



CAPITAL MARKET REGULATORS FORUM COMCEC

COMCEC CAPITAL MARKET REGULATORS FORUM

FINANCIAL LITERACY TASK FORCE

ASSESSING FINANCIAL LITERACY LEVEL AMONG RETAIL INVESTORS

THE RESERCH METHODOLOGY

Prepared by

Securities and Exchange Organization of Iran

With Consultation of

Capital Market Authority of Kuwait

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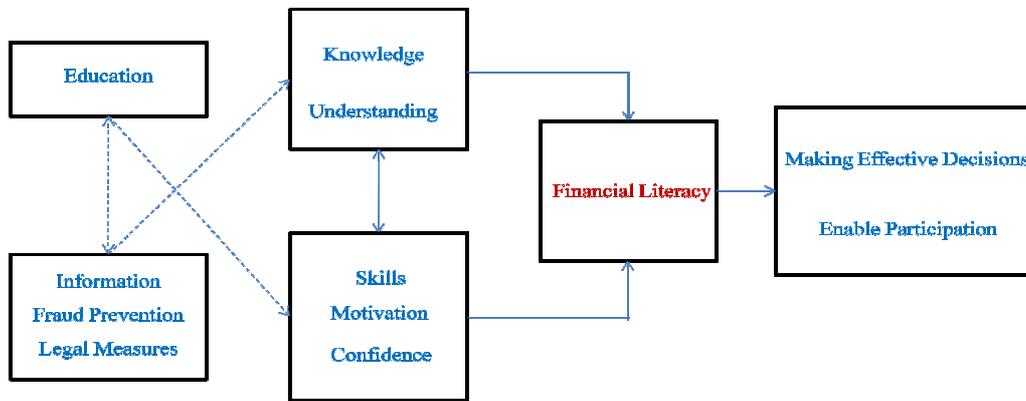
I NTRODUCTION

As decided in 2013 annual meeting in Istanbul, task forces were mandated to determine their further actions in respect of their related issues. In this regard, Financial Literacy Task Force, during frequently meetings and expert level discussions, has decided to focus on the conclusions of 2013 survey, titled “Enhancing Financial Literacy in Capital Market”. In this regard, Securities and Exchange organization of Iran as TF chair, in cooperation with the Capital Market Authority of Kuwait as co-chair and Capital Market Board of Turkey as COMCEC CMR Forum Secretariat have decided to assess financial literacy level among retail investors.

Since the 2013 annual meeting, we have worked on preparing an appropriate questionnaire which is applicable for all member countries and matched with the Islamic context of our nations. In order to guide each member country to conduct the survey by its own and sending data gathered to the secretariat and subsequently TF chair and co-chair for further analysis, this document is provided as a guide and an introduction for further collaboration.

Before we start introducing the methodology of the survey and explaining each section of the questionnaire, we would like to review the main points of the last year survey which are used in the context of the questionnaire.

1. Financial literacy definition: “***Knowledge and understanding*** of financial concepts, and the ***skills, motivation and confidence*** to apply such knowledge and understanding in order to ***make effective decisions*** across a range of financial contexts, to improve the financial well-being of individuals and society, and ***to enable participation*** in economic life”.



2. In order to enhance financial literacy, authorities must answer some wh-questions:
 - Why should they focus on financial literacy and education?
 - Who should be educated?
 - What should they present in the educational programs?
 - Where should they conduct educational programs?
 - What do they wish to achieve through educational programs?
 - When should they start educational programs?
 - How should they deliver educational programs?
3. In order to achieve those who need instruction, we divided people into three categories:
 - Potential investors;
 - Newcomers;
 - Current investors.

