



Ageing Economy in Early Retirement: The case study on Thailand

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Abstract

The objective of this study is to compare two groups of 55-60 years, one group who had taken early retirement and the other group who are employed, regarding their participation in the economy and to explore the factors affecting the ageing economy. This is quantitative research, and the data were collected via an online survey of a group of 495 people aged between 55 and 60 years selected by accidental selection. The Index of Item–Objective Congruence (IOC) was applied to test the reliability of the survey. The sample group was divided into two groups, those who had retired early and those who were employed, and employment status was used as a covariant together with dependent variables including demographic factors (gender, education level, career, and housemate) and factors relating to the use of the Internet (device, place, and daily usage). The findings show that the employed group are better prepared for retirement than the early retirement group; however, the early retirement population tends to participate more in the ageing economy, as they have higher in-kind and in-cash revenues. In addition, education level, career, housemate, Internet use, device, and place are factors affecting the ageing economy. The paper recommends that the public sector should create saving plans for young employees, and should provide information about how to prepare for retirement; moreover, to bring older people back to the labor market, useful courses and learning centers should be available for this population, so that they can use their potential to drive the nation's economy

Keywords: Ageing economy, Ageing society, Early retirement

1. Introduction

An ageing society, meaning a community where a growth in the number of older people makes up a growing share of the population, is an issue faced by many countries across the world, and this problem affects all sectors of society. In 2017, there were 962 million people aged 60 years old or over worldwide. This number is twice that of the older population in 1980 when there were 382 million elders, and the number of elders is expected to double again by 2050 when it is forecasted to be almost 2.1 billion. According to World Population Prospects: The 2019 Revision, around 16% of the world population will be aged over 65 by 2050, an increase on the figure of 9% in 2019. It is forecasted that 25% of people living in Europe and North America might be aged 65 or over by 2050. In 2018, the people aged 65 years or over outnumbered those aged under five years worldwide. The world population aged 80 years or above is expected to triple, from 143 million in 2019 to 426 million in 2050 (United Nations, 2019).

In Thailand, the changes in family structure caused by a decline in the number of children per family and a growth in the population of single people cause a drop in the number of workers. Since medical technology has been developing rapidly, resulting in a higher life expectancy for older people, the structure of the Thai population has changed. This effect does not include immigration. In addition, the number of people living in a big family, which is the traditional Thai style of living, has decreased significantly; as a result, the ageing population must save for their lives in retirement, and if their savings are insufficient, this will be a big issue. Hence, the public sector must allocate proper and adequate benefits to this older population (Sukpaiboonwat, 2017). According to the budget for older people estimated by the Office of Promotion and Protection of Children, Youth, Disabled People, the Elderly, and Vulnerable Groups, Thailand, the costs of benefits for older people in 2012 amounted to 170,000,000,000 Thai baths, and this will increase to 460,000,000,000 Thai baths in 2021, or triple in nine years. Moreover, old age benefit costs per person as a proportion of GDP and as a proportion of government revenue have increased gradually between 2012 and 2021, reflecting a higher Thai federal debt trend in the future (The Office of Promotion and Protection of Children, Youth, Disabilities, the Elderly, and Vulnerable Groups, 2012).

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Due to the global economic crisis in 2008, there were a high unemployment rate, restructuring of industries, and negative stereotypes toward older workers; therefore, in order to restore the financial balance and enhance the participation of elders in the labour force, researchers and policy makers are looking at strategies for how social security systems can affect personal retirement decisions. A central aspect of social security systems is to set up a specific employment policy, called the institutionalization of early retirement, to allow younger employees to claim social security retirement benefits from the institutionalization of early retirement (Von Nordheim, 2004; Kim, 2009; Engelhardt, 2012). Since impressive retirement benefits and a low early retirement age can create incentives for leaving the labour market, and low rates of employment of older people, there has been an increase in early retirement (Manoli & Weber, 2016).

Schalk and Desmette (2015) defined the term of early retirement as the withdrawal from the career path of a person of a certain age below the common retirement age and in the middle of, or late in, his or her career for a long period or completely from an organizational job because of the demands of work; it ends with a process of the gradual psychological disengagement from work. Previous studies have defined early retirement based on three factors including age, years of service, and eligibility. Even though these objective criteria can explain the understanding of early retirement decisions, an exclusive reliance on these factors might no longer be warranted (Feldman, 2013). Hence, subjective definitions of early retirement need to be taken into account, and one that is especially emerging is older employees' perceptions and attitudes regarding whether it is retirement time. First, a comparison with other workers within the same career or organization is used to define the common age for retirement. Second, such individuals view themselves as people who have retired, particularly when there is a psychological distance between them and their work. Third, later job and life stages lead to identification with non-work roles, which in turn may drive a decision about early retirement (Feldman, 2013).

