Original Article

# The Support of Entrepreneurship to Ageing **Economic Independence**

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Abstract - On entering retirement age, financial independence is dependent on assets capable of generating income, to support daily necessities. Act No. 11 of 1992 about Pension Fund, stipulates 55 years as the normal retirement age. In Indonesia, only civil servants are guaranteed retirement income as their pension fund is state-regulated, while private or stateowned enterprises apply various pension schemes, to help their workers achieve independence through personal retirement income-earning assets. Hence, entrepreneurship has become one of the alternatives for these workers.

This article discusses the potential of workers aged above 20 years to become entrepreneurs, using the General measure of Enterprising Tendency (GET) developed first in 1987-1988 by SallyCaird and Mr. Cliff Johnson at Durham University Business School. This article also analyzes the asset portfolios of workers, as they prepare to retire. The assets analyzed in this article comprise savings or investments in the forms of saving account, deposit account, mutual fund, corporate stock, pension fund, insurance, obligation, saving in cooperatives, non-bank financial institutions, and community/individual.

The tendency of becoming an entrepreneur is determined by the entrepreneurial background of the family, participation in entrepreneurship training, and depth of knowledge regarding entrepreneurship. However, workers' inadequate knowledge of the financial sector becomes an obstacle as regards their future retirement plans, further lowering their financial independence after retirement. Generally, aging people in Indonesia depend on their children or family, although their entrepreneurial tendency increases their probability of starting an enterprise.

Early education for workers as regards preparation for retirement is a necessity, as financial literacy emphasizes the importance of financial independence while preparing for retirement, with various alternatives of income sources including the startup of an enterprise.

Keywords (JEL Classification) - Relation of economics to social values (A13), Econometrics (C01), Financial institution and services general (G20), Economics of elderly (J14).

### I. INTRODUCTION

Financial independence upon retirement is largely determined by one's preparation during their working age, which could be achieved through advances in the financial sector and government pension programs. A more developed financial sector would increase incentives for saving up for retirement, through various forms of investment in banks and non-bank financial institution such as savings account, deposit account, mutual fund, corporate stock, pension fund, insurance, obligation, and saving in cooperatives as an alternative. Advancements in financial technology have been seen to simplify, innovating new alternatives to save. Evidently, wider coverage of pension guarantees in a country would contribute towards the financial independence of its society. In Indonesia however, universal health insurance has been enacted, leaving pension insurance behind.

The financial literacy of Indonesian society is still low [1] mentioned only about 21.84% are well informed of financial institutions that comprise banks, insurance, finance companies, pension fund, capital market, and the pawn industry. Through his research on financial literacy, reported no significant differences between the gender groups, as 18.84% of females and 24.87% of males were financially literate. He also reported financial literation was higher amongst fellow retirees (35.54%).

Hence, starting an enterprise is one investment alternative for workers before retirement, in order to achieve financial independence. The drive to start a successful enterprise is determined by one's character and confidence towards entrepreneurship, comprising of strong motivation, ambitiousness, craving for autonomy, creative tendency, calculated risk-taking, and an internal locus of control (belief you have control over own destiny and make your own 'luck') (Caried, Sally 2013). Regardless of the drive, starting an

enterprise necessitates adequate funding and knowledge in managing an investment of your personal fund. Therefore, implying that financial literacy is an essential aspect that affects the decision of starting an enterprise.

This article analyses the probability of a worker starting an enterprise in retirement, based on their enterprising tendency, and other contributing factors. To gather empirical data, we surveyed 97 workers aged 20-64 years, observing how they prepare for retirement and their probability of starting an enterprise to support their finance upon retiring.

#### II. LITERATURE REVIEW

#### A. GET2 Test

The General measure of Enterprising Tendency (GET) test was first developed in 1987 by Sally Caird and Cliff Johnson at Durham University Business School, funded by the University Grants Council[2]. GET2 is the second version of the GET test. The basic premise of the test was to identify specific entrepreneurial characteristics and those characteristics that could be nurtured via education and training. Furthermore, the approach to developing the measure of enterprising tendency involves identifying key characteristics associated with entrepreneurial behavior and the entrepreneurial act itself.

