

# SME's financial literacy: An overview based on demographic aspects

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## ABSTRACT

*This study attempts to examine the financial literacy level of SME's owner in East Java based on demographic aspect. The sample was taken from 65 SME's in East Java, which produce prominent local product. The data were collected by using survey method and deep interview. They were analyzed using descriptive explorative and also cross tabulation for examining SME's financial literacy based on demographic attribute. Research found that that the financial literacy score of SME's owner in East Java is good enough, where they have average score 55.8 with the same score of median and mode 66.7. Majority weakness of SME's owner is the literacy on SME understanding of net asset and insurance premium. Otherwise, whole SME's owner is fully understood that financial knowledge is so useful for the SME. Other finding shows that there is a relationship between financial literacy's level and SME's owner on demographic aspect such as gender, education, the business time established. It can be concluded that demographic aspects determine the financial literacy level of SME's owner.*

## ABSTRAK

*Tujuan penelitian ini adalah untuk mengkaji tingkat literasi keuangan pengelola Usaha Kecil Menengah (UKM) di Jawa Timur berdasarkan aspek demografi. Jumlah sampel yang diambil sebanyak 65 UKM di Jawa Timur yang memproduksi produk unggulan. Pengumpulan data dilakukan dengan survei dan wawancara mendalam dengan pengelola UKM. Teknik analisis yang digunakan adalah descriptive explorative serta dengan menggunakan cross tabulation untuk mengkaji literasi keuangan berdasarkan aspek demografi pengelola UKM. Temuan dari penelitian ini adalah tingkat literasi keuangan pengelola UKM di Jawa Timur masih rendah, di mana skor rata-rata 55,8 dengan nilai median dan modus yang sama sebesar 66,7. Mayoritas kelemahan pengelola UKM adalah literasi terkait dengan pemahaman asset bersih UKM dan premi asuransi. Namun di sisi lain, seratus persen pengelola SME sangat memahami bahwa pengetahuan keuangan sangat bermanfaat bagi UKM. Hasil lain yang diperoleh dari penelitian ini bahwa terdapat hubungan tingkat literasi keuangan pengelola UKM dengan aspek demografi, yang meliputi jenis kelamin, pendidikan, lama usaha. Hal ini dapat dijelaskan bahwa aspek demografi menentukan tinggi rendahnya tingkat literasi keuangan pengelola UKM. Namun tidak ditemukan bukti bahwa ada hubungan antara literasi keuangan dengan omset UKM.*

## 1. INTRODUCTION

The ASEAN Economic Community (AEC), enacted in 2015, is assumed to have a significant effect on the liberalization of goods, services, investment, human resources and capital in the region. In this era, the flow of trade in goods and services will be free to enter and exit between

countries, including Indonesia whose market is very potential.

The introduction of AEC on the one hand provides opportunities for the development of Small and Medium Enterprises (SME) that have the potential to export to enter the Asian free market, but on the other hand will have an impact on

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the increasing difficulty of SME products from outside in the domestic market and the increasing difficulty of entering an increasingly competitive foreign market. The existence of this AEC on the one hand is an opportunity for SMEs. On the other hand, it is a threat to SMEs. This happens because many of the problems faced by SMEs. The fundamental problem facing SMEs is, firstly, it is still difficult to access SMEs on the market for the products it produces; second, still weak development and strengthening effort; and thirdly, the limited access to financing sources from its formal financial institutions from banks. This problem cannot be separated from the low level of financial literacy of SME managers.

Financial literacy is the ability to read, analyze, manage, and communicate the personal financial conditions that affect material well-being. This includes the ability to create financial options, discuss money, and financial matters without (or even) inconvenience, plans as well as competent responses to events affecting everyday financial decisions, including general economic events. For SME managers, financial literacy is the ability of the learner to read, manage and analyze the financial condition of SME. The higher the SME's managers leverage, the more appropriate it is to take the SME's investment and leverage decisions and capitalize on business and investment opportunities that can enhance the value of the company.

A study of financial literacy was also conducted by Lutfi and Rr. Iramani (2008); Farah Margaretha and Reza Arif Pambudi (2015), Nicolini et al. (2013); Oseifuah (2010); Siekei et al. (2013); Fatoki (2014). The results of Lutfi and Rr. Iramani (2008); Margaretha and Pambudhi (2015), found evidence that the financial literacy score of the student's financial literacy score was only 48.9. Similarly, the results of the Fatoki study (2014), Oseifuah (2010) found evidence that the financial literacy held by young entrepreneurs and micro-enterprise owners in South Africa is still low.