According to the study of Zappalà and colleges (2008), at the individual level, the factors regarding economics and health are the most significant variables affecting early retirement. First, retirement means that material wealth and savings will be spent, so it is not surprising that fewer workers earning higher incomes tend to withdraw from their jobs early. This means that people with a better financial status prefer to delay their retirement. Second, health, both physical and mental, is another factor related to early retirement. Lawless (2015) stated that poor health should be taken into account as a powerful determinant of early retirement. Many people with poor health cannot extend their working lives or bolster their retirement assets (Johnson, 2018). However, some studies have shown that having health problems is a weaker factor of early retirement comparing to a factor of an option regarding the timing of retirement, because such an option encourages healthy employees to select early retirement regardless of the economic incentives of continuing to work (Leinonen et al, 2016).

Therefore, it is interesting to study the participation in the economy of the population who have retired early. The aims of this study are to compare two groups of older people, those who have retired early and those who are employed, regarding their participation in the economy, and to explore the factors affecting this.

2. Objectives

1. To compare two groups of older people, those who have retired early and those who are employed, regarding their participation in the economy
2. To explore the factors affecting elder participation in the economy

3. Materials and Methods

3.1 Population and Samples

The population in this study is the group of people aged between 55 and 60 years, and the sample group is 495 people selected by the accidental selection method. The sample group is divided into two groups, the early retirement group and the employed workers. This research aims to study the elder participation in economy by observing a group of elders aged between 55 and 60 years who have prepared for retirement and have good physical and mental health. This means that this sample group is seniors who



are still physically and mentally capable of living independently. In addition, the seniors were questioned about how capable they were at using digital devices and the Internet, since this era is the digital era where information technologies apply in every area of society.

Hence, the independent variables could be divided into two groups: demographic factors (gender, education level, career, and housemate) and factors relating to Internet use (device, Internet access point, and frequency of Internet use). The dependent variable is the factor affecting the participation in the economy of older people. Employment status is a covariant in this study.

Ageing economy, the dependent variable in this study, was defined from an in-depth interview as participation in the economy by older people to fulfil the needs of people aged 55 years or over. It involves revenue affecting the overall economy in terms of both in-cash income (e.g. incomes, pensions, savings, bonds, funds) and in-kind or time used (e.g. health, happiness, society, opportunity for older people to participate).

3.2 Study Tools

A survey was used as a tool in this study. First, a draft survey was created based on the literature review and an in-depth interview in order to define the independent variable in the study, which is the elder participation in the economy. After that, the survey was validated by checking its content validity, and then it was improved until it was suitable for the study and covered the study's objectives and context. Next, the survey was tested for reliability, and finally, the survey forms were created via Google Form.

Questionnaire development by Index of Item–Objective Congruence (IOC) is a statistical tool used to measure the reliability of a survey and evaluate the items of the survey. Specialists will score the items (R) ranged between -1 and +1, and the items could be scored as congruent = + 1, questionable = 0, or incongruent = -1. The item was kept if the IOC value was equal to 0.5 or above, while it was revised if the IOC value was lower than 0.5. The IOC value can be calculated from equation (1).

$$IOC = \frac{\sum R}{N} \text{ ----- (1)}$$

IOC = index of item–objective congruence

R = the rating (1, 0, -1) of the item as a measure of the objective by a content specialist

$\sum R$ = the summation of the R values

N = 3 = the number of content specialists

In this study, three specialists participated in commenting on the items used to measure the in-kind and in-cash ageing economy.

3.3 Analysis of covariance (ANCOVA)

Analysis of covariance (ANCOVA) is the statistic used in this study to analyse the data. It allows the inclusion of one or more continuous variables in addition to the variables of interest. ANCOVA can still access the main effects and the ability to answer the research hypotheses of ANOVA since it is an extension of ANOVA. However, the difference between ANCOVA and ANOVA is that 'covariate', correlated with the dependent variable, is included in the ANCOVA model, and the covariate has an influence on the means of the dependent variable adjustment (Tabachnick & Fidell, 2013).



4. Results and Discussion

Table 1 Interest earned per annum, categorized by employment status

	Interest Earned Per Annum (Thai baht)				Total (people)
	0	5,000-10,000	10,001-15,000	Over 15,000	
Early Retirement	143	27	18	67	255
	56.10%	10.60%	7.00%	26.30%	
Employed	126	0	0	114	240
	52.50%	0.00%	0.00%	47.50%	
Total (people)	269	27	18	181	495
	54.30%	5.50%	3.60%	36.60%	

From table 1, of those who have interest income over 15,000 bath during the year, the majority belong to the group of those who are still working, amounting to 47.5%, while the proportion of such people who have retired early is two times lower, at 26.3%. However, it is interesting that more than half of the population of both groups have no interest earned per annum, accounting for 56.1% in early retirement group and 52.5% in employed group. This means that active workers are better prepared for their retirement.

