

Effect of Experts' Opinions on Investment Behaviors

— Comparative Research into Commodities and Stocks —

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1. Introduction

The Japanese Accounting Standards have largely changed since the beginning of the 21st century. The Financial Big Bang which started in 1996 for the purpose of making the Tokyo Stock Market an international market such as those in London and New York has led to deregulation, which has also affected accounting. The result is called the Accounting Big Bang. Many accounting standards were altered and added for the year ending March 2000. The reason is that it was necessary to sort out information circulated in the stock market in order to internationalize the stock market.

The Financial Accounting Standards Board (FASB) of the USA agreed to convergence with the International Accounting Standards (IAS) in 2002. As a result, the Accounting Standards in Japan, so to speak, became isolated from the Global Accounting Standards. To avoid such a situation, Japan agreed that the Accounting Standards Board Japan (ASBJ) would accelerate convergence between the Japanese Standards, which started in March, 2005, and the International Financial Reporting Standards (IFRS) in 2007. This agreement is the so-called Tokyo Agreement. The Tokyo Agreement is an agreement to dissolve the important differences between the Japanese Standards and IFRS in 2008, and the remaining differences by 2011.

Furthermore, it appears that the USA adopted the adoption method in 2008. Because of this, only Japan asserted the convergence method only to eliminate the differences between the domestic accounting standards and IFRS. This US change had an effect on Japan. Then, Japan started to examine adoption. The Japanese Accounting Standards are expected to show a major change again after the Accounting Big Bang.

Such change in the Japanese Accounting Standards will accelerate globalization and global commonality of accounting information. Probably, this will be called “Greater precision of the accounting standards” and “Enhancement of accounting information”. However, in the short run, this change will bring about confusion to the Japanese stock market. People who need to prepare accounting information will need to pay a lot more in costs, and users of accounting information will have greater misunderstandings. The reason

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is that the same accounting terms will have different meanings.

Accounting information is information equally obtained by market participants. Because of this, confusion caused by the adoption of IFRS is estimated to continue at least until IFRS itself and the basic concept of IFRS have penetrated into participants in the stock market. However, there is a possibility that this confusion will last for a short period as a comparatively light matter. One of the possibilities is a case where that part of the market participants called experts will use accounting information as the primary information and other people will use it as secondary information. In other words, if experts cope with the change in the accounting standards quickly, and interpret accounting information prepared on the basis of the new accounting standards, and are able to convey them as interpreted information to other investors, confusion from the adoption of IFRS may not have a major effect on the market. The ASBJ which has prepared the Conceptual Framework of Japan appears to have taken this stance. The ground is that the “background explanation” of the Conceptual Framework says, “There are a lot of different types of information mediators in the today’s stock market, and they carry out analysis of information required for securities investment on behalf of investors who do not have sufficient analytical ability. Investors who do not have sufficient analytical ability are therefore able to carry out securities investment, using these mediators, while saving the necessary costs required to increase their analytical ability. If there is market competition between information mediators, accounting information will efficiently spread to investors who do not have sufficient analytical ability.”

However, here I am unable to overlook an important assumption. It is whether or not the assumption that information interpreted by “information mediators” so-called by ASBJ, that is to say, experts who understand accounting standards that can understand accounting information, can convey such information to “people who do not have a certain analytical ability”, that is to say, other general investors. In other words, will information interpreted by experts (opinions) be conveyed to general investors? Will general investors use information interpreted (opinions) by experts? Unless this question is resolved, the concept of ASBJ will be far from the reality, and the result will be either that the confusion caused by the adoption of IFRS will last a long time or that general investors will not use accounting information.

Accordingly, in this paper, I would like to analyze and introduce the results of a survey that I carried out into the point of to what extent general investors consider the opinions of experts important in equity investment, through the comparison with the time at which commodities are purchased.

2. Information for Equity Investment

The sender of information to be used by investors in the stock market is the enterprise, in principle. Of course, investors will refer to economic conditions both in and outside their

own country. However, it is necessary for investors to decide individual issue names in actual investment, and information concerning such enterprise is the main information that they will use. The sender of information concerning an enterprise is such enterprise itself. There are cases where an enterprise sends information as its own information, while at other time information of acts carried out by an enterprise is sent in the form of information. Investors obtain such information and will use it as materials for investment decisions.

In investment decision processes, investors make decisions on the basis of whether or not they will be able to obtain a return in excess of an amount invested in terms of income gains and capital gains. For income gains, the amount of dividends will be the basis of such decision making. For capital gains, investors will purchase equity shares of such enterprise, considering that the share price of such enterprise will rise, if the actual share price is low compared to the levels of the corporate value or the share price that they consider they should be. If in reverse, investors will sell. There are two points in this behavioral pattern of investors. The first point is what sort of computation is made to measure the corporate value, or the share price that investors consider they should be, are based on in general. The second point is how they consider a share price will rise on the basis of what sort of information, even where investors have not computed the corporate value or the share price.

