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香港大學秀圃老年研究中心
Sau Po Centre on Ageing
The University of Hong Kong

Study on Money Management in Mature Adulthood

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A research commissioned by the Investor and Financial Education Council and conducted by the Sau Po Centre on Ageing

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1. Executive Summary

This exploratory study, conducted by the Sau Po Centre on Ageing of the University of Hong Kong, was commissioned by the Investor and Financial Education Council (IFEC) to investigate the usage of and attitudes towards personal finance management among the mature adults (defined as individuals aged 50 to 69 in this study). It covered four key aspects of managing finance in mature adulthood:

- Use of common financial products and services such as channels of using banking services
- Use of relatively new products or services enabled by technologies such as mobile wallets and biometrics authentication
- Adoption and perceptions of financial products targeting the mature segment like annuities, reverse mortgage, silver bonds
- Arrangements made and attitudes towards estate planning

A mixed research method combining a quantitative survey and qualitative focus group discussion was adopted. Fieldwork was conducted during April to October in 2018.

The key research findings are outlined below:

- **Active participation in the financial markets and preference for traditional service channels**
    - There is a high penetration of different financial products among the mature adults, with 85% owning credit cards, 65% having taken out life insurance policies and 64% investing in at least one type of financial products in the past year (with stocks topping the list at 54%).
    - When it comes to channels of using banking services, majority of the mature adults still prefer going to the bank branches and about half have never used online banking services, with concerns about cybersecurity being the major usage barrier. During focus group discussions, there was a high recall of news stories about hackers hacking into victims' bank accounts. These stories present a real threat to respondents who see the bank accounts as holding their life time savings. Apart from security concerns, many also preferred human interaction and were used to being served by bank staff.
- **Hesitation in adopting new financial services enabled by technologies in general but high acceptance of mobile payment**
    - Of the newer financial products and services, as much as 65% of the surveyed mature adults had used mobile wallets in the past year. Usage was mainly triggered by perceived convenience and discounts offered by merchants. Over half of the users also reported they first started using mobile wallets in mainland China and felt it was convenient. Focus groups respondents who used mobile wallets pointed out they did not have much security concerns over mobile wallets as they felt it was just like using credit cards and Octopus cards but even safer with the password protection.
    - Meanwhile, less than half of the surveyed mature adults were aware of the application of biometrics authentication (such as finger-vein, facial and voice recognition) in financial services, and majority were sceptical about the safety and therefore not interested.

- In general, a significant proportion (43%) of the surveyed mature adults felt new technologies are targeting young people and not for the ageing consumers. They were also concerned that their choice of financial services would become limited due to their being unable to catch up with the new technologies. Nevertheless, majority agreed (only 15% disagreed) that they would develop the confidence to use the new services enabled by technologies if resources are available to educate them on the usage (either demonstration or usage guidance such as videos or booklets).

- **High awareness yet low interest in annuities and other products targeting mature adults**
  - When asked about their outlook for their later life stage, over half (59%) were concerned that they might outlive their retirement savings.
  - Majority of the surveyed respondents were aware of the financial products targeting or made available to the mature segment such as annuities, reverse mortgage, silver bonds and voluntary health insurance schemes (VHIS). Interest level in these products was on the low side in general (less than one third indicated interest), especially for annuities (public scheme or private markets). While many saw the appeal of the public annuity scheme being a safe investment backed by the government, they looked at annuities as an investment tool and were deterred by the perceived low return rate.

- **Low incidence of setting up wills and enduring powers of attorney**
  - As much as 76% of surveyed mature adults worried they might be affected by cognitive impairment. And some 43% were concerned that they might not be able to leave estates for their children.
  - Only 9% of the mature adults had set up wills. A further 22% said they planned to do so while the vast majority (69%) reported they did not see the need. They were of the view that they did not need a will since they did not own much asset. About 40% also thought they were still too young to do so.
  - Only about one third said they had heard about the Enduring Power of Attorney (EPA), and among them, 39% said they were interested in setting up one. Those who were not interested in EPAs reported they tend to feel at ease with whatever circumstances they are in and therefore did not see the need for such arrangements.
  - About three quarters said they had made other arrangements such as setting up joint ownership for personal assets and sharing details of their personal finance (such as bank accounts and passwords) with family members.

- Further statistical analysis revealed that younger age (those in the 50s as opposed to those in their 60s), higher education level and higher income are strongly associated with higher acceptance of technology-enabled financial services, the relatively new financial products targeting mature adults as well as estate planning arrangements.

Based on these findings, we have the following recommendations for financial education targeting mature adults:

- **Broaden the target group with tailored deliveries:** Financial education for mature adults should start before they enter old age (often defined as 60 or 65 years of age or older), which means targeting people who are in their fifties. This is so that they can have a longer horizon to apply what they learn to better manage their personal finance and plan for their retirement.