Table 2 Annual income from investments in assets, categorized by employment status

	Incomes from investing in assets (Thai baht)				Total (people)
	0	5,000-10,000	10,001-15,000	Over 15,000	
Early Retirement	206	31	7	11	255
	80.8%	12.2%	2.7%	4.3%	
Employed	144	18	0	78	240
	60.0%	7.5%	0.00%	32.5%	
Total (people)	350	49	7	89	495
	70.7%	9.9%	1.4%	18.0%	

From table 2, of those who have no income from investing in assets, the proportion of those who have taken early retirement is 80.8%, while the percentage of employed older people in this group is 60.0%. Moreover, the proportion of a group of employed older people who earn more than 15,000 baht of annual income from investments in assets is far higher than a group of early retirement, amounting to 32.5%. This reflects the fact that the elders who are employed have made better preparation for their retirement.

Table 3 In-cash revenue per year, categorized by employment status

	In-cash Revenue (Thai baht)			Total (people)
	5,000-10,000	10,001-15,000	Over 15,000	
Early Retirement	104	102	49	255
	40.8%	40.0%	19.2%	
Employed	186	54	0	240
	77.5%	22.5%	0.0%	
Total (people)	290	156	49	495
	58.6%	31.5%	9.9%	



Table 3 shows that the average annual in-cash revenue of people in the early retirement group is higher than the annual in-cash revenue of people in the employed group even though these individuals are in the same age group; as a result, this might be the cause of people wanting to retire early.

Table 4 In-kind revenue per year, categorized by employment status

	In-kind Revenue (Thai baht)			Total (people)
	5,000-10,000	10,001-15,000	Over 15,000	
Early Retirement	91 35.7%	113 44.3%	51 20.0%	255
Employed	120 50.0%	42 17.5%	51 20.0%	240
Total (people)	211 42.6%	155 31.3%	129 26.1%	495

The results from table 4 are related to those in table 3, and show that older people retiring early earn greater annual in-kind revenue than the employed group, despite belonging to the same age group; therefore, this might influence people to retire at an early age.

Table 5 Ageing economy (in-kind and in-cash revenue), categorized by employment status

	Ageing economy (Thai baht)			Total (people)
	5,000-10,000	10,001-15,000	Over 15,000	
Early Retirement	98 38.4%	94 36.9%	63 24.7%	255
Employed	284 77.5%	148 22.5%	63 0.0%	240
Total (people)	98 38.4%	94 36.9%	63 24.7%	495

The results from table 5 are related to those in tables 3 and 4 and show that the ageing economy of those who have taken early retirement is higher than that of employed older people despite belonging to the same age group. This means that employed older people have more participation in the ageing economy.

Table 6 Variance of the dependent variable analysed by Levene's Test of Equality of Error Variances (a)

F	df1	df2	Sig.
98	94	63	255

Note: a. Design: Intercept + Employment Status + Educate + Career + Housemate + Educate * Career * Income * Housemate * Employment Status
Dependent Variable: Ageing Economy

Table 6 shows that the variance of the independent variables is significantly different, resulting in an agreement violation; however, this is only expected to affect the data reliability slightly. Hence, ANCOVA can be used for the data analysis shown in table 7.

**Table 7** Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	16222266456175.48 (a)	19	8.538E+11	62.125	0	0.713
Intercept	1.264E+13	1	1.264E+13	919.46	0	0.659
Employment Status	1.729E+12	1	1.729E+12	125.81	0	0.209
Education	3.087E+12	2	1.544E+12	112.31	0	0.321
Career	1.645E+12	5	3.29E+11	23.93	0	0.201
Housemate	1.808E+11	2	9.04E+10	6.57	0	0.027
Education * Career * Income * Housemate * Employment Status	5.068E+12	8	6.334E+11	46.09	0	0.437
Error	6.528E+12	475				
Total	5.474E+13	495				
Corrected Total	2.275E+13	494				

Note: a. R Squared = .713 (Adjusted R Squared = .702); Dependent Variable: Ageing Economy

The findings show that education level, career, and housemate affect ageing economy, while employment status is a covariate. The three independent variables and the covariate can explain the dependent variable, ageing economy, with an R squared of 0.713 or 71.3%. Gender is not significant, so it was eliminated.

