

# FUNDAMENTAL VS TECHNICAL ANALYSIS: PREFERENCES AND DETERMINANTS OF INDONESIAN INVESTORS

**Guninta Surplusya S.**

*Universitas Indonesia*

**Ratna Wardhani**

*Universitas Indonesia*

*The focus of this research is to explain whether investors prefer technical or fundamental analysis in analyzing their investment options and to analyze factors influencing the selection of that investment analysis method. The research uses questionnaire with 92 participants. Six independent variables used to explain the selection of investment analysis method, namely investor's education, investor's experience, information accessibility by investor, investor's time horizon, trading activity frequency, and investor's perception toward the disclosure done by corporation. The outcome of research suggests that Indonesian investors prefer technical analysis. With 95% of confidence level, factors influencing selection of analysis method significantly are investor's experience, investor's time horizon, and trading activity frequency.*

---

*Keywords: Investment, technical analysis, fundamental analysis, factors*

## INTRODUCTION

Indonesia's equity market is one of emerging market in the world. It is shown by the increasing of market capitalization in Indonesia ([www.idx.co.id](http://www.idx.co.id)), which increase higher than other capital market in region area. The macroeconomic condition also supports this upward trend and this causes number of Indonesian investors growing rapidly.

In making investment decision, investors could analyze their investment using two analysis methods, namely fundamental and technical analysis (Sharpe, Alexander, and Bailey, 1995). Fundamental analysis is an investment analysis that aims on knowing the intrinsic value of company's stock (Jones, 2007). Whereas technical analysis is tool of analysis that heavily rely on market data that could be processed to charts or some technical indicators. That is why technical analysis is also called by charting (Lo, Mamayski, and Wang, 2000).

Taylor and Allen (1992) have done research to understand investment analysis method preferred by investors. Taylor and Allen (1992) did research on 353 exchange markets dealers in London. The result suggests that the use of fundamental and technical analysis is complementary. But, 90% of respondents in this research give more weight on technical analysis.

Similar to Taylor and Allen (1992), Lui and Mole (1998) did research on investment analysis method preferred by Hong Kong

investors. Lui and Mole (1998) carried out surveys for exchange market dealers in Hong Kong and found that technical analysis is more popular to be used, especially for shorter time period.

The popularity of technical analysis was explained by Fernandez-Rodriguez, Sosvilla-Rivero, and Andrada-Felix (1999) who did research to prove that technical analysis only could provide profit for the users. They did research in Madrid Stock Exchange and found that using the simple tools of technical analysis, namely moving averages and support and resistance level, they could predict the stocks price pattern. Therefore, investors using technical analysis could gain more profit.

The selection of analysis method used by investors highly related with Efficient Market Hypotheses (Fama, 1970). Fama (1970) defines efficient market as a market which prices have fully reflected all relevant information. These all relevant information includes past, public, and private information. Based on the degree of relevant information absorption, Fama (1970) divides efficient market into three categories, which are weak form efficient market, semi-strong form efficient market, and strong form efficient market.

In Indonesia, research in efficient market form has been done often. Sirait (2005) did research to test weak form market efficiency in Indonesia. The outcome of this research suggests that Indonesian equity market is not efficient and more inefficient in the longer term of research. Pontoh (2007) also suggests that Indonesian equity market is not efficient, even in the weak form. Suryadimaja (2004) tested semi-strong form market efficiency in Indonesia using event study to analyze the effect on announcement of Initial Public Offering (IPO) and additional listing. Suryadimaja (2004) suggests that information related to stock listing announcement has not reflected yet

on the prices of stocks. In other words, Indonesian equity market is not efficient in semi-strong form. Similar to previous research, Handriani and Ghoniyah (2007) also suggests that Indonesian equity market is not efficient in semi-strong form. Implication of these researches is investors could earn abnormal return using only historical data in Indonesian equity market, since Indonesian equity market has not been efficient yet (Pontoh, 2007). Therefore, the use of technical analysis may be beneficial in Indonesia.