The SME managers' financial literacy is also related to demographic aspects, such as gender, education, age and income. For example, Margaretha Pambudhi (2015) successfully proved that Gender influences financial literacy, but Sucuahi (2013) fails to prove gender as a predictor of financial literacy SME managers in Davao, City. The higher the education of a person or manager of SME the higher is, the higher the level of financial literacy. This is because of the higher the education the more knowledge they have and the higher

the level of understanding the financial literacy. In relation to this argument, Farah Margaretha and Reza Arif Pambudhi (2015) and Sucuahi (2013) have proved that the level of education influences the financial literacy of micro-entrepreneurs in Davao, City. SME managers, who have high financial literacy, will be able to increase turnover. This is because managers have a lot of knowledge about how to make investment and funding decisions. Previous research by Siekei et al. (2013) has obtained empirical evidence that financial literacy influences the performance of SMEs in Kenya.

The existence of inconsistencies from the results of previous research could motivate the researchers to review the financial literacy in terms of demographic perspectives. Therefore, the purpose of this research is to assess the level of financial literacy of SME managers in East Java based on financial literacy dimension, so it can be known the weakness of SME in managing SME finance. It also aims to examine the financial literacy of SME managers based on the demographic aspects of SME managers.

## 2. THEORETICAL FRAMEWORK AND HYPOTHESES

Small and Medium Enterprises (SMEs) play an important role in fostering the economic growth. In addition to it, SME can also absorb the labor so that they can also indirectly reduce unemployment, increase productivity, and affect the growth of the informal sector in the environment. In the context of assets and marketing performance, a Small Business is an entity that has: (1) net worth of more than Rp 50,000,000 up to Rp 500,000,000 not including land and building of business premises; and (2) have annual sales of more than Rp 300,000,000 up to a maximum of Rp 2,500,000,000. Medium Enterprise is a business entity that has the following criteria: (1) net worth of more than Rp 500,000,000 up to Rp 10,000,000,000 not including land and building of business premises; and (2) have annual sales of more than Rp 2,500,000,000 up to a maximum of Rp 50,000,000,000

If viewed from the number, the largest proportion is on Micro Enterprises. Unfortunately, this group is of low ability and less developed because of limited access to financial institutions, especially banking. Small and medium-sized business groups, although only 1.12%, their potential is great to support economic growth if developed properly. The study by Bank Indonesia concludes that the main problem faced by SMEs is in

accessing banks to obtain sources of financing (credit). The reason is inadequate knowledge of banking and credit services (including credit requirements), the ability to manage the business, especially the financial aspects that are still less professional, and the other is from the side of the banking itself is less effort to provide solutions to the problems faced by SME.

### **Competence of SMEs' Financial Management**

From the World Bank survey, it is noted that Indonesia's financial literacy rate is only 20% while other ASEAN countries are well above that score. Philippines financial literacy rate of 27%, Malaysia 66%, Thailand 73%, and Singapore 98%. As many as 15% of the Indonesian population invested and 9% borrowed/loaned to a formal financial institution, while 42% borrowed or owed the family. A survey conducted by Bank Indonesia states that 60-70% of 51.3 million MSMEs in Indonesia have not connected with banking services. This shows the low level of financial literacy and the low understanding of SME financial management in Indonesia. Therefore, there is a need for conflicts of financial literacy problems and financial management of SME.

Financial management conducted by SME can be seen from the capability of a business owner in managing investment and fund source optimally to achieve maximization of business value as reflected from the growth of asset, an increase of worker number and business growth from year to year. Business owners should be able to make financial decisions both investment decisions and funding decisions and profit-sharing decisions (Nurwilda and Rr. Iramani 2013).

The investment decision is a decision related to the amount of Asset and its components (Current Assets and Fixed Assets) that must be invested that can provide financial value added. The funding decision is a policy that must be done related to the source of funds that will be used to finance the company's investment and the selection of funding sources that provide optimal capital cost. The final decision to be made by the entrepreneur is the profit sharing decision, what proportion of the profit will be distributed to the capital owners and how much should be invested for the development of its business. These three decisions are very important for SME managers so that the long-term goals of the company can be achieved.

Financial management is important for SME to increase the value of its business is (1) Record-

ing of monthly income and expenses, (2) Recording of debt and savings account, (3) Cash inventory of operational needs, (4) Cash inventory in case, (6) Fund management until the end of the month, (7) Financial planning, (8) Use/allocation of profit at each end of the period.

### **Financial Literacy and Demographic Characteristics**

Financial Literacy is indispensable for making the right decision (Braunstein & Welch 2002; Perry 2008). SME managers who have financial literacy will understand the financial problems, the capabilities of the business in managing their business. According to Oseifuah (2010), financial literacy consists of financial understanding, financial capability, and financial responsibility.