The corporate value or the share price, which is the first point, is called corporate value evaluation or theoretical share price, and a number of different computation methods are introduced. They are divided into the Cash Flow Model and the Residual Income Model. In the Cash Flow Model, accounting information, and especially profit information, is located as the most relevant information to estimate future cash flow. On the other hand, in the Residual Income Model, accounting information is located as the most important information, as it uses accounting information. Investors need "a certain analytical ability", as corporate value evaluation or estimation of a theoretical value is made, when using such a Model. However, not a few investors have a certain analytical ability, and the possibility that such investors will disappear from the stock market is extremely slim. I consider that investors without a certain analytical ability will use other information to gain investment returns. This is the second point. Their behavior will always have an effect on price formation and price fluctuations of the stock market.

I will therefore summarize circulation of various kinds of information in the stock market. Enterprises publicize not only accounting information but also other information. Other information includes financial information, product information to be circulated in the financial market, and information obtained by special interviews, etc. Information publicized by enterprises shall all be available to participants in the stock market. Sell-side analysts and mass communications (press and magazines) will add their own research to this information, and sell-side analysts provide information to buy-side analysts, and the press and magazines provide their interpreted information to their users. Further, buy-side analysts provide their interpreted information to investors for a consideration, who are their

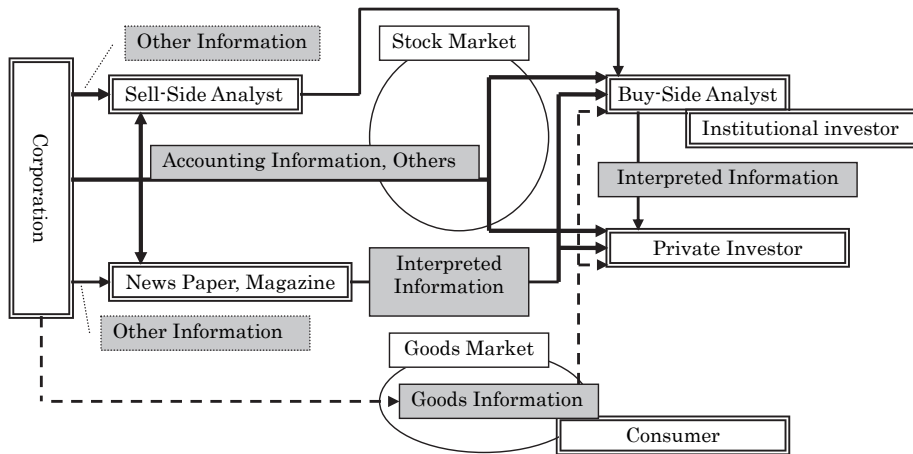


Figure 1 Flow of Information in Stock market

clients. Besides, investors consider that they obtain and use information of the financial market as well. Figure 1 shows flow of information to investors, although part of information is omitted for simplification purposes.

Many general investors may not have a certain analytical ability concerning accounting information. If so, this means that they obtain information which they are unable to understand. I would like to draw attention to accounting information here. I consider that accounting information has the following characteristics. 1) Accounting information is available to all investors. 2) Accounting information represents the fundamental condition of a certain enterprise which is the subject of investment in an objective monetary quantity. 3) The trustworthiness of accounting information is secured by an audit system. 4) Because of recent changes in accounting system, accounting knowledge is required to a considerable degree in order to understand the information more precisely and accurately. In other words, it is considered that accounting information is highly reliable and inexpensive information for general investors. Although accounting knowledge is essentially required to a considerable degree to understand the information accurately, it can be considered that apparently people tend to wrongly assume that they have understood it. Accordingly, I consider that it is impossible that general investors ignore accounting information as information impossible to understand.

From these points, it can be considered that there are two types of handling of accounting information by general investors. One of them is that they use accounting information, while wrongly assuming that they have understood the accounting information. The other is that they obtain interpreted information by paying a certain cost and attempt to understand accounting information correctly. The question is how important they will consider experts' opinions to be, when they use them, if an amount corresponding to only costs to obtain

publicized information is required to obtain interpreted information. If the level of importance of experts' opinions is low for them, investors will continue to use accounting information, avoiding an additional cost and wrongly assuming that they have understood the accounting information.

3. Behavior at Time of Commodity Purchase

I consider that individual investors do not have a certain analytical ability for equity investment. However, they expend money to acquire equities. There are opportunities to spend money other than for equity investment. Rather, many of such opportunities are those other than for equity investment. Concretely, they are for purchasing general goods (commodities). I do not consider that they have sufficient knowledge of the subject commodity, when they purchase commodities. Certainly, they have sufficient knowledge. However, if their ability is measured by a level of knowledge required to evaluate a corporate value when they acquire equity shares, I do not consider that they have knowledge of commodities to an equivalent level. In essence, they accurately understand neither information relating to equities nor that of commodities. However, they behave themselves as if they knew the subject well at least as far as commodities are concerned.