The objectives of this research are: (i) to investigate which method of analysis that becomes investor preference in making investment decision, fundamental analysis or technical analysis; (ii) to investigate factors that determine the investment analysis method chosen by Indonesian investors. The factors consider in this research are: education, experience, information accessibility, investment horizon, trading activity frequency, disclosure perception. This research gives two main contributions which are this research on which method of analysis used by the investor is quite rare, especially in Indonesia and this research give contribution by investigate the determinant of the methods used by the investors, which has not been research before.

## **LITERATURE REVIEW**

Frensidy (2007b) stated that fundamental analysis is more complex and harder to apply than technical analysis. Thus, it is possible that education and experience of investors influence the selection of investment analysis method. Investors with higher education and experience are likely to use fundamental analysis, because fundamental analysis needs more understanding in economic and accounting practices. Only educated and experienced investors could process all the information needed into

investment decision. On the other hand, less educated and experienced investors likely to use technical analysis because it is simpler and easier to apply. Investors do not need education and experience to process market data into investment decision, since charts play more roles in this. So, first and second hypotheses tested in this research are:

H1: The higher education possessed by investor, the higher probability of using fundamental analysis

H2: The higher experience possessed by investor, the higher probability of using fundamental analysis

Peter Lynch (1990) stated that investors should invest in what they know. Fundamentalists do investment on company's stock that is well known by them. So, high accessibility of information is needed by fundamentalists to complete their analysis. If accessibility of information available to investors is limited, investors may tend to use technical analysis that is not requiring extend information of company. Investors simply collect historical price and volume data and their decision would depend on charting. So, the third hypothesis tested in this research is:

H3: The higher investors' accessibility of information, the higher probability of using fundamental analysis

Other factors influencing investors' preferences toward investment analysis methods are investors' time horizon and trading frequency (Jalan, 2003). Frensidy (2007a) affirmed these by revealing benefits of using technical analysis and fundamental analysis. These benefits depend on the activeness of investor's trading activity and investment strategy used by investor.

Day traders investors with high frequency of trading most likely use technical analysis, because technical analysis is easy to apply and quick to make decision. On the other hand, investors with passive

strategy most likely using fundamental analysis, because fundamental analysis would analyze investment more comprehensively and need more time to apply. So, the fourth and fifth hypotheses tested in this research are:

H4: The longer investment time horizon, the higher probability of using fundamental analysis

H5: The higher trading frequency, the lower probability of using fundamental analysis

Perception toward financial report disclosure that is done by listed companies also may influence the selection of investment analysis method. Fundamental analysis which needs to analyze financial reports also needs adequate disclosure on financial statements. Therefore, fundamentalists tend to have good perception toward company's financial reports disclosure. If investors do not have good perception toward it, investors tend to choose technical analysis, since technical analysis does not require knowledge and analysis of financial reports. So, the sixth hypothesis tested in this research is:

H6: The higher investors' perception toward disclosure on financial reports, the higher probability of using fundamental analysis

## **RESEARCH METHOD**

This research used survey to collect data. Personally-administered questionnaires used to understand the characteristics of Indonesian investors. The population of this research is Indonesian investors doing investment by using online trading facility. This group of investors is selected because online trading investors are able to make their own decision by doing their own analysis. Therefore, they would know best what kind of investment analysis method they are using. This group of investors is centralized in Jakarta, since Jakarta is heart

of business in Indonesia. Therefore, this research used online trading investors living in Jakarta as its samples. The method used to select sample is random sampling.

Components of question to understand the rate of the use of fundamental analysis are review of GDP, review of business cycle, review of yield curve, review of inflation rate, industrial review, review of industrial cycle, sector rotation, review of financial statements, review of other disclosures done by companies, and review of financial ratios. Review of GDP, business cycle, yield curve, and inflation rate used to understand the use of market analysis by Indonesian investors. Industrial review, review of industrial cycle, and sector rotation are used to understand the use of industrial analysis by Indonesian investors. And other components are used to understand the use of company analysis by Indonesian investors. Each of components would be measured by likert scale with unbalanced rating scale.