The financial capability enables people to have a proper financial behavior. People who have financial capabilities have the knowledge, skills, and confidence to make financial decisions (Atkinson et al. 2006; O'Donnel & Keeney 2010). With Finance, literacy is the ability of a person to read, analyze, and manage finances to achieve the expected goals. Financial literacy is needed for the creation of value on the financial behavior of individuals, families or business managers to make economic decisions every day. The low financial literacy will have an impact on the difficulties of meeting daily needs. Low financial literacy will have an impact on mistakes in financial decision-making. Excessive investment decisions using unmanaged debt sources will result in the company failing in the future.

Chen and Volpe (1998) stated that financial Literacy covers several dimensions/aspects of finance, namely: 1) Basic Personal Finance, basic understanding of personal finance includes understanding basic concepts in the financial system, including understanding the calculation of simple interest rates, compound interest, inflation, opportunity cost, time value of money, liquidity of an asset; 2) Money Management, this dimension covers how a person manages the financial owned and analyzes the source of income and determines the priority of the use of funds and makes the budget; 3) Credit and Debt Management, this dimension includes how a person's ability to determine funding sources derived from credit/debt, understanding of creditworthiness, interest rate, and loan term; 4) Saving and Investment, covering a person's ability to saving and investing both investment in real assets and financial assets; 5) Risk Management, including the ability of a per-

son to be associated with risk, either personal risk (accident, death), asset risk or liability risk (liability to loss of others)

The level of financial literacy relates to demographic aspects, such as gender, education, age, and income. A study of financial literacy in relation to demographic factors has been undertaken. The study of the correlation between financial literacy and education shows that financial literacy from business students is higher than non-business students. The financial literacy of students who have received financial management courses is significantly higher than those who have not yet undertaken Financial Management (Lutfi and Rr. Iramani (2008). Another study shows that there are inconsistencies in the influence of social demographic variables on financial literacy in some countries (Nicolini et al. 2013). The study by Margaretha and Pambudhi (2015) provides empirical evidence that Gender influences financial literacy, but in contrast to a study conducted by Sucuahi (2013) that failed to prove gender as a predictor of financial literacy of SME managers in Davao, City The level of intelligence of a man is higher than that of a woman, but women are more diligent in acquiring knowledge. A man is able to quickly grasp the information obtained. Remote memory is higher than female. the first hypothesis to be tested, namely:

H1. There is a significant relationship between the Genders and the level of financial literacy SME managers.

The educational demographic aspect can affect financial literacy. The higher the level of a person's education, the higher the financial literacy. It is because the higher the level of education the more knowledge they have both from formal education and knowledge obtained from various sources, such as social media, internet and so forth. For example, a study by Margaretha and Pambudhi (2015) and Sucuahi (2013) proved that the higher the higher the financial literacy of micro-entrepreneurs. Based on the theoretical and empirical studies, the second hypothesis to be tested is as follows:

H2. There is a significant relationship between education and the level of SME managers' financial literacy.

Age is also assumed to affect the level of financial literacy. The higher the age or the length of business conducted SME then also the higher level of financial literacy SME managers. It logical because the longer the effort made by SME managers more practical experience faced so that the

understanding or financial literacy owned is increasing. Therefore the third hypothesis to be tested is:

H3. There is a significant relationship between age/length of business with the level of financial literacy SME managers.

The income demographic aspect referred to in this study is the SME turnover. There is a correlation between financial literacy with the turnover achieved by SME. SME managers, who have high literacy high, also have a lot of knowledge about how to make investment and funding decisions. In investment decisions, managers will be able to choose investments that provide optimal benefits. Furthermore, the funding decision of managers who have a high level of financial literacy will be able to determine the source of funding with a low cost so that it can determine a competitive selling price that will eventually be able to sell products in large quantities or in other words increased sales turnover. Siekei et al. (2013) succeeded in obtaining empirical evidence that the literacy of youth had an effect on the performance of SMEs in Kenya. On the basis of this study, the fourth hypothesis to be tested in this study is:

H4. There is a significant relationship between business turnover and the level of financial literacy SME managers.

### 3. RESEARCH METHOD

This study is an exploitation design because it aims to examine the level of financial literacy of SME managers based on demographic aspects, namely gender, last education, length of business and turnover. This study is also a survey research because in reviewing financial literacy using the instrument/questionnaire as a means of data collection. Cross-sectional research is also used in the design of this study since the data is taken at a particular time in order to observe variations between samples.

The population of this research is SME in East Java. The sampling technique used is purposive sampling where SME taken is SME, which produces a prominent product in East Java. There are 65 SMEs taken as samples in this research scattered in Pacitan, Magetan, Ponorogo, Surabaya, Mojokerto, Malang, and Sidoarjo areas.

