

**DETERMINANTS FOR INCREASING THE URBAN PEOPLE FINANCIAL LITERACY IN JEMBERREGENCY, INDONESIA**

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**ABSTRACT**

The dynamics of the financial sector have become the transmission media of economic and social movements. This condition is supported by the rapid development of information technology making finance access can reach different groups of people and even has been globally integrated. However, the level of financial literacy in Indonesia is only 20 percent. Jember as an economy barometer in area of East Java Province produces financial inclusion program, especially in literacy of financial products to encourage the growth of the financial sector. This study aims to arrange a baseline study toward levels and determinants of finance literacy of urban people in Jember. The method used is quantitative in the form of existing data and perception tabulation data through in-depth interviews.

The results of financial literacy levels and finance literacy determinants analysis of urban people in Jember come to conclusion that sum of particulars finance literacy level of urban people in Jember is 38,37 low by basic financial literacy classification index 54,85 which comes into moderate or medium category, while advanced financial literacy is at 21,89 as low category. This condition is not in line with financial dynamics which number of financial institutions, both banks and non-banks and all financial services and its products, grows quite fast. In aggregate records, the level of financial literacy of urban people in Jember is low both basic financial literacy and advanced financial literacy. Furthermore, both basic financial literacy and advanced financial literacy are influenced by the level of income, education, gender, ownership to financial products and behavior toward financial services.

*Keywords: Financial Literacy, Financial Inclusion, Financial Institutions*



**Full Text Paper**

## INTRODUCTION

The dynamics of financial sector has been the transmission media of economic and social movement in improving the community living standards (Lerman& Bell, 2006). This is also supported by the rapid development of information technology which makes access to finance reach various groups of community members and even have been globally integrated (Braunstein& Welch, 2002; Ministry of Education Toronto, 2011). The financial inclusion has been the government program through the Financial Services Authority (FSA) and the Association of Financial Services Institutions whose aim is to encourage financial system that can be accessed by all segments of community, so it is expected that the system can enhance economic growth and overcome poverty.

Financial inclusion program is based on the results of a survey conducted by the World Bank and Bank Indonesia showing low level of public accessibility to financial institutions. Based on the survey of the World Bank, the level of financial literacy in Indonesia is only 20 percent while in other ASEAN countries such as the Philippines 27 percent, Malaysia 66 percent, Thailand 73 percent, and Singapore 98 percent. The gaps in financial sector in Indonesia is not only about affordability or inclusion but also about understanding or literacy (Gerrans and Hershey, 2013). In terms of affordability, currently less than 30 percent of Indonesian people have received the financial sectorservices, whereas in terms of the financial literacy, only 21 percent of the community members are welliterate.

JemberRegency is one barometer of the regional economy in East Java makes financial inclusion program, especially in financial productliteracy in order to encourage the growth of financial sector in driving regional economic activities. This research is highly relevant to analyze more deeply about financial literacy, especially in urban communities in line with the urban development (Australian Securities and Investments Commission, 2011). The research aimed to (1) arrange a baseline study of level and determinants of financial literacy in urban community of Jember Regency; (2) formulate a strategy to improve financial literacyin urban community of Jember Regency.

## LITERATURE REVIEW

By definition, financial literacy has a variety of definitions. Financial literacy can be defined as the ability to effectively evaluate and manage finances in achieving good finance (American Institute of Certified Public Accountants, 2013). Garman and

Forgue (2000) define financial literacy as knowledge of reality and references in successfully managing finances. Meanwhile, according to Kim (2001), financial literacy is one's basic knowledge to be able to survive in modern life in line with the increasing complexity of principles in spending, saving and investment.

Huston (2010) identifies four definition categories of financial literacy and knowledge, that is, individual basic finance, loan, savings or investment and protection. Conceptually, financial literacy has two dimensions, that is, understanding financial knowledge possessed theoretically and utilizing financial knowledge possessed by application. Therefore, financial literacy should be defined as a measure of how well a person can understand and use finance based on the information owned.

Lusardi and Mitchell (2006) found that the low financial literacy is affected by age to the case in the United States, and similarly, the study of Cole et al (2008) found that age becomes a significant factor of financial literacy in India and Indonesia. Another factor is gender in accordance with the studies by Mandell (2008), Cole et al (2008), Lusardi and Mitchell (2006, 2008) which explain that gender differences in Sweden are very large where women rarely make economic decisions in the household. The study by Goldsmith and Goldsmith (1997) shows that women have a low interest in the investment and finance and rarely use financial services than men.