Components of question to understand the rate of the use of technical analysis are historical price analysis, historical volume analysis, the use of charting, review of sentiment indicators, review of put/call ratio, and the use of moving average. Historical price and volume analysis and also the use of charting and moving averages are used to understand the use of market data analysis by Indonesian investors. On the other hand, sentiment indicators review and put/call ratio review are used to understand the use of technical indicators by Indonesian investors. Each of components would be measured by likert scale with unbalanced rating scale.

Investors' education would be measured in two components, namely formal education and informal education. Formal education is degree completed by investors in formal education. And informal education is investors' participation in various training, workshop, seminar, and talk show with

investment theme. This variable would be measured by using nominal scale and category scale, specifically.

Investors' experience would be measured by asking how long investors have been experienced in investing in equity market. This variable would be measured by using nominal scale and category scale, specifically.

Investors' accessibility on information would be measured in two components, namely accessibility of market news related with financial matters and accessibility of market news related with non financial matters. This variable would be measured by likert scale with unbalanced rating scale.

Investors' time horizon measures how long investors typically hold company's stocks. This variable would be measured by using rating scale and category scale, specifically. Investors' trading frequency measures number of transactions investors do per day. This variable measured by using rating scale and category scale, specifically.

Investors' perception on disclosure would be measured in five components, namely investors' perception on balance sheet disclosure, investors' perception on income statement disclosure, investors' perception on cash flow statement disclosure, investors' perception on other financial information disclosed by company, and investors' perception on other non financial information disclosed by company. This variable would be measured by likert scale with unbalanced rating scale.

All data obtained then would be analyzed by using descriptive statistics and inferential statistics. Descriptive statistics used in this research is frequency to understand Indonesian investors' characteristics and also to know investment analysis method preferred by Indonesian investors.

All variables which are measured by likert scale, namely the using rate of

fundamental analysis, the using rate of technical analysis, accessibility of information, and perception toward disclosure, would be tested for their validity and reliability. Validity test used in this research is correlations and reliability test used in this research is Cronbach's alpha.

All variables which consist of two or more components would be tested for their factorability, using factor analysis. These variables are the using rate of fundamental and technical analysis, investors' education, investors' accessibility of information, and investors' perception toward disclosure. Factor analysis used to form measure for concepts consist of more than one component.

To analyze the influence of independent variables on dependent variable, this research would use logistic regression with formula:

$$FUND = \beta_0 + \beta_1 EDU + \beta_2 EXP + \beta_3 ACS + \beta_4 TIM + \beta_5 FRQ + \beta_6 PCP \quad (1)$$

Where:

FUND: categorical variable that shows comparison between the using rate of fundamental and technical analysis

EDU : investors' education

EXP : investors' experience

ACS : investors' accessibility of information

TIM : investors' time horizon

FRQ : investors' trading frequency

PCP : investors' perception toward disclosures

FUND is dependent variable that shows

comparison between the using rate of fundamental and technical analysis. FUND would have value of 1 if the product of the factor analysis of using rate of fundamental analysis and the use of fundamental analysis frequency is bigger than the product of the factor analysis of using rate of technical analysis and the use of technical analysis frequency. Otherwise, it would have value of 0, which is if the product of the factor analysis of using rate of technical analysis and the use of technical analysis frequency is bigger than the product of the factor analysis of using rate of fundamental analysis and the use of fundamental analysis frequency.

Dependent variables in this research are EDU, EXP, ACS, TIM, FRQ, and PCP. EDU is the outcome of investors' education factor analysis. EXP is investors' experience, ACS is the outcome of investors' accessibility of information factor analysis, TIM is investor's time horizon, FRQ is investors' trading frequency, and PCP is the outcome of investors' perception toward disclosure factor analysis.