The key entrepreneurial characteristics identified include strong motivation, characterized by a high need for achievement and autonomy; creative tendency; calculated risk-taking; and an internal locus of control (belief you have control over your own destiny and make your own 'luck'). People set up enterprises because they are highly motivated (to achieve something themselves) by good ideas and the will to manage risks, information, and uncertainties to achieve success.

Developed from an analysis of psychological tests and a bank of entrepreneurial descriptions, the test was piloted with entrepreneurs and other occupational groups to establish construct validity and reliability. The GET test provides an indicative, undefined measure of enterprising potential. The higher the score a person gets, the higher the potential for success when opening a business.

Therefore, an enterprising tendency is defined as the affinity to start up and manage projects. Indicatively, most enterprising people set up innovative projects more frequently, are growth-oriented, opportunistic in nature, and efficient with resources which include human, technological, physical, and organizational resources.

If a person is highly enterprising, they often display the following qualities:

 A strong need for achievement as they are highly motivated, energetic, and very diligent. They are

- also busy, driven, dynamic, and highly committed to getting things done. Inherently, their high motivation levels are characterized by a high need for achievement, manifesting as the desire to lead, shape, and complete projects.
- (ii) Desire to be in charge (need for autonomy) with their highly motivated and energetic nature, often predisposes them to do things their way. They are also independent, driven, and dynamic, seeking ways to work solo.
- (iii) Opportunity seekers with plans to utilize resources creatively (creative tendency); as they are restless with ideas, imaginative problem solvers, and holistic analyzers of cross-cutting issues. Their innovative tendency and need for achievement also help them to develop ideas, create new products and processes for new technologies, businesses, projects, organizations, comedy, and artistic outputs.
- (iv) The belief that they possess or can gain the qualities to be successful (an internal locus of control); They have an internal rather than external locus of control, which means that they believe to have control over their own destiny, further deciding their own 'luck'. This implies that they confidently seek to exert control over their affairs and draw on their inner resources, believing that success can be achieved through their own efforts and hard work.
- (v) Innovativeness and willingness to take a calculated risk (calculated risk-taking). Opportunistic in nature, they continually seek information and expertise, needed to evaluate if an opportunity is worth pursuing.

GET2 Test comprises of 54 questions, which requires the respondent to select answers that they consider relatable, with options ranging from 'A' for 'Tend to Agree' to 'D' for 'Tend to Disagree'. The GET2 test questions translated to Indonesian, measures enterprising tendency through five entrepreneurialattributes as follows: (i) Need for achievement (NACH100)- measured in rows 1 and 6 of the scoring sheet, i.e. Questions 1,10,19,28,37,46, 6,15,24,33,42,51; (ii). Need for Autonomy (AUTO100) - measured in row 3, i.e. Questions 3,12, 21,30,39,48; (iii). Creative Tendency (CT100) - measured in rows 5 and i.e. Ouestions 14,23,32,41,50,8,17,26,35,44,53; (iv). Calculated Risk taking (RT100) - measured in rows 2 and 9, i.e. Questions 2,11,20,29,38,47, 9,18,27,36,45,54; (v). Locus of control (LOC100) - measured in rows 4 and 7, i.e. Questions 4,13,22,31,40,49,7,16,25,34,43,52.

If a person agrees with a statement by circling A and a statement number is an even number, they get one point. However, if a person disagrees with a statement

by circling D and the statement number is an odd number, they also get one point. Other responses on the other hand get zero points, after-which all points gained are added together. The total addition of points gives a final score, which measures their entrepreneurial tendency.

Furthermore, respondents gain one point when they agree with even-numbered statements on the scoring sheet, that represent positive entrepreneurial statements. They also gain one point when they disagree with odd-numbered statements on the scoring sheet, that represent negative entrepreneurial statements. The scores for each entrepreneurial attribute as well as the total score are then calculated, with 54 representing the maximum score (representing General Enterprising Tendency), where a higher score indicates a higher enterprising tendency.

