart and make it easier to identify the trends. EMA reduces the effects of lagging by providing a loading for the current price with the price of the past. This will result in the EMA is moving faster than Simple Moving Average (Sewell, 2011).

Analysis of stochastic oscillator consists of two lines, namely the %K and %D lines. The %K line is the line that describes the relative position, and the closing price at the highest and lowest prices within an observation period. Although it is trigger lines, simple moving averages (simple moving average) in %K, maximum is %D and the stochastic 100. The explanation of oscillator can be traced as following chart (Aronson, 2006).



### The Indonesia Strategy

Today in Indonesia also has had several of the security's companies that offered the program software that could be used in the stock trading as a strategy. This article showing two kinds of program that consider was good enough as strategy in stock trading. First, Home Online Trading System (HOTS) was launched by the security's company, E-Trading. Secondly, the system strategy of D'one (Danareksa Online) that was provided by the company belonging to the government of Indonesia. This program is made to be used by the community that interested in investing in the Indonesian stock market.

Home Online Trading System (HOTS) was what was most complete in the presentation of the menu that was needed in determining the trade strategy in the share. Almost all the technical analysis and fundamental analysis are available for implementing forecasting to determine the timing of buy and sell of the stock. By combining several analyses the technical instruments, then a prospective investor could easily decide when to buy the stock that has been recommended. Afterwards the investor could easily decide when to stop loss, for example in cut the loss at 5%.

Several instruments of the technical analysis that are accurate enough for resulting of its prediction are: candlestick, simple moving average (the SMA) the volume, stochastic, and average direction the index (ADX). Also is available the instruments for forecasting such as Moving Average Convergence Divergence (MACD), Bollinger Band, Triple Moving Average (TRIX), and Ichimoku Chart (Achelis, 2000).

In the whole Home Online Trading System (HOTS) have more than 60 instruments of the technical analysis that could be used in a combination to get the picture that is sharper about the strategy to buy the stock that has been recommended. The investor is not prosecuted to understand all instruments that are available, it's enough several that most agreed with the type of the individual investor. One of the forms of the combination of the foundation the stock trading strategy that most often is used in the stock trading are

candlestick, simple moving average (SMA 5, SMA 20, SMA 60), the volume of the trade, and stochastic.

The menu of Home Online Trading System (HOTS) could be seen from the figure 1 as following:



Figure 1. Menu of HOTS and Example of ASII Chart.

The picture 1 above could be seen the menu switches that could be used to carry out the technical analysis of the Astra International stock (ASII). This chart of ASII stock clearly gave the guidance to the user that the price of this stock will continue to experience the rise. In the underside is shown the volume of the daily stock trading that confirm about the direction of the trend of the price of the ASII stock for several days in the future. By carrying out the analysis chart trend of the price of the ASII stock that can be accessed at once online from the security's company E-Trading, then the investor can determine when the timing to buy the ASII stock and when the timing to immediately sell it.

Program Home Online Trading System (HOTS) also provides the menu to carry out the fundamental analysis of a stock. In the choice of the "Information" menu, if being clicked will emerge the sub-menu of "Income Statement" and "Balance Sheet". The data from the two information furthermore could be used to make the fundamental analysis of the certain stock, in this example the Astra International share (ASII). The form of the fundamental analysis menu of the Home Online Trading System (HOTS), i.e., Income Statement, could be seen in the picture 2 as following:

The screenshot shows the 'Equity Income Statement' for Astra International Tbk (ASII). The table displays financial data for the latest quarter and previous quarters. The data is as follows:

Code	ASII	Astra International Tbk.	Quarter	Year	1st Qtr
Latest Quarter	Last	Book Value	EPS	PER*	PBV
1	61,550	15,761	1,252	12.3	3.9
* Annualized	EPS-Net Income/Share Listed		BV-TotalEquity/Share Listed		
Quarter/year	1st Quarter 2011	1st Quarter 2010	1st Quarter 2009	1st Quarter 2008	
Total Sales	38,693,000,000,000	29,688,000,000,000	21,537,100,000,000	21,780,000,000,000	
Cost of Good Sold	-31,074,000,000,000	-23,765,000,000,000	-16,582,000,000,000	-16,553,000,000,000	
Gross Profit	7,619,000,000,000	5,923,000,000,000	4,955,000,000,000	5,227,000,000,000	
Operating Expenses	-3,279,000,000,000	-2,765,000,000,000	-2,333,000,000,000	-2,098,000,000,000	
EBIT	4,340,000,000,000	3,247,000,000,000	2,622,000,000,000	3,129,000,000,000	
Other Income / Expenses	441,000,000,000	197,000,000,000	228,000,000,000	198,000,000,000	
Earning Before Tax	6,224,000,000,000	4,521,000,000,000	3,245,000,000,000	3,327,000,000,000	
Net Income After Tax	5,070,000,000,000	3,581,000,000,000	2,352,000,000,000	2,771,000,000,000	
Minority Interest	0	-587,000,000,000	-477,000,000,000	-522,000,000,000	
Net Income (NI)	5,070,000,000,000	3,014,000,000,000	1,875,000,000,000	2,249,000,000,000	
Earning Per Share (EPS)	1,062	743	463	555	
BookValue Per Share (BV)	13,378	10,612	8,640	7,199	
Close Price	57,000	41,900	14,250	24,250	
PER (Close Price/EPSt)	13.4	14.1	7.7	10.9	
PBV (Close Price/BV)	4.3	3.9	1.6	3.4	
Public Accountant	0			HaryantoSahariCo.(PW)	

Further, the form of the fundamental analysis menu of the Home Online Trading System (HOTS), i.e., Balance Sheet, could be seen in the picture 3 as following:

Quarter/year	1st Quarter 2011	1st Quarter 2010	1st Quarter 2009	1st Quarter 2008
<b>Assets</b>				
Cash & Equivalent	9,666,000,000,000	9,924,000,000,000	8,596,000,000,000	6,687,000,000,000
Account Receivable	11,791,000,000,000	8,761,000,000,000	6,352,000,000,000	6,498,000,000,000
Inventories	9,744,000,000,000	6,476,000,000,000	7,036,000,000,000	4,651,000,000,000
Other Current Assets	22,866,000,000,000	14,903,000,000,000	12,646,000,000,000	3,256,000,000,000
<b>Total Current Assets</b>	<b>54,067,000,000,000</b>	<b>40,064,000,000,000</b>	<b>34,630,000,000,000</b>	<b>21,093,000,000,000</b>
Fixed Assets	25,586,000,000,000	22,469,000,000,000	19,569,000,000,000	15,737,000,000,000
Other Non-Curr. Assets	43,631,000,000,000	33,238,000,000,000	26,312,000,000,000	30,798,000,000,000
<b>Tot. Non-Current Assets</b>	<b>69,217,000,000,000</b>	<b>55,707,000,000,000</b>	<b>45,881,000,000,000</b>	<b>46,535,000,000,000</b>
<b>Total Assets</b>	<b>123,284,000,000,000</b>	<b>95,771,000,000,000</b>	<b>80,511,000,000,000</b>	<b>67,628,000,000,000</b>
<b>Liabilities</b>				
Current Liabilities	39,639,000,000,000	29,092,000,000,000	24,985,000,000,000	22,946,000,000,000
Long Term Liabilities	19,837,000,000,000	14,163,000,000,000	12,579,000,000,000	10,220,000,000,000
<b>Total Liabilities</b>	<b>59,476,000,000,000</b>	<b>43,255,000,000,000</b>	<b>37,564,000,000,000</b>	<b>33,166,000,000,000</b>
Total Equity	63,808,000,000,000	42,993,000,000,000	34,980,000,000,000	29,148,000,000,000
Minority Interest	10,143,000,000,000	9,523,000,000,000	7,967,000,000,000	5,314,000,000,000
<b>Tot. Liabilities &amp; Equity</b>	<b>123,284,000,000,000</b>	<b>95,771,000,000,000</b>	<b>80,511,000,000,000</b>	<b>67,628,000,000,000</b>

It could be said that from the aspect of the menu that was provided for the users, then the program of Home Online Trading System (HOTS) is the most complete. Beside of its complete menu, this program also especially is drafted for the investor in the Indonesian Stock Exchange. Unfortunately, this program was made in the English language version, so as to be difficult to be understood by the majority of Indonesian people.

Meanwhile, the strategy system that was made by Dana Reksa Securities Company (D'ONE) more often gave information about the condition for the stock market of last days. In its presentation this system also gave the results of the research about the market prospect of several supreme stocks in Indonesia. Market information and the analysis produced by the real research on several supreme stocks indeed very beneficial for the investor, but not applicable enough in stock trading practice. The investor, especially who is still the beginner really needed some system strategy that directly could be used in the stock trading in the real market.

This system strategy is not emphasizing on the social aspect, especially the aspect of the economic development as being stated by Director of Research and Development of the Indonesian Stock Exchange (2011) that the government aimed during 2014 at least as many as 2 million Indonesian people have been successful investment in the stock trading online.

## RESULTS AND DISCUSSION

Various comparative analyses has been done towards several results of the empirical research in front gave the descriptive picture that generally all the strategies could be made use of by the perpetrators of the stock trading. Nevertheless, respectively every strategy had strength and weaknesses if being applied in the actual stock trading. In other words, there is nothing perfect in the stock trading strategy.

Because the aim of this research was to look for the best strategy that in accordance with the condition for the Indonesian stock market, then it is needed several criteria as the foundation of the selection. Criteria that are being used in this case are: 1) the strategy must be easy both to be understood and applied for the trade in the Indonesia Stock Exchange; 2) the strategy must be available online and can be downloaded for free; 3) the strategy must have track record that proven the success in the application by the users; 4)



the strategy must be comprehensive enough in guiding the users; and 5) the strategy must be suitable with the Indonesian condition.

From all over strategies that has been discussed in front, evidently did not have any that could fulfill these five criterions. Therefore, it is needed a deeper study to find a strategy that really could be relied on by the Indonesian investors, both good for the aim of maximizing the profit and for the need to avoid the risk of the loss in the online stock trading. This matter is based in fact that most Indonesian communities are frightened by the risk of losing due to the limitations of their wealth.

## **CONCLUSION**

It does not yet have any system of the stock trading that could satisfy the requirement for most Indonesian communities. Especially, most Indonesian community's do not mastering the English language, in fact all the program system of the stock trading was made in the English language. Also must be remembered, that most Indonesian communities were still being classified as "poor", so as to be able to not provide the fund that is quite big for investment in the stock exchange. Moreover, with the number of deception incidents by the fake brokers that often damaging society wealth, caused the community's mistrust about the truth of the investing prospect in the Indonesian Stock Exchange.

Several of the security's companies that progressively carried out the socialization of the trade in the online share, still was limited to the middle-class social class above. Moreover only focuses chose the community's member from the rich group that live in big cities such as Jakarta, Bandung, Surabaya, and Medan. In fact most Indonesian inhabitants lived in rural areas and small cities, so as did not enable for them to join this socialization program. Moreover to join the training of the use of the stock trading strategy program must pay relatively expensive, also the fund that is needed for investment in the stock exchange still quite big.

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