The variables observed in this research are financial literacy variable and demography aspect of Financial Literacy is knowledge and understanding of SME in SME financial management dimension include: 1) basic literacy of financial management, 2) credit and lending management,

**Table 1**  
**Test Results of validity and Reliability of Financial Literacy**

Indicators/ Dimension	Correlation Coefficients	Significance	Details
Basic Literacy of Financial management	0.648	0.000	Valid
Literacy of Saving and Credit	0.471	0.000	Valid
Insurance Literacy	0.784	0.000	Valid
Literacy of Risk management and Investments	0.640	0.000	Valid
<b>Cronbach Alpha</b>			
Financial Literacy	0.6331		Reliable

**Table 2**  
**Basic Literacy of Financial Management**

Indicators	% Correct	% Wrong
Benefits of Financial Knowledge for SMEs	100	0
Financial Planning fir SMEs	86	14
Understanding the easy of selling the Land	28	72
Understanding the Net Asset	18	82
Understanding Sales as SME's Income	89	11
Understanding Interest as SME's expense	72	28
Overage Score of Basic Literacy of Financial Management		58.2

3) literacy of management of saving and investment and 4 ) financial risk management literacy. Measurements of this variable using an ordinal scale with the following conditions: If the financial literacy SME greater than the median given the score "1" and less than the median scored "0". Yet, demography aspect to be studied in this research is gender, education, length of business and SME turnover. Measurement of this variable was done by using a multinomial scale.

The data collected in this study is taken from the primary data, which is from the selected respondents. The data was collected by survey method using questionnaires distributed to SME by visiting each selected SME. SME managers are required to complete a research questionnaire accompanied by the researcher. In addition, researchers also conducted interviews to obtain in-depth information from SME managers. The test of validity was done using Pearson correlation, while the reliability of the instrument was tested by using the Cronbach Alpha indicator.

The data were analyzed using a descriptive explorative analysis that is by using descriptive statistic to study the level of financial literacy of SME. A cross-tabulation analysis was also used in this study, to examine the interrelations between the demographic aspect and the level of financial literacy of SME. Chi-Square Test (X<sup>2</sup>) was used to examine the relationship between the demographic aspect and the level of financial literacy. If sig-

nificant < 0.05 then Ho is rejected which means there is a relationship between demographic factors with the level of financial literacy.

#### 4. DATA ANALYSIS AND DISCUSSION

Financial Literacy is measured by using four indicators/dimensions, which include: 1) basic literacy of financial management, 2) savings and lending literacy, 3) literacy on insurance and 4) literacy on risk management and investment. The Indicators of Financial Literacy, measured by 16 items of questions poured in a Keary filled by financial managers. To verify whether the instrument used is valid and reliable in measuring financial literacy, then in this study conducted testing instruments. Validity and reliability test results are presented in Table 1.

As seen on Table 1, it is clear that all indicators are valid. It can be explained that all indicators used in this study are able to measure Financial Literacy. The highest level of validity is an indicator of insurance literacy, which means the instrument is the most superior literacy to measure financial literacy SME managers. Furthermore, the instruments used are also reliable, meaning that these instruments tend to be consistent for use on other SME samples or in the future, although the level of reliability is still not good enough. This condition is most likely to occur, given the instrument made, developed from the measurement of personal financial literacy that

**Table 3**  
**Literacy of SME's Saving and Loan**

Indicators	% Correct	% Wrong
Understanding the Calculation of the deposit Interest	55	45
Understanding the Deposit Period	66	34
Understanding the Interest rate of credit	65	35
Average Score of Literacy of Saving and Loan		62.1

Source: The processed survey.

**Table 4**  
**Insurance Literacy**

Indicators	% Correct	% Wrong
Understanding the general Insurance	76	26
Understanding the Types of Insurance	80	20
Understanding the Health Insurance Premium	38	62
Understanding the benefits of Insurance Premium	86	14
Insurance Literacy		55.7

**Table 5**  
**Literacy of Risk Management and Investment**

Indicators	% Correct	% Wrong
Understanding the Risk and deposit Placement	57	43
Understanding the Investment Fund vs. Mutual Fund Deposits	82	18
Understanding Mutual Funds	51	49
Average Score of Risk and Investment Literacy		47.3

may be different from the lite of someone finance literacy as SME managers.

### **The Basic Literacy of Financial Management**

The basic literacy of finance in this study is the understanding of SME managers on general knowledge of financial basics and accounts that are SME's income and expenses. The distribution of basic literacy is presented in Table 2. It can be seen that: first, one hundred percent of SME managers correctly answer that financial knowledge is very useful for SME. It can be explained that in managing the business, knowledge of finance is crucial to the manager regardless of the type of business. Secondly, 86 percent of SME managers correctly answer that financial planning is indispensable for SMEs, the rest are wrong.

It can also be explained that in managing the business, financial planning is necessary for most managers. A small part of the wrong, meaning that it does not require financial planning, it can be explained that SMEs do not need financial planning, because part of SME managing its business only thinks about the importance for the present and the principled origin of the business can be enough.