Current Investors: the Most Important and Prominent Target Group

Our capital markets are formed by many things, from infrastructures to investors. In the side of investors, market regulators face legal and retail investors. Legal investors basically use financial experts to manage their portfolio. Therefore, retail investors who apply their own information and knowledge or enjoy recommendations of financial advisors are the side which their financial literacy must be assessed. However, we started by assessing financial literacy level of retail current investors not newcomers or potential investors because the necessity of assessing their financial literacy level is urgent and their ineffective decisions would affect the capital market as a whole. In addition, by assessing their financial literacy level, we can determine current status of financial literacy and plan ahead for more desirable situation. Moreover, through this survey we can determine the main concepts that investors need to be educated on. Because of above reasons, we do believe on the importance of assessing financial literacy level among current investors and have chosen the survey population among retail current investors. Below we will describe the methodology of the survey and different parts of the questionnaire.

Order of the Questionnaire

As mentioned above, we have based questionnaire preparation on the definition of financial literacy and conclusions of our last survey. The prepared questionnaire consists of five sections:

- 1- General information;
- 2- Knowledge and Understanding;
- 3- Skills;

- 4- Education, Information and Confidence; and
- 5- Attitudes.

We start the interview by asking some general questions. Each question has a specific code that must be written in a roster provided for each section. Most questions are designed to acquire a specific score as 1 or zero for correct or wrong answers. In section B: knowledge and understanding, we have focused on different concepts such as general information about stock market, risk, compound interest rate, inflation, rate of exchange and bankruptcy. In section C, we have focused on capital market products and the usage of them by investors in comparison to the other parallel markets. In section D, we have focused on the sources of information, confidence and education provided by authorities for investors. And ultimately, in section E, we have provided some questions in order to acquire investors' attitude toward Islamic capital market. Detail information of each section is provided at the end of this document.

Through scoring and assessing detailed information, we will be able to compare different levels of financial literacy among member countries. The results and analyze methods will be disclosed in 2014 annual meeting.

Population of the Survey

Before conducting the survey, we need to determine population and sample. In this survey, we aim to assess financial literacy level of retail active investors. According to the international definitions, active investors are those who typically look at the price movements of their stocks many times a day and are seeking short-term profits. Therefore, we define active investors as *“those whose trading volume is more than trading days in a year* (for instance, if trading

days in your country is 250 days, then the minimum trading volume of active investor must be 250 times in a year)". Below example is for simplification of choosing population:

"According to the statistics acquired from the Central Securities Depository of Iran (CSDI), trading volume of approximately 19000 investors is more than 250 times in 2013. So, the survey population is 19000." Member countries must acquire trading volume of investors in 2013 from entities like clearing houses, central securities depositories or any similar entities.

Sample of the Survey

By acquiring the list of active investors as the population of the survey, we apply Simple Random Sampling as sampling method. We apply Cochran test in order to reach an appropriate size of sample. The Cochran test equation and its components are:

N: Population size

n: Sample size

Z: Z statistic for a level of confidence= 1.96

d: Precision (in proportion of one)= 0.05

p: Expected proportion (in proportion of one)= .5

q: p-1= 0.5

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)}$$

For above example, the sample size (population of 19000) will be 377.

If your population is lower than 100, because this sample is small, the population and the sample are similar. So, N=n=100.

In order to gain an accepted size of sample, we have to circulate more questionnaires. In this regard, we recommend each country to circulate 10% more than what Cochran test calculates (around 400 questionnaires in the case of Iran).

In order to determine who should be interviewed, sort investors' codes or their phone number in ascending or descending format and then divide population size to sample size (for instance $19000/377=50$). Choose a specific number randomly from the first set of numbers determined (30 from first set of 50). Add the determined number to the chosen one to specify the rest of samples ($30+50=80$, $80+50=130$...). Interviewees must be chosen from similar intervals.

Interview Process

The questionnaire is provided for domestic adult investors above 18 years old who are accessible and their contact information is available. According to the specific Law of each country, investors must have right to trade. Based on the capacities and limitations of each member state, the interview can be conducted in 3 ways:

- 1- Face to Face;
- 2- Via Phone;
- 3- Via Email.