This difference does not originate from the fact that expenditure of money on equities is more familiar to individual investors than expenditure of money on commodities. Whether or not the subject is familiar to them is an important point. However, this difference cannot be explained by the point that equities are familiar to them if expenditure of money on equities is as frequent as that on commodities. Rather, this difference may depend on the difference of the results after such expenditure. The effect of equity investment for individual investors depends on the amount of money remaining in their hand when they sell the equities. In other words, in cases of equity investment, it will be a positive effect if the amount of money remaining in their hand when they sell equities is greater than the amount of money required when they purchased the equities. Equity investment always brings about a direct increase or decrease in one's own assets. On the other hand, the effect of commodities depends on their own satisfaction level or utility for consumers in general (individual investors).

In cases of equity investment, the result of equity investment is cash inflow and is measurable. Accordingly, the effect of equity investment is clear. If they misunderstand information, and made a wrong decision, their assets will fall and the fact that its decision was wrong will be clarified. On the other hand, in cases of commodity purchase, the result is utility and unmeasurable. The size of utility is decided by the subjective view of a consumer. Because of this, if they misunderstood information and made a wrong purchase, their utility will not necessarily fall.

My question is that whether or not the difference between the result of equity investment and that of commodity purchase also originates from the difference at the time of acquisition.

Next, I will analyze the behaviors of consumers at the time of commodity purchase.

The final objective of this survey is to clarify the effect of others' opinions on investors & consumers. This survey is to analyze subjective decisions of investors & consumers by a questionnaire survey. The questionnaire survey was carried out mainly on Kansai University students in July, 2008. The number of samples was 375, the breakdown of which is shown in Table 1 below. The questions were concerning information at commodity purchase (information source, selection criteria and the level of importance of others' and experts' opinions), and the substance concerning the level of importance of experts' opinions at equity acquisition.

Table 1 Breakdown of Samples

	Males	Females	Total
Students	160	111	271
Full-fledged members of society	44	60	104
Total	204	171	375

1) Information Source and Selection Criteria

I carried out a survey concerning the information source and selection criteria at the time of consumers purchasing commodities. The questions that I made were as follows. "When you purchase a commodity, mainly from where do you obtain information?" "Please state three of your selection criteria when you purchase commodities in the order of their importance." "Please state three of your selection criteria of the commodity that you want most at the present moment." The second question and the third question look the same at first glance. Because selection criteria at the time of general purchases cannot be said to be the same as those for the results where the subject of purchases has been decided, I prepared two kinds of questions. Two kinds of totalization method have been adopted for each question. One of them is core method (totalization is made, giving 3 points to the first, 2 points to the second and 1 point to the third), and the other is to give a score which is each order number.

Table 2 Information Source

Top items in each order rank				
	Point order rank	Top	Second	Third
First	Shop front	Shop front	Magazine	Magazine
Second	Magazine	Maker site	Friend/acquaintance	Shop front
Third	Maker site	Magazine	Maker site	Friend/acquaintance
Fourth	Friend/acquaintance	Friend/acquaintance Word of mouth	Shop front	Maker site
Fifth	Catalogue	communication site	Catalogue	Catalogue

Note: "Site" means such site on the Web-site

Table 2 shows main information sources at the time of consumers purchasing commodities. It is not clear from the point order results. However, if you look at top items under each order rank, it is possible to guess their ranking of information sources. The first sources are “Shop front” and “Maker Site”, and the second sources are “Magazine” and “Friend/acquaintance”. In other words, they directly confirm the commodities which are the subject of their purchase at Shop front or Maker site, and obtain reputation information on them from Magazine and Friend/acquaintance afterwards. It is possible to interpret that they carry out an act to evaluate the subject by themselves before obtaining others' opinions.

Table 3 Selection Criteria

General commodities		Top items in each order rank		
	Point order rank	Top	Second	Third
First	Price	Price	Price	Price
Second	Function	Function	Function	Product design
Third	Quality	Quality	Easy to use	Easy to use
Fourth	Product design	Product design	Quality	Quality
Fifth	Easy to use	Easy to use	Product design	Function

Commodities wanted		Top items in each order rank		
	Point Order Rank	Top	Second	Third
First	Price	Price	Price	Price
Second	Function	Produce design	Function	Quality
Third	Product design	Function	Quality	Easy to use
Fourth	Quality	Quality	Easy to use	Product design
Fifth	Easy to use	Brand name	Product design	Function

Table 3 shows selection criteria for purchasing commodities. High ranking items are “Price”, “Function”, “Quality”, “Product design” and “Easy to use”, etc. Because they are selection criteria, top priority is given to “Price”. Important items are “Product design” which is the efficiency pertaining to sensibility as well as physical efficiency such as “Function” and “Quality”. The items of the selection criteria under General commodities are mostly the same as those of the selection criteria under Commodities wanted. However, the importance of Product design is higher in the selection criteria under Commodities wanted. Additionally, in Top items in each order rank, “Brand name” is included in important items only in the case of Commodities wanted.

2) Reflection of Others' Opinions

I carried out a survey on to what extent consumers accept others' or expert' opinions,

when they purchase commodities. The question is concerning the effect of experts' opinions at the time of selecting commodities to be purchased. The substance is "When you select a commodity to purchase, you hear an opinion or recommendation of a person who knows very well about that commodity. To what extent do you accept such opinion or recommendation?" The choice of answers comprises 5 points, i.e., "1) I absolutely accept it, 2) I accept it as important information, 3) I accept it as reference information, 4) I will consider it later after ignoring it once, and 5) I will ignore it completely". The greater the number of the points, the less experts' opinions will be reflected.