## B. Entrepreneurship Tendency Among ASEAN and Japan Students

[3] conducted a survey of 2482 students in ASEAN and Japan by applying the GET2 Test. The enterprising

tendency score is shown in Table 1 below. The tendency test score is 0-100. The higher the score, the higher the tendency of students to become entrepreneurs. Five components forming a score can also be seen in Table I.

Singapore is not included because of a lack of samples. However, the data of Singapore that are taken from the incubation center of Singapore Management University showed the highest score of the total which is 72.0. The highest point for Need for Achievement for Indonesia is 69.9 and the lowest point is for Vietnam 53.4. The point for Japan 49.7 is much lower than the ASEAN Average 61.9.

**Table 1. Summary of Enterprising Tendency** 

		Need for	Need for	Creative	Calculated	Locus of	
Country	n	achievement	Autonomy	Tendency	Risk taking	control	Total
BrunaiDarusalam	360	61.50	38.10	61.00	60.50	63.20	59.70
Cambodia	315	69.20	76.00	54.10	41.10	57.50	57.70
Indonesia	311	69.90	52.50	58.40	48.40	63.10	59.20
Lao	215	65.60	44.50	59.50	61.50	66.30	61.20
Malaysia	259	60.20	45.00	56.60	62.30	61.40	58.50
Myanmar	104	55.00	48.70	60.80	58.50	60.00	57.50
Philippines	127	62.60	44.60	63.10	68.20	66.70	62.90
Thailand	376	56.10	41.00	51.80	61.30	60.80	55.70
Vietnam	191	53.40	54.90	61.00	56.60	57.80	56.90
ASEAN Average		61.50	49.50	58.50	57.60	61.90	58.80
Japan	224	49.70	43.10	50.80	54.80	54.70	51.50

Source: [3]

## C. Senior Entrepreneurship

Senior entrepreneurship has many definitions, i.e. third age, older, second-career, late-career, post-career, grey, mature and early-retiree entrepreneurship.[4]. In Europe for example, countries with high senior entrepreneurship activities have a better institutional profile, compared to countries with low senior entrepreneurship activities [5]. Government policies in the form of support to entrepreneurship, simpler bureaucracy, and lower taxes were also found to be very different in countries with low and high senior entrepreneurial activity indexes. This further shows the important role of government in improving the entrepreneurial environment, as policies to support the senior population to become entrepreneurs, will yield high economic and social impact to the nation.

In-depth Interviews by [6] with elderly communities, indicated that the elders who were still

working appeared healthier, with the ability to finance their daily needs and at extension support their children and grandchildren.

[7]postulated that in forming a retirement investment portfolio, countless individuals face three decision problems: (1) how much to consume; (2) how much to invest from their savings, and (3) when to retire. Their reports showed that investment for early retirement tends to increase savings and reduce an agent's effective relative risk aversion, thus increasing her stock market exposure. However, an investor might find it optimal to increase his/her proportion of financial wealth held in stocks, as they age and accumulates assets, even when income and investment opportunities are constant.

#### III. METHODOLOGY

This article implements the GET2 test to measure enterprising tendency, which will be used as an independent variable in the logistic regression model, to determine the probability of someone starting an enterprise after retirement. The factor determining enterprising tendency was analyzed utilizing the ordinary least square (OLS) regression model, placing the result of the GET2 test as an independent variable.

## A. Empirical Methodology

Entrepreneurship tendency is used as an independent variable in logistic regression, to determine the probability of one starting an enterprise upon retiring. The quantitative measure of entrepreneurship tendency used was the General measure of Enterprising Tendency (GET) test, first developed in 1987-1988 by Sally Caird and Cliff Johnson. GET2 is the second version of the GET test. Using Ordinary Least Square (OLS) and Pearson correlation (Pearson chi-square), factors that affect one's entrepreneurship tendency were analyzed to explain the correlation between one's drive to start an enterprise and one's savings/investments, used to prepare for financial independence after retirement.