In order to conduct the interview, if you have enough resources, you can contract with a research firm to conduct the interview on your behalf. Otherwise, you should conduct it by your own organization or by your affiliated firms. In addition, you can enjoy the contribution of brokerage firms which have essential information and enough capacity. In case of face to face interview, we recommend inviting groups of investors and ask them fill the questionnaires

simultaneously. However, there are some limitations and expenditures that make face to face interview costly and quite ineffective.

In case of telephone interview, you should first acquire investors' phone number and then make a team to call one by one. You should train each interviewer in respect of the method of interview via phone and the behavior of asking questions. Without any doubt, this method has also some limitations but less expenditure. In addition of phone interview, you can send each questionnaire to all investors via email. You should call and inform them that you are conducting such a research and ask them to contribute your organization in the process of the survey. This method will be really easy and cost effective but fewer questionnaires would be returned.

We can summarize our recommendations in respect of interview method:

- **In case of enough resources:** contract a research firm to conduct the survey;
- **In case of enough capacity:** conduct the survey face to face;
- **In case of enough human resources:** conduct the survey via phone;
- **If you are sure about the questionnaires rate of return:** send them via email.

Roster and Sections of the Questionnaire

In order to determine validity of the questionnaire, we have circulated it among more than 20 capital market experts to assess each questions relation to financial literacy components. As mentioned above, the questionnaire consists of 5 sections. Below is explanation of each section and its related roster which you must fill it by data gathered.

Section A: General Information

This section consists of 8 questions related to public information of interviewee. Gender, age, marital status, education level, job, income, and some other stock exchange related information form this section. We aim to assess the correlation between financial literacy and each part of section a. for instance, one of our main model questions might be: “is there any correlation between age and financial literacy?”

All data gathered must be returned in a specific roster. In this survey we only work with scores and numbers. Majority of questions are multiple choice questions in which interviewee (or interviewer in case of phone interview) can tick specific option or number. Your specific staff must fill each section roster appropriately and send them to us for further analysis. For simplification, we have depicted a model roster to be completed in a similar format. You can use Excel software for roster imitation.

Section A: Roster								
Interviewee	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
	<i>Gender</i>	<i>Age</i>	<i>Mar stat</i>	<i>Edu Lev</i>	<i>Job</i>	<i>Income</i>	<i>Return</i>	<i>Investing</i>
1	1 male 2 for female	Number of age	1 for single 2 for Married	Choosing from 1 to 5	Name of Job	Choosing from 1 to 5	Choosing from 1 to 5	Choosing from 1 to 4
2								
3								
4								
...								

Section B: Knowledge and understanding

As mentioned in the definition of financial literacy, two components of financial literacy are knowledge and understanding. Section B scores these two topics by 7 questions. Main concepts of section B are risk and return, diversification, pricing, institutions, financial instruments, inflation, compound interest rate, currency, bankruptcy. In addition, in question 9 we aim to let interviewee to self assess his/her financial literacy level. This section consists of not only multiple choice questions but also true/ false questions. Each question has a specific answer. Model roster for section B must be filled as below:

Section B: Roster							
Interviewee	Q9	Q10	Q11	Q12	Q13	Q14	Q15
	<i>S-assessment</i>	<i>True/false</i>	<i>CIR</i>	<i>INF</i>	<i>BIR</i>	<i>CURR</i>	<i>BNKR</i>
1	Choosing from 1 to 4	a, b, c, d, e, f: 1 true, 2 false	1 for correct\ 2 for wrong\ 0 for don't know	1 for correct\ 2 for wrong\ 0 for don't know	1 for correct\ 2 for wrong\ 0 for don't know	1 for correct\ 2 for wrong\ 0 for don't know	1 for correct\ 2 for wrong\ 0 for don't know
2							
3							
4							
...							