Thirdly, the literacy associated with the ease of asset sales resulted in 72 percent of SME managers being wrong, only 28 percent correct. This result means that most SME managers consider landless assets to be easy to sell. This understanding is not appropriate, considering the land is a fixed asset whose liquidity is very low, the sale of land takes a long time.

Fourth, the literacy related to the understanding of net assets is also very low, of which only 18 percent answered correctly, while the remaining 82 percent answered wrong. SME managers assume that net assets are all assets owned by SME. While the net asset in financial management concept is the difference between the total assets with debt, which is none other than the equity owned by SME.

Fifth, the literacy associated with the SME income indicates that 89 percent of SME managers answered correctly and only 11 percent answered wrongly. Although only a small part of the answer is wrong, this result is very unexpected. A hundred percent manager should answer correctly that sales are revenue for SMEs. The SME manager's misunderstanding of such literacy might assume that sales are not necessarily an income for

**Table 6**  
**SME's Financial Literacy**

Dimensions	AECn	Median	Mode	Dev. Standard
Basic Literacy	58.2	66.7	66.7	15.1
Literacy of saving and Loans	62.1	66.7	66.7	26.3
Insurance Literacy	55.7	60	60	18.2
Literacy of Risk and Investment	47.3	50	50	21.7
Financial Literacy (all)	55.8	56.7	60.8	12.9
Q1=51; Q2=56.7; Q3=62.5				

**Table 7**  
**Financial Literacy Based on Gender of SME Managers**

Gender	Financial Literacy (FL)		Total
	Low FL	High FL	
Male	23.1%	35.4%	58.5%
Female	27.7%	13.8%	41.5%
Total	50.8%	49.2%	100%
Chi-Square = 4.67; Sign = 0.031; Ho rejected			

SME, as some SMEs do not directly sell their products to consumers, but to agents. When the product is delivered to the agent, the manager does not directly receive the proceeds of the sale but waits for the product to be sold.

Sixth, the literacy associated with SME expenditure, shows that 72 percent of SME managers correctly answer the question of "interest is SME expenditure", and still 18 percent answered wrongly. This shows that not all SME managers think this interest is the expense. This could be SME never borrow money in the Bank, so SME managers do not understand what is meant by interest. If SME requires funds, the manager will take the deposit so that there is no element of interest. Another way is that managers will borrow funds from relatives/partners who provide loans without interest. Another possibility is, the lack of clarity of the research instrument is related to the "interest", so that respondents perceive the "interest" is the interest of deposits/deposits, which is actually an income for SME managers. The average basic literacy score of financial management is only 58.2

#### **Literacy against Savings and Loans**

The literature on savings in this study is the understanding of SME managers about matters relating to savings made by SME managers for the benefit of their business. This literacy is presented in Table 3. It can be seen that: first, the literacy on the calculation of deposit interest rates, is still low only 55 percent of SME managers who answered

correctly. This indicates that some SME managers assume that the deposit interest in the form of deposit will give high interest.

Second, the literacy associated with the term of deposit, indicates that still 34 percent of the respondents answered wrongly. Managers do not understand that the term of deposit there are 1 month, 3 months, 6 months. Understanding some SME managers is because the deposit is "Savings Time" where the term is one year.

Thirdly, the literacy associated with the credit card interest rate, indicating that 65 percent of respondents answered correctly and 35 percent answered wrongly. These results provide evidence that there are still many SME managers who do not know that credit card interest is very high in excess of loan interest. There are two causes of wrong answers in this case, first SME managers do not understand the banking products in the form of credit cards, automatically respondent also did not understand "credit card interest". Second, SME managers who take advantage of credit cards, do not know that if the delay paying credit card debt will be charged interest where the interest rate is much higher than the interest on working capital loan, or it could be the manager never delinquent credit card payments so there is no burden interest to be paid. Average score of the financial literacy associated with savings and loans is worth as much as 62.1

#### **Literacy toward Insurance**

Literacy of insurance in this research is the under

**Table 8**  
**Financial Literacy Based on the SME's Managers' Aspects of Education**

Education	Financial Literacy (FL)		Total
	Low FL	Low FL	
Primary School	4.6%	1.5%	6.2%
Junior High School	27.7%	4.6%	32.3%
Senior HS/ Vocational HS	16.9%	30.8%	47.7%
Undergraduate/Graduate	1.5%	12.3%	13.8%
Total	55.4%	44.6%	100%
Chi Square = 19.88; Sign = 0.001; Ho rejected			