The first regression was conducted to analyze factors affecting entrepreneurship tendency  $(Tend_i)$  comprises a level of financial literacy  $(Fin_i)$ , the current owner of the business $(Bis_i)$  and participation in entrepreneurship training  $(Train_i)$ . The control variable employed comprises age  $(Age_i)$  and gender  $(Gen_i)$ . This model was used to analyze the goal of entrepreneurship encouragement programs in Indonesia.

$$Tend_i = \beta_0 + \beta_6 Fin_i + \beta_4 Train_i + \beta_1 Bis_i + \beta_5 Age_i + \beta_6 Gen_i + \varepsilon_i$$
 (1)

Fin; was measured using the number of financial products owned by the respondents. The questionnaires inquired if the respondents own 9 types of savings and investment, after which their answer (1 for yes, 0 for no) was multiplied with the weights that indicate literacy of financial products. Savings products from banks and cooperatives were weighted 1, pension and insurance 2, financial market product 3, and financial technology (fintech) product 4. The 9 types of savings and investments with its weight are as follows: (i) savings account/1, (ii) deposit account/1, (iii) corporate stocks/3, (iv) obligations/3, (v) pension funds/2, (vi) life insurance/2, (vii) mutual fund/3, (viii) savings in cooperatives/1, (ix) investments in IT-based financial (fin-tech)/4. Therefore, the value for this variable was between 0 and 20, which was divided by 20 to indicate the percentage of financial literacy, where a higher percentage implies higher financial literacy.

Ownership of business and participation in entrepreneurial training correlates with higher enterprising tendency, with reports by Lindquist, Sol, and Praag (2015) stating that parental entrepreneurship increases the probability of children's entrepreneurship to about 60% [8]. Self-employed parents serving as role models often assist children in understanding self-employment as a realistic and viable career. However, entrepreneurial interest remains high and stable over time for males but declines over time for females [9]. Thus, we expect that  $\beta_1$  to  $\beta_4$  in equation (2) above to be positively significant. During the study, we assigned  $\beta_5$  equals 1 for male and 0 for female, expecting positive significant correlation.

[10] postulated that financial literacy increases confidence levels of managers, in the management of small to medium-sized businesses, responding better to the needs of the company through adequate knowledge about instruments traded on financial markets. The measure of enterprising tendency involves identifying key characteristics of entrepreneurial people, associated with entrepreneurial behavior and the act itself. The key entrepreneurial characteristics identified include strong motivation, characterized by a high need for achievement and autonomy; creative tendency; calculated risk-taking; and an internal locus of control (belief you have control over your own destiny and make your own 'luck'). People set up an enterprise because they are highly motivated (to achieve something themselves) by a good idea, and the will to manage risks, information and uncertainties because they believe they can succeed [2]. Thus, we expected all  $\beta'$ s in the equation (1) to be significantly positive.

The second regression was the probabilistic regression (logit and probit) used to estimate the probability of starting an enterprise, to support financial independence upon retirement  $(Prob_i)$  based on entrepreneurship tendency  $(Tend_i)$  and saving rate  $(S_i)$ . The control variable used was current ownership of business  $(Bis_i)$ , participation in entrepreneurial training  $(Train_i)$ , age  $(Age_i)$ , and gender  $(Gen_i)$ . A higher entrepreneurial tendency correlates with a higher probability of starting an enterprise upon retirement, as does the savings rate  $S_i$  being the ratio of monthly income and expenditure. This model predicts the probability of new enterprises in the future, which is very crucial when planning programs that support the financial independence of elderly people.

$$\begin{aligned} Prob_i = \ \beta_0 + \beta_1 Tend_i + \beta_2 S_i + \beta_4 Train_i + \beta_1 Bis_i + \\ \beta_5 Age + \ \beta_6 Gen_i + \varepsilon_i \end{aligned} \tag{2}$$

## B. Sampling Methodology

A total of 97 workers aged above 20 years were interviewed, as regards their portfolio of savings and investment, after which the enterprising tendency test was conducted[2]. The respondents were selected using purposive random sampling in the Greater Jakarta Area, Indonesia.