Section C: Skills

This section consists of 5 main questions which assess skills of interviewee in regard of investment skills. The questions not only focus on specific answers but also financial IQ tests and the correct trend of investment a skillful investor should follow. We try to understand interviewee skills on choosing each product, his/her past 5 years experience in the context of investment products and concepts such as asset allocation and compound interest rate. The section's roster must be provided as follow:

Section C: Roster					
Interviewee	Q16	Q17	Q18	Q19	Q20
	<i>Products1</i>	<i>Products2</i>	<i>Products3</i>	<i>CIR</i>	<i>Asset-al</i>
1	From 1 to 12 specify a, b or c Mention the reasons	1 for correct \ 2 for wrong \ 0 for don't know	1 for correct \ 2 for wrong \ 0 for don't know	1 or 2 for each option Mention interviewee reasons	1: percents of a, b, c, d, e & f 2: percents of a, b, c, d, e & f 3: percents of a, b, c, d, e & f 4: percents of a, b, c, d, e & f
2					
3					
4					
...					

Section D: Education, Information & Confidence

Besides knowledge, understanding and skills, level of education, sources of educational programs, being informed about trading system and more important about investors' right and

legal protections, are complimentary concepts of financial literacy. Appropriate level of education and information will result investors confidence in capital market. Therefore, in section C we focus on 2 information related, 3 confidence based and 3 education oriented questions. Question 21 would be changed according to your capital market specific rules. Then we recommend you to adjust the question based on correct options. In this section we will be able to identify the most important sources of education and information which are applied in investors' decisions. Therefore, we can determine the best delivery methods through this section. The section roster must be prepared as follows:

Section D: Roster								
Interviewee	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28
	<i>Suspension</i>	<i>Cin-Int</i>	<i>Sou-Dec</i>	<i>INF-selass</i>	<i>Del</i>	<i>CURR</i>	<i>Edu-Pro</i>	<i>Del</i>
1	Choosing from 1 to 4	1 for correct\ 2 for wrong\ 0 for don't know	Specifying 1 to 5 for a, b, c, d & e	Choosing from 1 to 4	Choosing from 1 to 4	1 for correct\ 2 for wrong\ 0 for don't know	1 for yes and 0 for no	Choosing from 1 to 5
2								
3								
4								
								Choosing 3 items from 1 to 11

Section E: Attitude

Although the attitude has not been a component of financial literacy definition, in the context of literacy we always assess the attitude as an important component. In this regard, financial literacy task force has decided to evaluate investors’ attitude toward capital market and its related concepts. In this section we focus on risk taking characteristics and risk tolerance of investors, their attitude toward Islamic capital market and so on. This section will not result a score but we can identify different attitudes of investors toward our capital markets. Following is the model roster each member state must prepare:

Section E: Roster					
Interviewee	Q29	Q30	Q31	Q32	Q33
	<i>Risk taking</i>	<i>Risk Tolerance</i>	<i>Investment</i>	<i>Advisors</i>	<i>Shariah</i>
1	Choosing from 1 to 3	Choosing from 1 to 5	Choosing from 1 to 4	Choosing from 1 to 3	Choosing from 1 to 5
2					
3					
4					
...					

Conclusion

The questionnaire has been provided by the work of financial experts and through in-depth studies of international surveys. Therefore, we believe that this survey can be comparable to other national and international financial literacy level assessments. By assessing financial literacy level of current investors, we will be able to plan for enhancing financial literacy in our countries. This survey needs a high level of cooperation and collaboration among chair, co-chair, secretariat and member states to achieve. In this regard, Securities and Exchange Organization of Iran is ready to cooperate and coordinate conducting the survey in each member state. Our experts are ready to consult you in its conduit process and answer any related questions. You can contact Meysam Hamedí or Karim Karim via following contact information. There are 2 questionnaires attached to this document: a questionnaire for member states which answers are given and sections are determined, and a questionnaire for circulating among investors in face to face interview.

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Thank you very much. Your cooperation is highly appreciated