**Table 9**  
**Financial Literacy Based on the Period of SME Management**

Period of SME	Financial Literacy (FL)		Total
	Low FL	Low FL	
< 3 years	16.9%	7.7%	24.6%
3-5 years	6.2%	6.2%	12.3%
>5-10 years	9.2%	1.5%	10.8%
>10 years	18.5%	33.8	52.3%
Total	50.8%	49.2%	100%
Chi Square = 8.75 ; Sign = 0.033; Ho rejected			

**Table 10**  
**Financial Literacy Based on SME Turnover**

Turnover	Financial Literacy (FL)		Total
	Low FL	Low FL	
< 10 million	15.4%	23.1%	38.5%
>10 - 25 million	9.2%	4.6%	13.8%
>25- 100 million	24.6%	15.4%	40%
>100 million	4.6%	3.1%	3.6%
Total	50.8%	49.2%	100%
Chi Square = 5.70 Sign = 0.222; Ho accepted			

standing of SME managers associated with the basis of insurance and its types. The distribution of correct and wrong answers is presented in Table 4. It can be seen that: first, the literacy of insurance understanding, not all respondents answered correctly. As many as 25 percents of respondents still answer wrongly, meaning some SME managers still do not understand what is meant by insurance. SME managers consider insurance something that is not necessary for business because insurance in their minds is just a life insurance.

Second, the literacy associated with the type of insurance shows that 80 percent of respondents have answered correctly and there are still respondents who answered wrongly by 20 percent. Still related to the basic literacy of insurance, some SME managers still consider that in-

surance is only "life insurance". While in reality, there are various types of insurance in addition to life insurance such as health insurance, fire insurance, vehicle insurance and so forth, which in fact SME managers can use it for the benefit of their business.

Third, the literacy on health insurance premiums, indicates that only 38 percent are able to answer correctly while the remaining 62 percent misjudged. These results suggest that the understanding of financial managers about health insurance premiums is very poor. Respondents assume that the insurance premium for children is more expensive than the parents. SME managers do not understand that the size of the premium is determined by the risk, where the risk of parents is higher than children. Therefore, the health premium of parents is more expensive



than children.

Fourth, the literacy of insurance premiums is associated with benefits, indicating that as many as 86 percent of respondents have answered correctly. However, there are still respondents who answered wrongly that by 14 percent. It can be explained that most SME managers have understood that the amount of insurance premium depends on the benefits desired by the customer. A few who answer wrongly do not understand about the premium, so that the premium depends on the type of insurance rather than the size of the desired benefit. The average Literacy score on insurance is still low at 55.7.

#### **Literacy toward Risk Management and Investment**

The financial literacy on risk and investment in this study is the SME managers' understanding of the risks that SME managers will face in choosing an investment. Distribution of respondents who answered correctly and incorrectly is presented in Table 5. It can be seen that: firstly, for the risk of placement deposit placement, there are still many respondents who answered wrongly as much as 43 percent. Respondents who answered wrongly still think that depositing funds on deposits is "very risky". It could be that SME managers still remember the 1998 monetary crisis that resulted in a massive fund withdrawal rush. SME managers do not know that there is currently a Deposit Insurance Corporation (DIP) that guarantees customer deposits. Managers declare "safer" to keep money at home or even SMEs who keep their funds in the Family Empowerment Cooperative or at SME Cooperative.

Secondly, the literacy on land investment versus deposits gives good results, where only 18 percent of the respondents who answer the wrong one are correct. This suggests that SME managers are well aware that investment in land is a "safe" investment. This is supported by interviews with respondents stating that the respondents will set aside the proceeds from the sale and will buy the land as a form of SME investment.

Thirdly, the literacy associated with "mutual funds" showed poor results, of which 49 respondents answered wrongly. This suggests that SME managers' understanding of "mutual funds" is still very low, not even knowing that "mutual funds" is an investment option that SME can use in its business development. This result can be interpreted that, managers understanding about investment is only investment in real asset, while investment in

financial assets still lay impressed. The average risk and investment literacy score are very low at only 47.3. This score is the lowest compared to the average basic literacy score of finance, savings, and loans as well as insurance literacy.

#### **Level of Financial Literacy of SME managers in East Java**

The purpose of this study is to examine the Financial Literacy of SME managers in East Java. It also reviews the financial literacy based on the demographic aspect. Financial literacy in this case is the ability of SME managers to assess and make effective decisions regarding the management of their business finances. This financial literacy is very important for SME managers. The higher the level of financial literacy SME managers should be more appropriate SME managers are in taking business decisions. The statistical descriptions of each Financial Literacy Dimension are presented in Table 6. It can be seen that the average financial literacy of SME managers is 55.8 lower than the median and mode. This can be explained that the level of financial literacy SME managers are still low with a small deviation rate, which indicates the level of literacy SME managers in East Java fairly evenly or high homogeneity.