#### IV. DATA AND ANALYSIS

## A. Entrepreneurship Tendency

Table II below shows the average score of the general entrepreneurship tendency test, conducted on 97 respondents aged between 20-64 years old. The total scores were in the upper percentile (60%), indicating a high tendency to start up a new business as a source of income after retirement. However, an indicator for the need for autonomy was extremely low (26%), further indicating the need for increased motivation and knowledge for future retirees, as regards investment and startup of a viable enterprise.

Table 2. The average result of the entrepreneurship tendency test

No	Enterprise Tendency	Short Description	Mean
1	Total	The tendency to start up and manage projects	60%
2	Need for achievement	Highly motivated, energetic, and has capacity for hard work	62%
3	Need for Autonomy	Highly motivated, energetic, likes to lead, shape, and do things their way	26%
4	Creative Tendency	Seeks opportunities and use resources to achieve plans	60%
5	Calculated Risk-taking	Innovative and willing to take a calculated risk	67%
6	Locus of control	The belief in control over one's destiny and 'luck'	70%

Notably, results from this study contrast with similar tests conducted by [3] on students in ASEAN areas, where the score for the need for autonomy was 52%, similar to the score of other components.

Table III below presents the comparison of enterprising tendency test scores in order to observe 3 effects; the existence of significant differences between females and males, current business owner status, and participation in entrepreneurship training. A prob t-test of less than 0.05, shows a significant difference between the two categories.

**Table 3. Enterprising Tendency Comparison** 

	Column		1	2	3	4	5	6
row	Enterprise Tendency		Total	Need for achievement	Need for Autonomy	Creative Tendency	Calculated Risk-taking	Locus of control
1		Female	0.60	0.62	0.28	0.60	0.63	0.70
2		Male	0.61	0.62	0.25	0.61	0.69	0.70
3	Gender	Diff.	-0.01	0.00	0.03	-0.01	-0.06	0.00
4	4	Prob t stat	0.25	0.48	0.20	0.38	0.0271**	0.47
5		YES	0.63	0.60	0.28	0.64	0.71	0.75
6		NO	0.58	0.63	0.24	0.57	0.64	0.66
7	Current business owner	Diff.	0.0470	-0.0285	0.0388	0.0672	0.0704	0.0829
8	8	Prob-t stat	0.0014**	0.130	0.165	0.0127**	0.0079**	0.0008**
9		YES	0.63	0.60	0.24	0.64	0.71	0.74
10	Participated in entrepreneurial training	NO	0.58	0.63	0.27	0.56	0.62	0.66
11		Diff.	0.046	-0.028	-0.029	0.077	0.090	0.082
12		Prob-t stat	0.0018**	0.1319	0.2284	0.004**	0.0013**	0.0008**

There was no significant difference between male and female respondents, except for the calculated risk-taking component score, as males were more prepared to take calculated risks in starting an enterprise when compared to their female counterparts. A further significant difference was observed with history of business ownership, participation in entrepreneurship training for creative tendency, calculated risk-taking, and locus of control scores. Similarly, the research of [3] reported a significant difference between students

who already had entrepreneur preparation activity and those without. The two researches highlight the importance of introducing entrepreneurship to society, starting with the introduction to various investments in the financial sector, as the preliminary step in managing business capital. Therefore, ownership of a business and participation in entrepreneurial training, berths knowledge in the financial sector, which is a primary factor for success in kick-starting an enterprise.

## B. Financial Literacy Support to Entrepreneurship

Table IV below shows three equations result of OLS regression of aforementioned equation (1). The score of five components of entrepreneurship tendency (Need for achievement, Need for Autonomy, Calculated Risk-taking, Creative Tendency, and Locus of control) was included as control variables. With the various control variables, financial literacy was reported to have a significant effect on entrepreneurship tendency. This indicates that financial literacy can increase one's confidence and potential in starting an enterprise, implying a financially literate individual would be more confident to start their own business, to support his or her finances after retirement. The increase of financial literacy within the society especially amongst future retirees is necessary, in order to support the sprout of entrepreneurship. Gender and Business ownership was not significantly affected the entrepreneurship tendency test. This shows that a person's ability to build an entrepreneur does not depend on gender and previous business experience. Hence, it's suggested that financial education should be conducted by the government and various financial organizations, to encompass everyone especially workers who will definitely retire.