## ANALYSIS AND DISCUSSIONS

This research used 92 participants consist of investment managers and individual investors domiciled in Jakarta. The distribution of respondents is 89% of samples or 82 participants are individual investors, and the rest of it, which is 11% of samples or 10 participants are investment managers.

The investment analysis method preferred by Indonesian investors is described in the table 1:

**Table 1.**  
**Preference of Indonesian Investors**

Description	Frequency	Percentage
Fundamental analysis user	42	45,7%
Technical analysis user	50	54,3%
Total	92	100,0%

Indonesian investors preferred technical analysis than fundamental analysis. Even though all samples stated that they used them both in analyzing investment, there are more investors who give more weight on technical analysis. This result is similar with previous research by Taylor and Allen (1992) and Lui and Mole (1998). The difference is the superiority of technical analysis in this research seems less than previous research. Taylor and Allen (1992) stated that 90% of investors give more weight on technical analysis, while Lui and Mole (1998) stated that 85% of investors give more weight on technical analysis. This difference may be caused by the characteristics of the research. Taylor and Allen (1992) and Lui and Mole (1998) have done their research on exchange market where the price pattern is easier to determine than in stock market ("Forex Overview – Forex vs. Stocks"). Therefore, technical analysis is more popular in exchange market than in equity market.

Table 4.1 bellow presents the components of fundamental and technical analysis used by Indonesian investors. In FUND, investors most often use business cycle analysis. This may be caused by the completeness of business cycle. Because, business cycle has briefly summarized important macroeconomic indicators, therefore it is simpler to use by investors. The analysis most seldom used by investors is yield curve. Yield curve's lack of popularity may be caused by Indonesian investors' shortcoming knowledge of yield curve, as well as its application and benefits. In TECH, investors often use historical data analysis and also charting. This may be caused by the easiness to apply this kind of analysis. As technology advancing, it is really easy to get historical price data and also build charts to further analyze it. However, the analysis most seldom used is put/call ratio. This may be caused by the difficulty to obtain this data. Put/call ratio information is more difficult to get than historical data.

**Table 2**  
**Fundamental And Technical Analysis Used By Indonesian Investors**

Description	SD	D	A	SA
<b>FUND</b>				
Macroeconomic Analysis	0,00%	13,00%	51,10%	35,90%
GDP Analysis	16,30%	31,50%	47,80%	4,40%
Business Cycle Analysis	2,20%	21,70%	69,60%	6,50%
Yield Curve Analysis	22,80%	31,50%	41,30%	4,60%
Inflation Rate Analysis	9,80%	22,80%	44,60%	22,80%
Industry Analysis	2,20%	14,10%	45,70%	38%
Industrial Cycle Analysis	17,40%	29,30%	39,10%	14,20%
Investment Rotation	0,00%	13,10%	71,70%	15,20%
Financial Statement Analysis	0,00%	14,20%	38,00%	47,20%
Other Non Financial Disclosure Analysis	4,30%	23,90%	52,20%	19,60%
Financial Ratio Analysis	0,00%	2,20%	47,80%	50,00%
<b>TECH</b>				
Historical Price Review	0,00%	2,20%	31,50%	66,30%
Historical Volume Review	1,10%	10,90%	50,00%	38,00%
Charting	2,20%	15,20%	32,60%	50,00%
Using of Sentiment Indicators	6,50%	2,20%	80,40%	10,90%
Using of Put/Call Ratio	10,90%	25,00%	57,60%	6,50%
Using of Moving Averages	2,20%	15,20%	44,60%	38,00%

SD = Strongly Disagree    D = Disagree    A = Agree    SA = Strongly Agree

Table 2 presents statistic descriptive of determinants of analysis method chosen by investor from perspective of information accessibility and perception of disclosure. In ACS, overall Indonesian investors stated that listed companies information is accessible. However, the accessibility of non financial market is less than the accessibility of financial market. This shows that there is unbalanced information used by investors in analyzing their investment. Indonesian investors seem rely more on financial information, since the non financial information is less accessible. This result

suggests that more publication on non financial information is needed by Indonesian investors to complete their investment analysis.