Table 4 Extent of Reflection of Experts' Opinions at Commodity Selection

Extent of reflection	High				Low		Average
	1	2	3	4	5	NA	
Answer	1	2	3	4	5	NA	
Total	13	147	197	14	2	2	2.58
Males	9	81	105	9	0	0	2.56
Females	4	66	92	5	2	2	2.62
10s in age	4	47	50	2	0	1	2.49
20s	9	81	120	10	0	1	2.60
over 30	0	17	26	2	2	3	2.78
Students	12	107	136	12	0	1	2.56
Full-fledged members of society	0	37	55	2	2	1	2.68

Table 4 shows the results of the totalization. Answer 3 (I accept it as reference information) and Answer 2 (I accept it as important information) are the most frequently picked up items in the total samples. The highest frequency is Answer 3, and the average was 2.58. Firstly, men tend to reflect others' (experts') opinions more than women, in the comparison of men with women. Secondly, regarding the results by age, the higher the age, the less reflecting the respondents are. Lastly, in comparison of students with full-fledged members of society, students tend to reflect others' opinions more than full-fledged members of society.

In the questionnaire, others who provide opinions or recommendations are defined to be persons who know such products very well. Experts' opinions were roughly "a little important reference information" in total¹⁾.

1) A similar survey at the time of commodity purchase was carried out. The results showed the same tendency as that at the selection of a commodity purchased.

4. Level of Importance of Experts' Opinions in Equity Investment

Equity investment and commodity purchase are the same in that money is expended. However, as mentioned above, the results and the effects are both different. Because of that, the importance of experts' opinions may be different, in cases of commodity purchase. I therefore carried out a survey on to what extent respondents accept others' or experts' opinions as in the case of commodities. The question was concerning the effect of experts' opinions at the time of selecting issue names in investment. The substance is "When you select a stock to invest in, you hear an opinion or a recommendation of a securities analyst (a person who knows very well about equity investment), to what extent do you accept his or her opinion or recommendation?" The choice of answers comprises 5 answers, like that for the question concerning commodities, "1) I absolutely accept it, 2) I accept it as important information, 3) I accept it as reference information, 4) I will consider it later after ignoring it once, and 5) I will ignore it completely." The greater the number of the points, the less experts' opinions will be reflected.

Table 5 Extent of Reflection of Experts' Opinions at Issue Name Selection in Investment

Extent of reflection	High				Low		Commodity	
	1	2	3	4	5	NA	Avg.	Avg.
Total	18	197	118	10	5	27	2.39	(2.58)
Males	7	113	58	7	3	16	2.39	(2.56)
Females	11	84	60	3	2	11	2.38	(2.62)
10s in age	9	54	35	0	0	6	2.27	(2.49)
20s	8	121	62	8	4	18	2.40	(2.60)
Over 30	1	19	21	2	1	3	2.61	(2.78)
Students Full-fledged	13	148	82	5	3	20	2.35	(2.56)
members of society	5	46	34	3	2	7	2.46	(2.68)

Table 5 shows the results of the totalization. Answer 2 (I accept it as important information) and Answer 3 (I accept it as reference information) are the most frequently picked up items in the total samples. The highest frequency is Answer 2, and the average was 2.39²⁾. Firstly, there was no difference in others' (experts') opinions between men and women, such as in the case of a commodity. Next, by age, the point is lower than the case

2) The same kind of report is available in the Web site of 'Nikkei Veritas & "Everybody's Equity Shares" questionnaires for 2008.9.14-9.24'. The results on the Web site concerning analysts' opinions comprised "I completely rely on them: 4.8%, I look at them as reference information: 48.5%, I partly rely on them: 28.2%, I don't look at them at all as they are useless: 11.0%, I just look at them, but do not use it as reference information: 7.6%".

of a commodity, but the higher the age, the less reflecting the respondents are. Lastly, regarding the difference between students and full-fledged members of society, the point is low as in the case of a commodity, but there is a tendency that students reflect others' opinions more than full-fledged members of society.

Experts' opinions are treated more important information at the time of equity investment than at the time of commodity purchase, provided, however, that these questions are questions where experts' opinions are confirmed to be important as individual information. However, people collect various kinds of information other than experts' opinions to make decisions both in the actual equity investment and commodity purchase. In other words, the results of these questions cannot tell the extent of priority that people give to experts' opinions when experts' opinions are obtained together with other information. I therefore carried out a survey on the relative importance of experts' opinions. I used AHP in this paper to estimate the relative importance.

1) AHP

Analytic Hierarchy Process (AHP) is a technique proposed by Professor T.L. Saaty, in which subjective decision making and system approach were mixed in problem analysis. It is one of the problem solution type decision making techniques³⁾.