The third factor is the level of education. Studies by Cole et al (2008), Worthington (2004), Lusardi and Mitchell (2006, 2008) found that people with higher education levels have more financial knowledge than those with low levels of education. Mandell (2004, 2008) shows a correlation between literacy with education in the early stages of life cycle, that is, children who graduate from college show a good performance in numerical tests. Meanwhile, Kharchenko (2011) shows the level of financial knowledge is influenced by age, gender, educational level, field of study, occupation, place of residence and ethnic background and wealth.

## **RESEARCH METHODOLOGY**

### **Types and Sources of Data**

Sources of data in this study consisted of primary data obtained directly from the sources/respondents, that is, community in Jember Regency by selecting respondents through random sampling in total of 90 respondents. Furthermore, secondary data were obtained from publications/research reports from

departments/agencies used as supporting data to obtain a description of financial inclusion in Jember Regency. This research applied explanatory research design because it provides a picture or description of the level of financial literacy and the major determinants of financial literacy of urban communities in Jember Regency.

## **Method of Data Analysis**

The method of analysis used in this research was descriptive-quantitative approach. Several stages in the data analysis were: (1) building an index of financial literacy; (2) analyzing the determinants of financial literacy including age, education level, gender, income level and ownership of financial products; (3) formulating a strategies to improve the financial literacy of urban communities in Jember Regency. Financial literacy index was built through several stages:

1. Creating variable groups, that is, grouping financial literacy variables into two groups, namely basic financial literacy and advanced financial literacy.
2. Scoring each variable i.e. 1 for correct answers and 0 for the other answers, unspecified answers and refused to answer.
3. Calculating the weight of each variable by using simple weight as suggested in studies by Bumcrot, Lin and Lusardi (2011).
4. Calculating the index of financial literacy in every observation in each variable group and then counting the number of scores and weights. The value of the overall score was calculated by arithmetic mean either for basic or advanced financial literacy.

## **RESULTS AND DISCUSSION**

### **Levels and Determinants of Community Financial Literacy**

Financial literacy can be defined as the ability to effectively evaluate and manage finances in achieving good finance (American Institute of Certified Public Accountants, 2013). Conceptually, financial literacy has two dimensions, namely understanding financial knowledge theoretically and utilizing financial knowledge possessed by application. The levels of financial literacy were calculated using simple weighting both for the classification of basic financial literacy and advanced financial literacy levels.

Determination of the category of financial literacy index referred to the study by Definite (2013), which divides into three categories:

1. The financial literacy index lower than or equal to 60 is categorized as a low financial literacy index ( $0 \leq FLI \leq 60$ )
2. The financial literacy index higher than 60 and less than or equal to 80 is said to be moderate financial literacy index ( $60 < FLI \leq 80$ )
3. The financial literacy index higher than 80 is categorized as high financial literacy index ( $FLI > 80$ )

Meanwhile, the levels of basic literacy have 11 indicators as shown in Table

**Table 1. Indicators Evaluation of Community Financial Literacy**

Weight Indicators and Financial Literacy Levels				
	Basic Financial Literacy	Value	Advanced Financial Literacy	Value
1.	Completeness of Identity Card (KTP)	0,09	Functions Capital Markets	0,10
2.	Minimal amount of money opening a savings account early	0,09	Interest Rate and Price of Securities or Bonds	0,10
3.	Minimum amount of savings account balances	0,09	Revenue Shares and Bonds	0,10
4.	Deposit guarantee from the Government	0,09	Risks Stocks and Bonds	0,10
5.	Simple Interest Rate Calculation	0,09	Definition of Buying Stocks	0,10
6.	Interest Rate Calculation Compounded Interest	0,09	Definition of Buying Bonds	0,10
7.	Calculation of Credit Interest Rate	0,09	Penalty Sell Bonds Before Maturity	0,10
8.	Inflation	0,09	Investment Options with High Gain	0,10
9.	Discount	0,09	Investment Options with High Risk	0,10
10.	Money Value	0,09	Investment diversification	0,10
11.	Money Illusion	0,09		

Source : Primary Data, processed, 2014

Based on the analysis results of the level of financial literacy, in the aggregate level, the financial literacy of urban communities in JemberRegency was low at 38.37 classified as basic financial literacy with index value of 54.85, in moderatecategory, whereas for advanced financial literacy was at low category by 21.89. This condition was inversely proportional to the number of financial institutions, both banksor non-banks and the whole range of financial services and products which is quite rapid in Jember Regency. The increasednumber of financial institutions is not in line with the level of literacy of the community toward financial services.