**Table 4. Financial Literacy and Entrepreneurship Tendency Test** 

Table 4. Financial Literac	y and Entrep	reneursinp re	endency rest			
Dependent Variable: Total Entrepreneurship Tendency Test (Tend <sub>i</sub> )						
Independent Variables	1	2	3			
Financial Literacy (Fin <sub>i</sub> )	0.06154**	0.05516**	0.061913**			
	(0.000)	(0.000)	(0.000)			
	-	-				
Age $(Age_i)$	0.00048**	0.00050**	-0.00052**			
	(0.050)	(0.071)	(0.012)			
Gender( $Gen_i$ )(1=male,						
0=female)	-0.007	-0.007				
	(0.188)	(0.291)				
Business ownership $(Bis_i)$	0.007	-0.002				
	(0.230)	(0.727)				
Entrepreneurship Training						
$(Train_i)$	-0.004	-0.004				
	(0.484)	(0.504)				
Need for achievement	0.237**	0.212**	0.236**			
	(0.000)	(0.000)	(0.000)			
Need for Autonomy	0.099**	0.124**	0.097**			
-	(0.000)	(0.000)	(0.000)			
Calculated Risk taking	0.270**	0.316**	0.256**			
	(0.000)	(0.000)	(0.000)			
Creative Tendency	0.208**		0.216**			
	(0.000)		(0.000)			
Locus of control		0.203**				
		(0.000)				
Constant	0.129**	0.099**	0.133**			
	(0.000)	(0.000)	(0.000)			
Prob > F	0.000	0.000	0.000			
R-squared	0.928	0.906	0.923			

Note: \*\* Significant at 5% level

Another variable with significant effect was age, as a younger person showed better confidence in starting an enterprise after retirement. This shows that younger people are easier to sensitize, as regards financial independence. Consequently, it is suggested that support for workers to start their own enterprise early, should be encouraged from the get-go and not when they are approaching retirement. Presently in Indonesia, entrepreneurial training is focused on workers aged 50 years and above, as they prepare for retirement. Therefore, this research seeks entrepreneurial training for workers, right from when they are recruited by the government or any other institution.

The probability to start an enterprise after retirement depends on the confidence of starting a business, which was shown through the result of probabilistic regression using logit and probit, observed in Table V below.

Table V. Probability of Starting an Enterprise for Retirement

Dependent Variable: Probability of starting an Enterprise for					
Retirement					
Independent Variables	1	2			
Entrepreneurship Tendency Test	11.230**	6.395**			
	(0.046)	(0.043)			
Saving Percentage	11.787**	6.933**			
	(0.006)	(0.006)			
Business ownership	-1.647**	-0.989**			
	(0.081)	(0.067)			
Entrepreneurship Training	0.956	0.554			
	(0.293)	(0.272)			
Age	-0.079**	-0.047**			
	(0.043)	(0.035)			
Gender	1.681**	1.043**			
	(0.083)	(0.061)			
Constant	-3.619	-2.019			
	(0.327)	(0.339)			
Prob > chi2	0.000	0.000			
Pseudo R-squared	0.424	0.433			
Method	Logit	Probit			
Predicted Probability	0.8655	0.8661			

Note: \*\* Significant at 5% level

The probability of someone starting an enterprise after retirement is predicted to be quite high at above 80%. Apart from the confidence of starting an enterprise, the level of savings also has a significant effect, as a higher level of savings would increase the probability of starting an enterprise in the future. Hence, Savings increases confidence to start an enterprise upon retirement, and not the other way around. However, after retirement, there are two alternatives in utilizing their savings; either for their daily needs or as capital to fund an enterprise. Notably, the first alternative drastically lowers the activity level of retirees compared to when they were working, and further tend to deplete their level of savings. As regards the latter alternative, retirees can maintain their level of activities similar to when they were in employment, as they are tasked with a business to run, in order to generate profit accrued to their savings. However, starting an enterprise poses a great risk of failing, as

researches have shown that a higher level of savings encourages high-risk taking in starting a business.