Decision making by AHP is made using the following procedures. Firstly, the structure of the problems to be resolved will be tiered with the three of the "final target", "evaluation criteria" and "replacement ideas" as the basic strata. Next, the importance of each evaluation criterion from the final target, the superiority or inferiority, etc. of a replacement idea for each evaluation criterion will be evaluated in the order of the stratum. Evaluation at this time shall be carried out on the basis of a pair of evaluation criteria, a pair of replacement ideas, etc. Lastly, evaluation of replacement ideas seen from the final target on the basis of these evaluations will be carried out. In this paper, estimation of evaluation functions and evaluation of consistency (coherence) that will be carried out in the above second step will become important. I will therefore further explain these two points.

In estimation of evaluation functions by AHP, the weight of evaluation criteria will be sought by the Eigenvalue Method, Geometric Method, Error Margin Method, etc. on the basis of the Paired Comparison Method. Firstly, the weight will be measured between evaluation criteria by paired comparison. In this measurement, scales such as "Important", "A little important", etc. will be taken, and subjective decisions will be absorbed there. A matrix will be formed by a comparative matrix by making such paired comparison $n(n-1)/2$ times. This matrix (A) is inscribed as $a_{ij} = W_i/W_j$, $a_{ji} = 1/a_{ij}$, $a_{ij} = 1$ by the n number of weights, W (W_1, W_2, \dots, W_n), of evaluation criteria. The measured value by the paired comparison is inscribed as W_i/W_j . Next, the weight of each evaluation criterion is estimated by seeking Eigen Vector of this matrix (A). In other words, if you multiply the matrix (A)

3) Kinoshita [1998], p.74.

by the line W , which is the weight, the product is nW , and $AW = nW$. Eigen Vector of Matrix (A) available by comparison will show the weight of each evaluation criterion. There are Eigenvalue Method, Geometric Method, Error Margin Method, etc. to compute this⁴⁾.

The consistency of a paired comparison will be evaluated by processing the maximum Eigenvalue of the matrix obtained by the paired comparison mentioned above. A transition ratio will be available in all comparisons in the weight comparison of evaluation criteria carried out by a paired comparison, if there is no inconsistency at all in its comparison. The equation of $a_{ij} \times a_{jk} = a_{ik}$ is satisfied with an arbitrary i, j, k . λ_{\max} (the maximum Eigenvalue) $= n$ will be satisfied. However, because the comparison is made by an evaluator (a human being), it cannot be said that lack of consistency is always evaluated as importance. In addition, if comparison becomes complicated because of an increase in the number of paired comparisons, coherence will not be maintained in answers, and the probability of occurrence of inconsistency increases. Because of this, matrix obtained by a paired comparison will be $\lambda_{\max} > n$. Concretely, the expression is $C.I. = (\lambda_{\max} - n) / (n - 1)$. If the comparison is perfect, C.I. will be 0. The greater the inconsistency, the greater the C.I. will be. Where comparison is considered to be consistent to some extent, C.I. is 0.1 (or 0.15) according to Saaty's experience rule.

AHP, a decision making techniques having such process, has the following characteristics. Firstly, it is possible to analyze by breaking up the decision making process into "problem confirmation", "evaluation criteria", "replacement ideas", etc. Secondly, it is possible to deal with it, even where a number of evaluation criteria which do not have common yardsticks exist, quantitative information and qualitative information simultaneously exist, or expression and evaluation are ambiguous. Thirdly, evaluation contents by evaluators do not necessarily need to be consistent. Lastly, it is possible to express in a numerical value as to the consistency of comparison, and it is therefore possible to know to what extent a comparison has consistency by measuring it. It is therefore considered that AHP is an effective method to integrate various kinds of information subjectively and carry out systematic decision making.

On the other hand, regarding decision making in equity investment and commodity purchase, people appear to make decisions of their own accord in their general view, collecting various kinds of information such as quantitative information and qualitative information. In extreme cases, it can be considered that there is even a possibility that people do not make any reasonable forecast of the results, and that quantitative information is evaluated by their image obtained from a numerical value not as a numerical value comparison, and that their evaluation method and decision making method are not necessarily consistent. If such supposition has a realistic reasonability, it can be said that the supposition of a decision making process like that of AHP is more desirable than the decision making process of the DCF Method or Residual Income Model.

4) Calculation in this pager is made by the geometric average method whereby calculation is easily made.

2) Level of Importance of Experts' Opinions at Time of Commodity Purchase

In the above results, the level of the importance of experts' opinions at the time of equity investment was lower than that at the time of commodity purchase. In cases of commodities, the results of their expenditure do not bring about a direct increase or decrease in assets, but depend on the utility that can be obtained from the commodity purchased. Because of that, the trustworthiness of close people may be considered more important than the expertise of the opinions, even in cases of others' opinions. I therefore carried out a comparison with the opinions of non-experts (here friends and acquaintances), which are also others' opinions.

The question is "when you select a commodity to purchase, please compare the importance of three items, which are your own instinct, the reputation of your friends and acquaintances and the reputation of experts.". The comparison comprises Comparison 1: "My own instinct is xxx than the reputation of my friends and acquaintances", Comparison 2: "My own sensitivity is xxx than the reputation of experts", and Comparison 3: "The reputation of my friends and acquaintances is xxx than the reputation of experts", and the choice of answers which come to xxx are seven points, which are "1) pretty important, 2) important, 3) a little important, 4) the same, 5) little important, 6) unimportant, and 7) pretty unimportant". The results of comparison of the respondents will be represented by the importance (weight) calculated by AHP. Table 6 shows the results of the totalization.