**Basic Financial Literacy**

The level of basic financial literacy can be seen by social demography of community members who became the respondents according to, among others, indicators of income, education, gender and ownership of financial products that are listed in Table 2 below:

**Table2. Basic Financial Literacy Based Income Level**

Income	Low	%	Moderate	%	High	%	Total
Up to Rp.1.000.000	30	71.43	8	19.05	4	9.52	42
>Rp.1.000.000 - Rp.2.000.000	5	33.33	3	20.00	7	46.67	15
>Rp.2.000.000- Rp.2.000.000	5	26.32	6	31.58	8	42.11	19
>Rp.4.000.000- Rp.6.000.000	5	41.67	4	33.33	3	25.00	12
>Rp.6.000.000 - Rp.8.000.000	0	-	0	-	2	100.00	2
>Rp.8.000.000- Rp.10.000.000	0	-	0	-	0	-	0
>Rp.10.000.000	0	-	0	-	0	-	0
<b>Total</b>	<b>45</b>		<b>21</b>		<b>24</b>		<b>90</b>

Source : Primary Data, processed, 2014

Based on the level of income, the low distribution of basic financial literacy of the public is in low-income group by 71.43 percent while for moderate level of literacy is concentrated on income group from IDR 4,000,000.- to IDR 6,000,000.- and the high literacy level is at in high income group, that is, IDR 6,000,000.- to IDR 8,000,000.-. The distribution pattern of relationship between basic financial literacy and income levels is directly proportional to the ability of the community in the management and use of finance through financial services. The higher the income levels, the higher the levels of financial literacy.

Meanwhile, when seen from the levels of education, financial literacy has a pattern of uneven distribution. The low level of financial literacy is concentrated in communities with low educational levels, that is non-school educated and elementary school (SD) graduated, moderate level of financial literacy is concentrated in the levels of high school education (SMA) up to Master's degree (S2). Furthermore, the high level of financial literacy is in uneven distribution, that is, there are some community groups with elementary school education level have a high literacy and partially high school graduated by 8.11 per cent, and the most in the group with strata of Diploma until Master's degree (S2). This shows that the higher the educational

level, the higher the level of financial literacy, but a small part of community members with low education are well literate, as shown in Tables 3 and 4 as follows:

**Table3. Basic Financial Literacy Based on Education Level**

Education	Low	%	Moderate	%	High	%	Total
No School	1	100.00	0	-	0	-	1
Not Graduated Primary School	0	-	0	-	1	100.00	1
Graduated Elementary School	8	100.00	0	-	0	-	8
Graduated High School	23	62.16	11	29.73	3	8.11	37
Graduated D1/D2/D3	3	37.50	1	12.50	4	50.00	8
Graduated S1	7	29.17	6	25.00	11	45.83	24
Graduated S2 or more	3	27.27	3	27.27	5	45.45	11
<b>Total</b>	<b>45</b>		<b>21</b>		<b>24</b>		<b>90</b>

Source : Primary Data, processed, 2014

**Table 4. Basic Financial Literacy Based on Gender**

Gender	Low	%	Moderate	%	High	%	Total
Male	18	46.15	8	20.51	13	33.33	39
Female	27	52.94	13	25.49	11	21.57	51
<b>Total</b>	<b>45</b>		<b>21</b>		<b>24</b>		<b>90</b>

Source : Primary Data, processed, 2014

Based on gender, community groups with low literacy levels are female by 52.94 percent and male by 46.15 percent. The moderate literacy level is mostly highly in female group by 25.49 percent and male by 20.51 percent; this is in line with the role of women as housewives who hold important role in the management of household finances. Meanwhile, the high level of financial literacy is distributed in male group by 33.33 percent and female by 21.57 percent, with most heads of family serve as financial decision makers in the household.