The highest score of financial literacy is 78 and the smallest is 16.7. Q-1 worth 51 means that the highest score of 25 percent which is low in financial literacy is 51; while Q3 = 62.5 means the lowest value of 25 percent SME high financial literacy of 62.5. The results of this study support the previous study found Fatoki (2014), Oseifuah (2010) who found evidence that the financial literacy of young entrepreneurs and micro-enterprise owners in South Africa is still low.

When compared to the previous research conducted by Lutfi and Rr. Iramani (2008); Margaretha and Pambudhi (2015), then the financial literacy score of SME managers of 55.8 is still better than the student's financial literacy score of only 48.9. This is very logical, considering the financial literacy of managers SME obtained directly because of financial practices conducted in managing their business, while the financial literacy of students obtained based on the theory of knowledge obtained from the learning process conducted in Higher Education.

#### **The SME Financial Literacy Based on the Demographic Perspective**

Another purpose of the study is to review financial literacy based on the financial literacy di-

mension, as well as to review the financial literacy based on demographic aspects, which include gender and education of SME managers as well as SME business and SME income. Furthermore, it deals with the test of relationship between demographic factors and the level of financial literacy. The level of financial literacy in this analysis is divided into the level of high financial literacy i.e. if the literacy score is greater than the median value of 56.7 and the low literacy rate is the opposite.

### **Financial literacy by Gender**

Cross-tabulation of financial literacy based on Gender of SME managers is presented in Table 7. It can be seen that from the managers of 58.5 percent of SME men, who have high financial literacy scores as much as 35.4 percent more than with low level of financial literacy ie as much as 23.1 percent. In contrast, female SME managers, the high financial literacy rate was 13.8% less than the low level of financial literacy of 27.7%. Result of examination relation between Gender with financial literacy yield value chi square 4.67 with significance level 0.031.

The result above provides empirical evidence that there is a significant relationship between the Genders with the level of financial literacy SME managers. This supports the results of previous research conducted by Margaretha and Pambudhi (2015) which proved that Gender influences financial literacy, but does not support a study conducted by Sucuahi (2013) that failed to prove gender as a predictor of financial literacy MSME management in Davao, City.

### **Financial literacy Based on SME management education**

Table 8 presents a cross-tabulation of financial literacy based on SME management education. Based on Table 8, it can be seen that the majority of SME managers have high school/vocational education at 47.7 percent. Only 13.8 percent of SME managers are undergraduate education. Of all SME managers, it can be seen that the percentage with a high level of financial literacy is less than the low literacy rate. However, managers with high school/vocational and D3 (undergraduate)/S1 (graduate) education, the percentage of which has a higher level of financial literacy is greater. Based on the test results can be known chi square value = 19.88 with a significance level of 0.001 which means  $H_0$  is rejected. It can be explained that there is a significant relationship be-

tween education and the level of financial literacy of SME managers in East Java. This empirical evidence supports the results of previous research conducted by Margaretha and Pambudhi (2015) and Sucuahi (2013) which proved that the level of education influences the financial literacy of micro entrepreneurs in Davao, City.

### **Financial Literacy Based on the Old Aspects of SME Business Management**

Table 9 presents a cross-tabulation of financial literacy based on the length of SME management efforts. It is known that the majority of SME managers have run their business for more than 10 years with higher levels of financial literacy than the low level of financial literacy. The result of testing with chi-square = 9.75 and the significance = 0.033 proves that there is business age correlation with the level of financial literacy, meaning the longer the business manager runs its business, the higher the level of financial literacy, because financial literacy can be obtained because of the experience. It can be explained that the length of business undertaken by SME managers can increase the level of financial literacy SME managers in East Java

### **Financial Literacy Based on Aspects of SME Earnings/Turnover**

Table 10 presents cross-sectional financial literacy based on SME turnover. It can be seen that the majority of SMEs have turnover > 25 million-100 million that is of 40persen. The lowest percentage is SME with a turnover of more than 100 million from each turnover group. Therefore, it can be seen that the percentage of managers who have low literacy more is than those with high literacy rate.

In this context, SMEs should have high turnover, so that their financial literacy is also high. The rationalization is that by having a high turnover rate, the SME managers could decide how to finance, how risk management and other things are related to financial management. However, the results of this study indicate that SME managers who have high financial literacy have low turnover. Based on the test results, it shows that the value of chi-square = 5.70 with significance level = 0.222 which means  $H_0$  accepted. It can be explained that there is no significant correlation between the levels of financial literacy and the income/turnover rate of SMEs.

The results above do not support the previous research conducted by Siekei et al. (2013) who

succeeded in obtaining empirical evidence that financial literacy influenced the performance of SMEs in Kenya. The difference in results can be due to differences in the measurement of financial literacy, which in this study uses the dimensions of personal financial literacy measurement while in the previous studies using the dimensions of special literacy measurement for SME.