The age of respondents and probability of starting an enterprise has a significant negative correlation shown by the regression result in Table 5 above. The results showed that younger persons tend to start an enterprise, save and invest, in order to collate adequate capital to start an enterprise after retiring.

[3] their survey on students in ASEAN showed that 58.8% of Indonesian students are ready to be entrepreneurs. Although this percentage represents a large pool of young persons to be an entrepreneur in the future, it is however not limited by age, as one can start and quit anytime. However, the negative correlation between the age of respondents and the probability of

starting businesses, recommends the creation of an awareness campaign for young people as regards the gains of retiring as a senior entrepreneur.

#### C. Retirement Investment Portfolio

Table VI below presents the percentage of respondents that own various types of savings and investments, and the related purposes of these funds after retirement. The last column shows the ratio of respondents who own savings/investment for retirement, against total respondents who own savings/investment. A higher ratio indicates the choice of respondents to either save or invest, in any product type for the purpose of retirement.

Table VI. Ownership of Saving/Investment for Retirement

No.	Type of saving/investment	Owners		Retirement Purpose	D 4	
		Number of Respondents	Percentage	Number of Respondents	Percentage	Ratio
1	Savings account	92	95%	76	78%	83%
2	Deposit account	46	47%	36	37%	78%
3	Corporate stock	19	20%	15	15%	79%
4	Obligation	11	11%	10	10%	91%
5	Pension fund	58	60%	58	60%	100%
6	Life insurance	55	57%	49	51%	89%
7	Mutual fund	12	12%	12	12%	100%
8	Cooperatives	50	52%	39	40%	78%
9	Fintech	31	32%	29	30%	94%

Reports from the table above show low knowledge of respondents regarding financial products such as corporate stocks, obligation, and mutual funds, in the capital market. However, almost all owners of these products were intended for post-retirement purposes. Notably, financial technology (fintech) based products, was significantly a primary choice. Furthermore, knowledge of financial products in the capital market and ways to invest either through stocks, purchase of obligations, or mutual funds were essential, although knowledge of pension funds and life insurance was quite high. Evidently, the participation of society in financial markets can increase market efficiency, further utilizing societal funds in banks, as they can directly monitor financial market events.

## V. CONCLUSION

Financial independence in retirement age is determined by preparation during working age, as the level of personal savings directly affects the confidence of starting an enterprise, to support their finances after retirement. Unfortunately, the level of savings in present-day Indonesian society is still relatively low, with barely 27.2% of income saved towards retirement preparations. Another cause was the society's low level

reduced revenue in the short term. Asides from receiving income, entrepreneurship also maintains their level of physical activities. Similar to these findings, indepth Interviews by [6] with elderly communities, indicated that the elders who were still working

of knowledge of the financial sector, as this research reported 10-12% of workers aged 20-64 years, are well informed of financial products in the capital market (stocks, obligation, and mutual funds). Therefore, to increase the level of savings in society and the potential of starting enterprises upon retiring, financial sector education should be encouraged. Further implying that increased financial literacy of the society would motivate a change of consumption pattern towards an increase in saving.

Results from the study also indicated that awareness to become an entrepreneur, in order to gain financial independence after retirement, was high amongst young people. This implied that the younger a person is, the higher the potential of becoming an entrepreneur. Therefore, financial education and entrepreneurial training would further encourage people, to consider entrepreneurship before and after retirement. Entering retirement, accumulated experience during working age would definitely strengthen the ability to become an entrepreneur.

Elderly people often show stronger partnerships within various circles, especially as suppliers of large companies. Moreover, loans from financial institutions also support senior citizenry businesses, although it appeared healthier, with the ability to finance their daily needs and at an extension support their children and grandchildren.

Therefore, the government should encourage various programs that increase the knowledge of the

financial sector and entrepreneurship, in order to increase the number of senior entrepreneurs in Indonesia. This is to lower the dependence of the elderly in the society, which would at the end long result in a more prosperous Indonesian economy.

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