Table 8 Variance of the dependent variable analysed by Levene's Test of Equality of Error Variances (a)

F	df1	df2	Sig.
19.809	15	479	.000

Note: Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Employment Status + Frequency + Device + Access + Frequency * Device * Access * Employment Status

Table 8 shows that the variance of the independent variables is significantly different, causing an agreement violation, but it only affects the data reliability to a small degree. Therefore, ANCOVA can be used for the data analysis shown in table 9.

Table 9 Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	11557800305994.53 (a)	12	9.632E+11	41.477	0	0.508
Intercept	1.16E+13	1	1.16E+13	499.399	0	0.509
Employment Status	3.215E+12	1	3.215E+12	138.45	0	0.223
Frequency	1.863E+12	3	6.211E+11	26.747	0	0.143
Device	1.651E+12	2	8.253E+11	35.54	0	0.129
Access	2.049E+12	2	1.025E+12	44.124	0	0.155
Frequency * Device * Access * Employment Status	2.379E+12	4	5.948E+11	25.615	0	0.175
Error	1.119E+13	482				



Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Total	5.474E+13	495				
Corrected Total	2.275E+13	494				

Note: a R Squared = .508 (Adjusted R Squared = .496)

Dependent Variable: Ageing Economy

The results in table 9 show that frequency of Internet use (Frequency), device (Device), and Internet access point (Accesss) affect ageing economy, while employment status is a covariate. The three independent variables and the covariate can explain the independent variable, ageing economy, with an R squared of 0.508 or 50.8%.

It is not surprising that employed older people are better prepared for retirement than those who have retired early because they are still earning money from their jobs, so they are accumulating savings and funds for investment; therefore, the income of the members of this group is increasing day by day. Looking at the in-cash revenues, the findings show that the early retirement population tends to participate more in the ageing economy. This is related to Lee and Mason's study (2014). These authors found that if savings and assets can lead to an increase in capital investment, the savings and assets accumulated by retired people may indirectly result in economy-wide productivity growth. They give the example of GDP growth in the UK throughout the 2010s, which was between 0.6 and 0.8 per cent higher because of the contribution of older people's assets. Looking at in-kind revenues, the early retirement population also participates more in the ageing economy than the employed one. When people withdraw from their career path, they have more free time and more freedom for their interested activities, hence these older people might develop their well-being. The study of Newman, Tay, and Diener (2014) revealed that subjective well-being is positively associated with many leisure activities.

Career is one of the factors influencing the ageing economy, according to this study. Employee productivity is based on factors such as experience, changes in labour market skill needs, and changes in mental and physical capacity. In some industries, especially labour-intensive industries, older workers experience declines in output. It has been found that the productivity of employees in automobile industry has decreased by around the age of 60, even though older employees are also found to make fewer mistakes. In the automotive industry, multi-generation teams that include older workers are more productive than the team that include only single-generation (Börsch-Supan & Weiss, 2016).

The ageing economy is affected by Internet use. There are no doubts that technology is a significant factor in allowing senior citizens to remain active in the community. The use of technology increases opportunities for employment and independent living and improves equality for older people, while it can also reduce social isolation. Older adults are also influenced by technology-enabled innovations and intelligent devices, and thus technological skills play an important role in employability (Ramachandran, 2011).

5. Conclusion

The findings show that employed older people are better prepared for retirement than the early retirement group since only a low proportion of them earn no income from interest every year or from investing in assets; however, the early retirement population tends to participate more in the ageing economy, with higher in-kind and in-cash revenues. Regarding the demographic factors, education level, career, and housemate are the factors affecting the ageing economy, while Internet use factors affecting the ageing economy are frequency of Internet use, device, and internet access point. For the future study, the career which is suitable for ageing people would be included.



6. Recommendations

1. According to the study, people who are still working earn more income from annual interest and investments in assets, so they are better prepared for retirement. This is a good trend because when this group of the population retires at the normal age, they will have sufficient savings to live on. Hence, the public sector should support employees by establishing policies regarding ways to prepare for retirement, such as creating saving plans for young employees, decreasing interest rates for loans for start-ups, and giving information about how to prepare for retirement.
2. Those in the early retirement group can earn more money by working. However, since they have already withdrawn from their career path, they might have no passion for their previous job. Hence, they can learn new skills that interest them, and start new jobs. They do not need to work full-time. Working part-time or volunteering is enough to create value for them. Thus, useful courses and learning centres should be made available for the early retired population to bring them back to the labour market where they can use their potential and drive the national economy. In addition, the government might offer benefits such as tax reductions to companies that hire these skilled older people.

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