Table 6 Importance of Others' Opinions

Opinion	Oneself	Friend&Acquaintance	Expert	C.I.
Total	0.572	0.218	0.210	0.132
Males	0.586	0.206	0.208	0.111
Females	0.555	0.233	0.212	0.158
10s in age	0.560	0.231	0.209	0.140
20s	0.572	0.217	0.211	0.135
Over 30	0.600	0.198	0.202	0.089
Students Full-fledged	0.573	0.219	0.208	0.132
member of society	0.574	0.217	0.208	0.126

The results of the level of importance are one's own opinion at 57%, opinions of one's friend & acquaintance at 22%, and experts' opinions at 21%, the total of others' opinions being at 43%. One's own opinion was therefore more important than others' opinions. In the comparison between males and females, men consider their own opinions important, while women consider the opinions of their friends and acquaintances important. The level of importance of experts' opinions is about the same between men and women. In addition, the level of consistency in the comparison of the importance is lower in women than men.

By generation, there was a tendency that the more elderly, the more important their own opinions, and the lower the importance of the opinions of their friends and acquaintances. There was no major difference in the level of importance of experts' opinions. In addition, the more elderly, the more consistent the answers in the comparison of importance were. There was no major difference in the results of the comparison between students and full-fledged members of society.

When people construct their own opinions, they collect information concerning the commodity. As Table 3 shows, among the selection criteria at the time of commodity purchase, there are more items directly relating to the commodity than experts' opinions. I therefore carried out a survey on the point of to what extent experts' opinions have weight in the comparison with the items which directly relate to these commodities.

The question is "when you select a commodity, please compare the five items, i.e., the price, function & quality, design, brand and experts' opinions. The comparison was concerning items such as "the price is xxx than function & quality". The choice of answers comprised seven items, i.e., "1) pretty important, 2) important, 3) a little important, 4) the same, 5) little important, 6) unimportant, and 7) pretty unimportant, with respect to all five items. Table 7 shows the results of the totalization of the importance (weight) obtained by calculating the answers by AHP.

Table 7 Importance of Information at Time of Commodity Purchase

Opinions	Price	Function&Quality	Design	Brand	Experts	C.I
Total	0.233	0.304	0.232	0.118	0.114	0.233
Males	0.235	0.314	0.221	0.123	0.107	0.232
Females	0.229	0.292	0.244	0.111	0.123	0.233
10s in age	0.252	0.270	0.247	0.116	0.115	0.225
20s	0.228	0.313	0.233	0.118	0.108	0.250
Over 30	0.209	0.340	0.194	0.120	0.137	0.176
Students	0.235	0.298	0.238	0.121	0.108	0.238
Full-fledged member of society	0.223	0.322	0.215	0.109	0.131	0.212

Regarding the results of the importance, function & quality was the highest, followed by price and design. Brand and experts' opinions were the lowest. In addition, C.I. was high. The reason for C.I. being high appears to have been ascribed to a number of times of comparison. In the comparison of men with women, men considered price, function & quality and brand more important than women, while women considered design and experts' opinions more important than men. By generation, there was a tendency that the more elderly, the more important were function & quality and brand, and the lower the importance of price and design. People over 30 tended to consider experts' opinions more important

than people in their 10s and 20s. In the comparison between students and full-fledged members of society, Students considered price, design and brand more important than full-fledged members of society, while full-fledged members of society considered function & quality and experts' opinions more important than students.

These results agree with the results of Table 6. In other words, direct selection criteria are considered more important to construct one's own opinion. The importance of brands which are considered to be accumulation of evaluation by others' and experts' opinions is low.

3) Level of Importance of Experts' Opinions at Time of Equity Investment

In this survey, I carried out similar questions at the time of equity investment as those in Table 7 for comparison. The question was "when you make an equity investment (or if you make an equity investment), please compare five items, i.e., business contents, accounting information, equity price trend, renown & company name, and experts' opinions." The method of comparison and the choice of questions are the same as in the questions concerning Table 7. Table 8 shows the results of the totalization of the importance (weight) obtained by calculating answers by AHP.

Table 8 Importance of Information at Time of Equity Investment

Opinions	Share price trend	Accounting information	Business contents	Renown	Experts	C.I
Total	0.228	0.216	0.240	0.134	0.182	0.221
Males	0.227	0.215	0.255	0.127	0.175	0.241
Females	0.228	0.217	0.222	0.142	0.191	0.198
10s in age	0.251	0.214	0.216	0.153	0.166	0.235
20s	0.221	0.222	0.239	0.125	0.193	0.237
Over 30	0.211	0.196	0.289	0.137	0.168	0.126
Students	0.233	0.221	0.221	0.135	0.189	0.235
Full-fledged member of society	0.217	0.201	0.284	0.132	0.165	0.173