Based on the ownership of financial products, the low financial literacy levels is concentrated in the group of private bond products or obligation by 50 percent, 41.43 percent in bank financial products, namely savings, deposits, and 40 percent in savings products of non-bank financial institutions. Moderate level of financial literacy is concentrated in community groups that have 25 percent credit card, savings and bank deposits 24.29 percent and non-bank savings products 20 percent. Community group with high literacy level has almost the majority of financial products ranging from savings and deposits in banking and non-banking institutions to insurance, credit cards and securities. This can be seen in table 5 below:



**Tabel 5. Basic Financial Literacy Based Ownership Financial Products**

<b>Financial Products</b>	<b>Low</b>	<b>%</b>	<b>Moderate</b>	<b>%</b>	<b>High</b>	<b>%</b>	<b>Total</b>
Bank Savings Account	29	41.43	17	24.29	24	34.29	70
Bank Deposits	4	40.00	2	20.00	4	40.00	10
Savings Institutions Non-Bank	12	40.00	6	20.00	12	40.00	30
Deposits Institutions Non-Bank	0	-	0	-	0	-	0
Insurance	3	17.65	3	17.65	11	64.71	17
Credit Card	5	25.00	5	25.00	10	50.00	20
Stocks	2	25.00	0	-	6	75.00	8
Government Securities	0	-	0	-	1	100.00	1
Private Bond	1	50.00	0	-	1	50.00	2
Mutual Funds	0	-	0	-	1	100.00	1
Do Not Have	13	76.47	4	23.53	0	-	17

Source : Primary Data, processed, 2014

### Advanced Financial Literacy

Advanced financial literacy is based on knowledge about the instrument of capital market products. In advanced literacy is also seen the relationship with income, education, gender and financial product ownership. Based on the income level, the level of financial literacy is concentrated more in communities with low income in total of 89 respondents, while those having advanced literacy level with higher category reach only 6.67 percent. This indicates the low financial literacy level, as shown in the following Tables 6 and 7:

**Tabel 6. Advanced Financial Literacy Based Income Level**

<b>Income</b>	<b>Low</b>	<b>%</b>	<b>Moderate</b>	<b>%</b>	<b>High</b>	<b>%</b>	<b>Total</b>
Up to Rp.1.000.000	42	100.00	0	-	0	-	42
>Rp.1.000.000 - Rp.2.000.000	14	93.33	0	-	1	6.67	15
>Rp.2.000.000- Rp.2.000.000	19	100.00	0	-	0	-	19
>Rp.4.000.000 - Rp.6.000.000	12	100.00	0	-	0	-	12
>Rp.6.000.000 - Rp.8.000.000	2	100.00	0	-	0	-	2
>Rp.8.000.000- Rp.10.000.000	0	-	0	-	0	-	0
>Rp.10.000.000	0	-	0	-	0	-	0
<b>Total</b>	<b>89</b>		<b>0</b>		<b>1</b>		<b>90</b>

Source : Primary Data, processed, 2014

**Tabel 7. Advanced Financial Literacy Based on Level of Education**

<b>Education</b>	<b>Low</b>	<b>%</b>	<b>Moderate</b>	<b>%</b>	<b>High</b>	<b>%</b>	<b>Total</b>
No School	1	100.00	0	-	0	-	1
Not Graduated Primary School	1	100.00	0	-	0	-	1
Graduated Elementary School	8	100.00	0	-	0	-	8

Graduated High School	37	100.00	0	-	0	-	37
Graduated D1/D2/D3	8	100.00	0	-	0	-	8
Graduated S1	23	95.83	0	-	1	4.17	24
Graduated S2 or more	11	100.00	0	-	0	-	11
<b>Total</b>	<b>89</b>		<b>0</b>		<b>1</b>		<b>90</b>

Source : Primary Data, processed, 2014

**Tabel 8 Advanced Financial Literacy Based on Gender**

Gender	Low	%	Moderate	%	High	%	Total
Male	39	100.00	0	-	0	-	39
Female	50	98.04	0	-	1	1.96	51
<b>Total</b>	<b>89</b>		<b>0</b>		<b>1</b>		<b>90</b>