In PCP, overall Indonesian investors stated that companies' disclosures are good enough. But, the perception on non financial matters is lower than perception on financial matters. This may be related with accessibility of non financial information explained before. Non financial information is less accessible, therefore investors' perception on non financial disclosures are low.

**Table 3**  
**Information Accessibility And Perception Of Disclosure Of Indonesian Investors**

Description	SD	D	A	SA
<b>ACS</b>				
Accessibility of Financial Market News	1,10%	9,80%	50,00%	39,10%
Accessibility of Non Financial Market News	5,40%	22,80%	51,10%	20,70%
<b>PCP</b>				
Perception toward B/S Disclosure	6,50%	10,90%	69,60%	13,00%
Perception toward I/S Disclosure	6,50%	16,30%	64,10%	13,00%
Perception toward C/F Disclosure	7,60%	26,10%	56,50%	9,80%
Perception toward Financial Info Disclosure	3,30%	33,70%	54,30%	8,70%
Perception toward Non Financial Info Disclosure	15,20%	41,30%	41,30%	2,20%

Statistic descriptive of determinants of analysis method chosen by investor from perspective of education, experience, time horizon, and trading frequency presented on Table 3. In formal education (EDU 1), bachelor degree dominates the sample proportion. But in the non formal education (EDU 2), it seemed that investors' education have more variation. The same thing happened in EXP where investors' experience is various. In TIM, investors with

shorter time horizon dominate the sample proportion. This means 60.3% Indonesian investors invest only for short time period and thus they are short term profit taker. However, in FRQ, investors' trading frequency seems low. It is on the contrary of the characteristics of short time period investors. Through some samples interviews, it is concluded that this low frequency is caused by financial support for investment activity of Indonesian investors is still low.

**Table 4**  
**Education, Experience, Time Horizon, And Trading Frequency**  
**Of Indonesian Investors**

Variable	Description	Percentage
EDU 1	Formal Education	
	High School	7,6%
	Bachelor Degree	83,7%
	Master Degree or higher	8,7%
EDU 2	Non Formal Education	
	0-2 times	37,0%
	3-5 times	27,2%
	More than 5 times	35,9%
EXP	Investor's Experience	
	Less than 1 year	26,1%
	1-2 year	23,9%
	3-5 year	22,8%
	More than 5 years	27,2%
TIM	Investor's Time Horizon	
	Less than 1 year	60,9%
	1-2 year	16,3%
	3-5 year	13,0%
	More than 5 years	9,8%
FRQ	Investor's Trading Frequency	
	Less than 10 times per day	55,4%
	10-15 times per day	12,0%
	16-20 times per day	18,5%
	More than 20 times per day	14,1%

This research measure the choice of analysis method in investment decision using dummy variable. FUND would have value of 1 if the product of the factor analysis of using rate of fundamental analysis and the use of fundamental analysis frequency is bigger than the product of the factor analysis of using rate of technical analysis

and the use of technical analysis frequency, and 0 otherwise. In another word, value of 1 is given if investors give more weight on fundamental analysis, and value of 0 is given if investors give more weight on technical analysis. The result on the determinants of investors choice using logistic regression is presented in Table 5



**Table 5.**  
**Logistic Regression Result**

FUND = $\beta_0 + \beta_1$ EDU + $\beta_2$ EXP + $\beta_3$ ACS + $\beta_4$ TIM + $\beta_5$ FRQ + $\beta_6$ PCP			
Dependent Variable: FUND			
Variables Independent	Hypothesis	Exponential Coefficient	Significant
Constant		0.102	0.125
EDU	+	1.067	0.913
EXP	+	2.948**	0.022
ACS	+	0.407	0.130
TIM	+	3.658***	0.006
FRQ	-	0.187***	0.001
PCP	+	2.554	0.155
Chi Square	0.120		
Cox & Snell R Square	0.540		
Nagelkerke R Square	0.721		
***Significant at 1% level			
**Significant at 5% level			
*Significant at 10% level			