Regarding the results of the importance, equity share trend was 23%, accounting information was 22%, business contents was 24%, renown was 13% and experts' opinions was 18%⁵⁾. In the comparison of men and women, men considered business contents more important than women, while women considered renown and experts' opinions more important than men. By generation, there was a tendency that the more elderly, the more

5) In the survey carried out in January, 2006, I carried out a survey on the importance of information excluding experts' opinions. The weights of information obtained in the results were 27.9% for share price trend, 30.9% for accounting information, 23.3% for business contents, and 18.0% for renown, respectively. Please refer to Tomita [2008]. I plan to carry out a survey in the future as to the causes of the difference from the results of the survey this time.

important business contents. People in their 20s tended to consider experts' opinions more important than the other generations. In the comparison between students and full-fledged members of society, Students considered experts' opinions more important than full-fledged members of society, while full-fledged members of society considered business contents more important than students. Regarding C.I., C.I.s of women were lower than those of men, and C.I.s of elderly people were lower than those of young people. C.I.s of full-fledged members of society were lower than those of students.

4) Level of Importance of Experts' Opinions

An amount of expenditure to obtain information (share price trend and price) in order to evaluate it by themselves, contents (accounting information, business contents, function & quality and design), and others' evaluations (the level of renown, brand names and experts' opinions) will be required for general investors and general consumers to evaluate the object before acquiring it. In addition, general investors have an overwhelmingly smaller amount of professional knowledge and skill than experts in company evaluation, who are typified by securities analysts. Furthermore, general investors have an overwhelmingly smaller amount of information required to carry out company evaluation than experts. Accordingly, it is reasonable to consider that experts' opinions are important and absolutely necessary information for general investors to carry out equity investment. The same thing can be said about commodities, although there is a difference in the extent.

In this survey (See Tables 7 and 8), in cases of commodity acquisition, the average weights (importance) given by the respondents were 23% for the amount of expenditure, 54% for the contents, and 23% for others' evaluation. On the other hand, in cases of equity investment, the average weights given by the respondents were 23% for the amount of expenditure, 46% for the contents, and 31% for others' evaluation. The weights of the information concerning the amount of expenditure and price fluctuations were approximately the same as those of commodities. In other words, whatever the object is, the importance of price information of an act accompanying expenditure may be the same. It appears that the balance of one's own evaluation based on information collected by oneself and others' (especially experts') opinions or evaluation has an important meaning in investment behavior. In addition, the weight of others' evaluation at the time of equity investment is higher than at the time of purchasing commodities. In particular, the weight of experts' opinions is higher at 18% compared to 11% (in cases of commodity acquisition). The extent where experts' opinions as information may be considered is 2.39 (See Table 5) compared to 2.58 (in cases of commodity acquisition), meaning an increase in the level of importance. It can be said from these results that experts' opinions are considered more important in equity investment than in commodity purchase.

The samples of this survey show that experts' opinions in equity investment are as important as accounting information. However, all investors do not apparently have such a tendency in accordance with the results of the sub-samples. By gender, in cases of men, the

weight of business contents was 25.5%, and men considered business contents the most important information and did not consider renown, the weight of which was 12.7%, the most important information. On the other hand, women did not consider renown the most important information, either, but its weight was a little higher at 14.2%. The weight of experts' opinions by men was 17.5%, while that of women was 19.1%. Women considered experts' opinions more important than men did. Nevertheless, the proportion of men and women of the participants (individual investors) in the stock market is roughly 70% for men and 30% for women⁶⁾. In other words, there are more men, who do not consider experts' opinions so much, than women in the market participants. The difference in the level of importance of experts' opinions by gender will not change, unless more female participants appear or the weight of male participants changes in the future. Accordingly, experts' opinions may not be reflected in the investment behavior of market participants. In the comparison between students and full-fledged members of society, in cases of students, the weight of renown is 13.5%, and the students did not consider renown the most important information, and gave approximately the same importance to the other information. On the other hand, in cases of full-fledged members of society, the weight of business contents was 28.4%, and the students considered business contents the most important information, and gave the weight of 13.2% to renown, thus renown was not the most important information. The weight of renown was the lowest both in students and full-fledged members of society. However, the students gave the weight of 18.9% to experts' opinions, and the full-fledged members of society gave the weight of 16.5% to the same. Full-fledged members of society appear to consider their own opinion on the basis of information centering on business contents without thinking much of experts' opinions. In general, students do not have a job, and full-fledged members of society have a job. It is therefore imagined that an overwhelmingly higher proportion of the investment funds of actual investors is from full-fledged members of society. By generation of market participants, people in their 10s and 20s comprise approximately 20%, and people over 30 comprise approximately 80%⁷⁾. In other words, there are more full-fledged members of society who do not think much of experts' opinions among the market participants.

The results are as follows. The substance of the question is "If a securities analyst (a person who knows very well about equity investment) recommends to you an equity share different from the one that you decided to purchase immediately before you purchase that, what should you do?". The choice of answers comprises "1) I will change my selection and will invest all the amount of money in the equity share that is recommended by that person,

6) These ratios were taken from the results of "Nomura Individual Investors Survey of Nomura Securities Economic and Financial Institute. According to the survey carried out by the Net Securities Conference in 2005, these ratios were 84.4% for men and 15.6% for women.