Source : Primary Data, processed, 2014

**Tabel 9 Advanced Financial Literacy Based Ownership Financial Products**

Financial Products	Low	%	Moderate	%	High	%	Total
Bank Savings Account	69	98.57	0	-	1	1.43	70
Bank Deposits	10	100.00	0	-	0	-	10
Savings Institutions Non-Bank	29	96.67	0	-	1	3.33	30
Deposits Institutions Non-Bank	89	98.89	0	-	1	1.11	90
Insurance	17	100.00	0	-	0	-	17
Credit Card	20	100.00	0	-	0	-	20
Stocks	8	100.00	0	-	0	-	8
Government Securities	1	100.00	0	-	0	-	1
Private Bond	2	100.00	0	-	0	-	2
Mutual Funds	1	100.00	0	-	0	-	1
<b>Do Not Have</b>	<b>72</b>	<b>98.63</b>	<b>0</b>		<b>1</b>	<b>1.37</b>	<b>73</b>

Source : Primary Data, processed, 2014

Similarly, the relationship between advanced financial literacy and educational levels are more concentrated in the low advanced financial literacy and distributed at the level of high school education up to Master's degree. Based on gender, advanced financial literacy is also low and the majority is women by 98.04 percent; only 1.96 percent of them have high advanced financial literacy. According to Tables 4.8 and 4.9, it is seen that advanced financial literacy has relationship with ownership of financial products, which also shows a concentration in the low category and is much distributed in ownership savings, deposits either bank or non-bank financial institutions, insurance, credit cards and securities.

### Strategy to Increase Financial Literacy

Financial literacy becomes one of government policies and an important concern for the government, banking industry, consumers and other organizations. More specifically, the increased financial literacy can be done through several priority strategies, especially for individuals, households and communities, that is: 1) providing financial literacy education for future generations through formal education system; 2) improving access to information and instruments as well as financial management resources; and 3) encouraging the improvement of the quality of financial literacy through a variety of programs and assistance.

First, the efforts to improve financial literacy through formal education can be done through several ways, among others, integrating the educational curriculum, improving education and training for teaching staff in training program on professional teaching, developing teaching resources and learners through a special curriculum for economy and business, improving trust and improving vocational education and training. Second, efforts to improve access to information, the provision of instruments and development of financial resources are held by, among others, improving public access to all information regarding financial management and developing workplace-based financial literacy. Thus, the government through the Financial Services Authority is required to provide the supporting infrastructure of financial sector in various levels of society and region. This aims to encourage the deepening and expansion of access to financial products and services. Third, improving the quality of financial literacy through a variety of programs and assistance, among others, through good practice especially the targeted in community group that is uneasily vulnerable to change or to due to problems of region and understanding. Fourth, improving coordination and partnerships between government and society and developing the opportunities for cooperation between sectors and regions and international cooperations through a variety of workshops and national forums on financial literacy. Fifth, improving research and evaluation of various financial literacy programs through active participation in international seminars, developing research related to financial literacy level and determinants of financial literacy in the community, good practice in the implementation of programs to the stage of evaluation, increasing the expertise and knowledge sharing as well as encouraging research in supporting the effectiveness and impacts of financial literacy programs.

## CONCLUSION AND RECOMMENDATION

### Conclusion

Based on the analysis of financial literacy level and financial literacy determinants in urban communities in Jember Regency, it is concluded that:

1. The aggregate level of financial literacy of urban communities in Jember Regency is low at 38.37 with the basic financial literacy classification with index value of 54.85 which is in moderate category, while advanced financial literacy is in the low category at 21.89.
2. In aggregate level, both basic financial literacy and advanced financial literacy are influenced by the levels of income, education, gender, ownership of financial products and community behaviors toward financial services.
3. Specifically, the increased financial literacy can be performed through several priority strategies, especially for individuals, households and communities, that is: 1) providing financial literacy education for future generations through formal education system; 2) improving access to information and instruments as well as financial management resources; and 3) encouraging the improvement of the quality of financial literacy through a variety of programs and assistance.

### Recommendation

Some recommendations based on the results of analysis are as follows:

1. The community has sufficient potential to improve financial literacy either basic financial literacy or advanced financial literacy indicated by the desire to obtain all the relevant information about finance.
2. The community potential to be well literate should be supported by the relevant stakeholders such as the Government, Bank Indonesia, the Financial Services Authority and other related parties to improve the socialization of the role and benefits of the use of financial products and services.

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