Before making analysis for each independent variable coefficient, the properness of formula should be tested. This is shown by Hosmer and Lemeshow test output. The significance is more than 0.05, which means that there is no significance difference between predicted FUND and observed FUND. This also means that binary regression model can be used in later analysis properly. There are two ways of determining R square in logistic regression, which are Cox & Snell and Nagelkerke R Square. These are shown in model summary. Using Cox & Snell, R square for this model is 0.540 or 54%. This means 54% variances of dependent variable, which is FUND, could be explained by six independent variables simultaneously. But, the number is higher using Nagelkerke R square. Using Nagelkerke R square, 0.721 or 72.1%

variances of dependent variables could be explained by six independent variables simultaneously. Only 27.9% could be explained by other independent variables excluded in this research. The difference between Cox & Snell and Nagelkerke R square may indicate that Nagelkerke R square has more sensitivity than Con & Snell R square.

By analyzing variables in equation table, concluded that among six independent variables used in this research, only three variables are significant in influencing the selection of investment analysis method. These three significant variables are experience, time, and frequency.

**Investor’s education**

The hypothesis used to test significance of investor’s education is:

H1: The higher education possessed by investor, the higher probability of using fundamental analysis

From the variables in equation table, it could be seen that significance of EDU is more than 0.05, which is significance level used in this research. This means that EDU variable has little or no influence on the selection of analysis investment method. First hypothesis in this research is refused. The insignificance of EDU could be caused by two things, which are EDU's components itself, namely formal education and non formal education of investor.

Formal education may cause EDU to be insignificant. Because, perhaps investor's formal education is not related with investment. So, in the investor's education background, he does not learn anything about investment analysis method. Therefore, even though investor's formal education is relatively high, but because this education is not related with finance or investment, this gives minimal influence on the selection of investment analysis method.

Non formal education also may cause EDU to be insignificant. Because, there is possibility that events participated by investor have investment theme, but not directly related with investment analysis method. So, there is no added value in fundamental and technical analysis knowledge for investor by participating in these kinds of events. Therefore, although investor's non formal education is relatively high, it has little or no influence on investment analysis method.

### **Investor's Experience**

The hypothesis used to test significance of investor's experience is:

H2: The higher experience possessed by investor, the higher probability of using fundamental analysis

From the variables in equation table, the regression coefficient of EXP is 1.081,

shows that every increase on EXP would cause FUND to increase also. And it could be seen that significance of EXP is 0.022 and this number is less than 0.05, which is significance level used in this research. This means that EXP variable has significant influence on the selection of analysis investment method. Second hypothesis in this research is accepted. The higher experience possessed by investor, the higher probability of using fundamental analysis. This fact agrees with theoretical framework and hypotheses developed before.

### **Investor's Accessibility of Information**

The hypothesis used to test significance of investor's accessibility of information is:

H3: The higher investors' accessibility of information, the higher probability of using fundamental analysis

From the variables in equation table, it could be seen that significance of ACS is more than 0.05, which is significance level used in this research. This means that ACS variable has little or no influence on the selection of analysis investment method. Third hypothesis in this research is refused. This may be caused by investor's normative approach in answering the questionnaires. Majority of investors say that listed companies information is accessible by advanced technology. Investors consider that any kind of information is always available. This investor's normative answer may lead to the insignificance influence of ACS to investment analysis method.

Other reason that is possible is ACS components in questionnaire only including general information and not detailed into specific kind of information. Therefore, investors tend to answer the question normatively.

### **Investor's Time Horizon**

The hypothesis used to test significance of investor's time horizon is:

H4: The longer investment time horizon, the higher probability of using fundamental analysis

From the variables in equation table, the regression coefficient of TIM is 1.297, shows that every increase on TIM would cause FUND to increase also. And it could be seen that significance of TIM is 0.006 and this number is less than 0.05, which is significance level used in this research. This means that TIM variable has significant influence on the selection of analysis investment method. Fourth hypothesis in this research is accepted. The longer investment time horizon, the higher probability of using fundamental analysis.