7) The sources of these ratios are the results of "Nomura Individual Investors Survey of Nomura Securities Economic and Financial Institute, and the results of the survey carried out by the Net Securities Conference in 2005.

2) I will invest in the equity share which is recommended by that person, but I will also invest some of the money in the equity share that I decided, 3) I will invest in the equity share recommended by that person and the one that I decided in fifty fifty, 4) I will invest in the equity share that I decided, but I will also invest some of the money in the equity share recommended by that person, and 5) I will ignore the recommendation, and will invest all the money in the equity share that I selected.” Table 9 summaries the results. The most frequent answer was 3. The average value was 3.07. This result means that the respondents would invest approximately 50% of the investment money in the equity share recommended by a expert. However, the result of men and full-fledged members of society was a higher point, and as in the weight of experts' opinions, there is a tendency that men and full-fledged members of society do not reflect experts' opinions so much in equity investment.

Table 9 Extent of Reflection of Experts' Opinions at Time of Equity Investment

Reflection	High			Low			At Stock Selection	
	1	2	3	4	5	NA	Avg. Val	Avg. Val.
Total	9	104	127	103	23	9	3.07	(2.39)
Males	5	50	65	62	18	2	3.19	(2.39)
Females	4	54	62	41	5	5	2.93	(2.38)
10s	4	33	37	24	3	3	2.89	(2.27)
20s	4	59	74	61	18	5	3.14	(2.40)
Over 30	1	11	14	18	2	1	3.20	(2.61)
Students	8	75	98	67	17	6	3.04	(2.35)
Full-Fledged Members of Society	1	27	27	34	5	3	3.16	(2.46)

It can be said from the results of the total samples that experts' opinions are considered important in equity investment relative to commodity purchase. However, the main categories (men and full-fledged members of society) of the market participants do not tend to consider experts' opinions so important as the total samples.

5. Importance of Establishment of Information Transfer System

This paper shows to what extent general investors consider experts' opinions important in equity investment in comparison with in commodity purchase. Both in commodity purchase and in equity investment, at their decision making, they gave priority to their own opinions or information to make their own opinions rather than information of others' and especially experts' opinions. Such a tendency is weaker in equity investment. Men and full-fledged members of society, who comprise the main part of individual investors among the market participants, tend to think lightly of others' opinions and respect their own opinions

more.

I consider that the reason for such a tendency is partly on the side of experts who show their opinions and analytical results and partly on the side of investors who make decisions. Experts who present opinions and analytical results behave like partners, or if not so, they are misunderstood to be a salesperson of a securities company. Experts may be unable to provide analytical results, on which they spend money, for nothing or cheaply, and full information may not be provided because of that. As a result, experts' opinions may have lost the position as experts' opinions, and may not be fully respected by investors. In addition, general investors may not differentiate opinions for sales purposes from experts' opinions (analytical results). Furthermore, investors who make decisions give priority to their own opinions, probably because their own assets increase or decrease depending on the results of equity investment, even if they make decisions depending on others' opinions. Of course, such reason is only my own conjecture. Future additional historical and psychological survey is required.

Because accounting criteria are becoming more precise and internationally standardized at present, accounting information in future is expected to show contents different from those of accounting information as of today or until recent days, while the appearance remains the same. However, the results of this survey show that general investors use accounting information, while wrongly assuming that they understand accounting information, and that that will remain so in the future. In other words, general investors cannot understand accounting information correctly, and carry out equity investment, while wrongly assuming it. Then, if I carry logic to extremes, for investors who understand information correctly, the stock market is a stock market, but for general investors, a stock market will become a gambling den. To avoid that situation, there are three choices for general investors. Firstly, general investors will find a method of equity investment whereby no accounting information which they may wrongly assume is used. Secondly, they will raise their own level of learning accounting so that they become able to read accounting information correctly, by spending money. Thirdly, they will find reliable experts and increase the importance of their opinions.

The first choice above is to negate the disclosure system of accounting information as a social system to increase the efficiency of the stock market. The second choice is not only to increase the hurdle for general investors to participate in a stock market, but also to negate the existence of experts in a society of advanced specialization and increase the costs of the whole society, although it increases the level of knowledge of the total participants in the stock market. The third choice is to press general investors to spend money to find reliable experts. However, the choice which does not negate a number of systems in the present stock market is the third choice. It is necessary for the stock market to become reasonable and efficient, so that general investors are easily able to obtain opinions (analytical results) from reliable experts and that they will be appropriately reflected in investors' decisions.

For example, the following acts can be raised. Change should be made so that experts send information in a method whereby they differentiate recommendations for sales purposes from analytical results of the experts, and analytical results of experts become trusted, and general investors become able to use it for a small additional cost. In IR activities, companies are required to change to transmit not only accounting information but also qualitative information whereby accounting information is correctly understood and no specialty knowledge is required. These are only examples, and I consider that there are more efficient methods.

I would like to leave good structures to another paper. From the results of this paper, I consider that it is urgently necessary to establish an information transfer system in the stock market.

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