## 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

The financial literacy level of SME managers is still low where the average literacy score is 55.8 with median and mode of 66.7. The lowest financial literacy occurs in the aspect of literacy of risk management and investment, where the average score is only 47.3. It implies that they need to increase the financial literacy by the regulator in order to improve the ability of SME and manage the finance well. Thus, by doing so, the SMEs can increase their competitiveness.

Other result shows that there is a demographic relationship between gender, education, length of business and financial literacy. It can be concluded that demographic aspects determine the high level of financial literacy of SME managers. However, this study fails to prove that the financial literacy of SME managers can determine the SMEs' turnover. Therefore, it is necessary to review other factors that determine the high level of the SME's financial literacy.

The instruments used in this study can be still simple so that the reliability is low. For that reason, for the future research, other researchers need to develop more consistent instruments with indicators that can better measure financial literacy, especially for the SMEs.

## REFERENCES

- Atkinson, A, McKay, S, Kempson, E & Collard, S 2006, 'Levels of financial capability in the UK. Results of a baseline survey', Bristol: University of Bristol, viewed November 27, 2006, from <[http://www.pfrc.bris.ac.uk/completed\\_research/fincap\\_baseline.html](http://www.pfrc.bris.ac.uk/completed_research/fincap_baseline.html)>.
- Bank Indonesia, 2012, *Hasil Kajian Kredit Mikro, Kecil dan Menengah untuk Kegiatan Produktif*, Bank Indonesia: Jakarta.
- Braunstein, S and Welch, C 2002, 'Financial literacy: an overview of practice, research, and policy', *Federal Reserve Bulletin*, November, pp. 445-57, available at: <[www.federalreserve.gov/pubs/bulletin/2002/1102lead.pdf](http://www.federalreserve.gov/pubs/bulletin/2002/1102lead.pdf)>.
- Chen, H and Volpe, RP 1998, 'An Analysis of Personal Literacy Among College Students', *Financial Services Review*, Vol. 7 No. 2, pp. : 107-128.
- Departemen Koperasi, 2010, *Perkembangan Data Dunia Usaha Mikro, kecil, Menengah (UMKM) dan Usaha Besar (UB) tahun 2009-2010*, Jakarta: Departemen Koperasi.
- Danes, SM and Hira, TK 1990, 'College Students and Credit Card Use: An Analysis of Financially At-Risk Students'.
- Fatoki, Olawale, 2014, 'The Financial Literacy of Micro Entrepreneurs in South Africa', *J Soc Sci*, Vol. 40 (2), pp. 151-158.
- Margaretha, Farah and Reza Arif Pambudi, 2015, 'Tingkat Literasi Keuangan pada Mahasiswa S-1 Fakultas Ekonomi', *Jurnal Manajemen dan Kewirausahaan*, Vol. 17 (1), pp. 76-85.
- <http://bappeda.jatimprov.go.id/2012/06/19/SM-E-jatim-tumbuh-42-juta/>, viewed 3 March 2014.
- Lutfi and Rr. Iramani, 2008, 'Financial Literacy Among University Students and Its Implication To The Teaching Method', *Proceeding 8<sup>th</sup> Annual SEAAIR Conference*, pp. 401-407.
- Nicolini, G, Cude, BJ and Swarn Chattejee, 2013, 'Financial Literacy: A Comparative Study A Cross Four Countries', *International Journal of Consumer Studies*, 37, pp. 689 – 705.
- Nurwilda Solikhah and Rr. Iramani, 2013, 'Financial Value Added Pada Bank Syariah Paradigma Baru Pengukuran Kinerja Berbasis Value', *Working Paper*, Forum Riset Ekonomi Syariah.
- O'Donnell, N and M Keeney, 2010, 'Financial Capability in Ireland and a Comparison with the UK', *Public Money and Management*, 30 (6): 355-362.
- Oseifuah, Emmanuel Kojo, 2010, 'Financial Literacy and Youth Entrepreneurship in South Africa', *African Journal of Economy and Management Studies*, Vol. 1 (2), pp. 164-182.
- Perry, VG 2008, 'Is ignorance bliss? Consumer accuracy in judgments about credit ratings', *The Journal of Consumer Affairs*, Vol. 42 No. 2, pp. 189-205.
- Sieki, Jacqueline, Juma Wagoki & Aquilars Kalio, 2013, 'An Assessment Of The Role Of Financial Literacy On Performance Of Small And Micro Enterprises: Case Of Equity Group Foundation Training Program On SMES In Njoro District, Kenya', *Journal of Economics & Finance*, Vol 1 (7), pp. 350-379.

Sucuahi, William T 2013, 'Determinants of Financial of Micro Entrepreneurs in Davao City',

*International Journal of Accounting Research*, Vol. 1 (1), pp. 44-51.