This fact agrees with previous theory by Jalan (2003). Jalan (2003) revealed that technical analysis user is investors with short time horizon. Besides, this also agrees with the benefit of technical analysis which is quick and appropriate for investors with short time horizon (Frensidy, 2007b).

### **Investor's Trading Frequency**

The hypothesis used to test significance of investor's time horizon is:

H5: The higher trading frequency, the lower probability of using fundamental analysis

From the variables in equation table, the regression coefficient of FRQ is -1.676, shows that every increase on FRQ would cause FUND to decrease. And it could be seen that significance of FRQ is 0.001 and this number is less than 0.05, which is significance level used in this research. This means that FRQ variable has significant influence on the selection of analysis investment method. Fifth hypothesis in this research is accepted. The higher trading frequency, the lower probability of using fundamental analysis.

This outcome agrees with previous theory by Jalan (2003). Jalan expressed that technical analysis is preferred by day traders, who are investors trade their stocks almost every day and in high frequency also. This fact also agrees with Frensidy (2007b) who revealed that fundamental analysis users are passive investors who are not too often trade their stocks. Meanwhile, technical analysis users are active investors who are often trade their stocks in the market.

### **Investor's Perception toward Disclosures By Company**

The hypothesis used to test significance of investor's perception is:

H6: The higher investors' perception toward disclosure on financial reports, the higher probability of using fundamental analysis

From the variables in equation table, it could be seen that significance of PCP is more than 0.05, which is significance level used in this research. This means that PCP variable has little or no influence on the selection of analysis investment method. Sixth hypothesis in this research is refused. This may be caused by investor's normative approach in answering the questionnaires. Majority of investors say that listed companies disclosures are good enough because they believe in corporate governance mechanism in each company.

Other reason, perhaps investors rely on Indonesian Financial Accounting Standards (PSAK) which gives guidelines for companies to disclose every item in financial statements properly. Investors believe that each listed companies has fulfill its obligation in disclosing items, according to PSAK.

There is also possibility that investors believe in auditor profession who express opinion to company's financial statements. Investors believe that auditor has given adequate evaluation in financial statement's

disclosures. Therefore, investors assess that financial statements disclosures are relevant and reliable in making investment decision. These three reasons may cause insignificant influence of investor's perception toward disclosure by company to investment analysis method.

## CONCLUSIONS

Investment analysis method preferred by Indonesian investors is technical analysis. Factors influencing the selection of investment analysis method significantly are investor's experience, investor's time horizon, and investor's trading frequency. Three other factors tested in this research are proven insignificant. Investor's experience and investor's time horizon are positively related to the use of fundamental analysis. While, investor's trading frequency is negatively related to the use of fundamental analysis. The proportion of sample used in this research was not balanced. The number of individual investors as samples (89%) is more than investment manager. It is caused by the difficulty to get investment manager as sample. It is possible for getting the better and more accurate results using more balanced samples proportion between individual investors and investment managers. Components' question for FUND and TECH could be added by asking about qualitative approach in analyzing industry (e.g. using Porter's Five Competitive Forces) for FUND and the using of advance-decline line, new high and lows, and short interest ratio for TECH. By adding these components, hopefully these variables could be measured more reliably. The investors' normative answer for variable ACS and PCP could be fixed by detailing the components' questions. By adding questions which are more fully detailed, it is possible that these variables could be measured more reliable. In the future, there is possibility for doing the same research

by adding more variables. Since in this research, only 72.1% variances in dependent variable could be explained by six independent variables. There are still 27.9% more variances that could be explained by adding the independent variables. Therefore, adding the independent variables would expand the knowledge about factors influencing the selection of investment analysis method. Other variable that could be added for example transaction volume or nominal amount per transaction. Because, according to Jalan (2003), investors using technical analysis give more attention to their stocks turnover. Therefore, there is possibility that their nominal amount of transaction is lower than investors using fundamental analysis.

## REFERENCES

- Fernández-Rodríguez, Fernando, Simón Sosvilla-Rivero, dan Julian Andrada-Felix. (1999). *Technical Analysis in the Madrid Stock Exchange*. FEDEA Working Paper No. 99-05.
- Frensidy, Budi. (2007a). *Investasi Berbekal Analisis Fundamental*. <http://web.bisnis.com/artikel/2id613.html> berbekalfundamental (12 Juni 2009).
- \_\_\_\_\_. (2007b). *Berbekal Analisis Teknikal*. <http://web.bisnis.com/kolom/2id634.html> berbekal teknikal (12 Juni 2009).
- Jalan, Mridul. (2003). *Role of Technical Analysis: As A Tool for Trading Decisions*. [http://www.africansea.org/ASEA/\(S\(0kdmazi5b5hf3t55hr5byqi0\)\)/Library/Explaining%20Fundamental%20Analysis.pdf](http://www.africansea.org/ASEA/(S(0kdmazi5b5hf3t55hr5byqi0))/Library/Explaining%20Fundamental%20Analysis.pdf) (12 Juni 2009).
- Jones, Charles P. (2007). *Investments* (10<sup>th</sup> ed.). New Jersey: John Wiley & Sons.
- Lo, Andrew W., Harry Mamayski, dan Jiang Wang. (2000). *Foundations of Technical Analysis: Computational Algorithms, Statistical Inference, and Empirical Implementation*. *The Journal of Finance* 55 (4), 1705-1765.

- Lui, Yu-Hon dan David Mole. (1998). *The Use of Fundamental and Technical Analyses by Foreign Exchange Market Dealers: Hong Kong Evidence*. Journal of International Money and Finance, 17 (3), 535-545.
- Lynch, Peter dan John Rothchild. (1990). *One up on Wall Street: How to Use What You Already Know to Make Money in the Market*. New York: Penguin Group.
- Pontoh, Jones. (2007). Uji Efisiensi Pasar Bentuk Lemah Pasar Modal Asia Tenggara (Indonesia, Malaysia, Singapura, Philipina, dan Thailand) 1998 – 2005. *Tesis Program Studi Ilmu Manajemen Pascasarjana Fakultas Ekonomi Universitas Indonesia*.
- Sharpe, William F., Gordon J. Alexander, dan Jeffrey W. Bailey. (1995). *Investments* (6<sup>th</sup> ed.). New Jersey: Prentice Hall.
- Sirait, Lindung Saut Maruli. (2005). Perkembangan Efisiensi Pasar Modal Indonesia pada Bursa Efek Yakarta (BEJ): Analisis Reaksi Pasar Terhadap Publikasi Laboran Keuangan Tahunan. *Tesis Program Studi Ilmu Akuntansi Pascasarjana Fakultas Ekonomi Universitas Sumatera Utara*.
- Suryadimaja, Asep Sobirin. (2004). Perilaku dan Reaksi Harga Saham Saat Pengumuman Pendaftaran Saham di Pasar Modal Tes Efisiensi Pasar Modal Studi Empiris di Bursa Efek Jakarta Periode Januari 2001 – Februari 2004. *Tesis Program Studi Ilmu Manajemen Pascasarjana Fakultas Ekonomi Universitas Indonesia*.
- Taylor, Mark P. dan Helen Allen. (1992). *The Use of Technical Analysis in The Foreign Exchange Market*. Journal of International Money and Finance, 11 (3), 304-314.
- <http://www.idx.co.id/MainMenu/TentangBEI/AnnualReport/tabid/64/lang/en-US/language/en-US/Default.aspx> (12 September 2009)
- <http://www.idx.co.id/NewsAnnouncements/EventsPressRelease/tabid/124/articleType/ArticleView/articleId/529/Default.aspx> (12 September 2009).

\*\*\*