Of note, the segment of mature adults aged between 50 and 70 is far from being a homogenous group. The segment straddles across two life stages - those soon-to-be-old nearing retirement versus those already retired and crowned with the “elderly” label. There are significant variations between those in their fifties and those in their sixties especially regarding attitudes towards technology-enabled financial services. Therefore financial education for this segment could not be done in “one size fits all” approach and calls for targeted and tailored approach.

- **Address the knowledge gaps and cultivate the right attitudes:** Efforts should focus on strengthening knowledge, skills and attitudes of the mature adults, which would ultimately lead to behavioural change.
    - On the front of **technology-enabled financial services**, cultivating the right attitudes is crucial. The mature adults should be educated to adopt a technology-neutral stance, that the new services carry benefits as well as potential risks, and mastering the necessary skills would enable them to choose services that suit themselves. While they shouldn’t be unreasonably deterred by negative news coverage (such as hackers hacking into bank accounts or systems), they also shouldn’t just see the convenience brought along by technologies nor lured by the commercial promotions. Of equal importance is a focus on the practical skills (acquired through simulations or step-by-step pictorial guides), as well as precautions to avoid potential risks and seeking support.
    - In view of the high interest in **investing**, it is essential to strengthen mature adults’ knowledge of different investment products and the associated risks, especially considering the volatile financial markets in recent years.
    - How to make better plans for **personal finance in later life stages** should also be a core part of financial education targeting mature adults. Apparently there is a lack of understanding of the relatively new products like annuities and reverse mortgages in terms of their functions of providing a stable stream of income in retirement.
    - The study shows a lack of understanding of **estate planning**. In particular, the prevalent worries over dementia was contrasted with a low awareness level of EPAs. People should be educated about the functions and benefits of setting up wills and EPAs as well as other possible arrangements.
- **Incorporate financial education into development of new financial products and services:** With the fast development of fintech and financial innovations in the area of retirement planning, it is essential for the government and financial services sector to include financial education as an integral part of the new developments so that the launch of new products or services targeting or made available to mature adults always comes with adequate guidance. This is especially important for the mature segment as older people, facing the challenge of cognitive and physical decline as they age, are slower in adopting new technologies and understanding new products.

2. Introduction

Hong Kong, as with most developed countries in the world, is facing the challenge of ageing population. Whilst elderly services and benefits have received much attention, financial management among mature adults entering old age is often a neglected topic.

Yet financial management among mature adults is of growing importance in a fast ageing society. It affects how they prepare for and manage financial matters in retirement which is imminent for them. In recent years, various financial products such as annuities, reverse mortgage, have been targeting mature adults planning for their retirement. These have added to the already complex array of choices of financial products. Consequently, it has become even more important to understand attitudes and values towards financial management and behaviours in using financial services among the segment of mature adults.

Apart from the traditional understanding of old-age financial management, the emerging trend of utilising more technological innovations in financial services may also pose a concern for this segment. This may be due to difficult adaptation and reluctance to use the new technologies.

In Hong Kong, Chen and Chan (2014) posed a quantitative inquiry of acceptance by elderly Chinese adults in Hong Kong in using gerontechnology and, thus, established a new model of “senior technology acceptance model” (STAM). It stated that gerontechnology acceptance by the elderly has strong correlations with age, gender, education, economic status, gerontechnology self-efficacy and anxiety, facilitating conditions, and health and ability characteristics.

When issues of acceptance and usage of technology are imposed upon mature adults’ financial behaviours, the inquiry becomes more complicated. However, no deep investigations or close observations have yet to examine how mature adults with diverse demographic characteristics behave in using technology-enabled financial services or analyse their values, attitudes and lived experiences in financial management. To fill in this theoretical and practical gap, this project aims to explore financially related issues of the mature adults in Hong Kong.

For the purpose of this investigation, mature adults are defined as individuals in their fifties and sixties (aged 50-69), covering pre-retirees close to retirement as well as those who have retired not too long ago.

3. Objectives of the Study

- To investigate the mature adults’ usage and perceptions of different financial products and services, with a particular focus on technology-enabled financial services;
- To examine their attitudes and understanding towards financial management in later life stages, including estate planning.

4. Theoretical Framework

The unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al., 2003) and the senior technology acceptance model (STAM) (Chen & Chan, 2014) are combined as the theoretical framework of this project.

UTAUT aims to discover and, thus, explain user behaviour intentions to use an information system and information technologies. Some scholars (Zhou, Lu & Wang, 2010; Dwivedi, Rana, Chen & Williams, 2011) have demonstrated that UTAUT was built on eight theories: the theory of reasoned action, the technology acceptance model (TAM), the theory of planned behaviour (TPB), the PC utilisation model, the innovation diffusion theory (IDT), the social cognitive theory (SCT) and the integrated model of technology acceptance and planned behaviour.

Amongst them, TAM is arguably the most widely accepted theory in examining how users come to accept and use a technology. The basis of the theory is made up of three constructs: perceived usefulness, attitude toward using the technology and perceived ease of use. Mixing these three factors, together with effects from other external variables, leads to behavioural intention and, ultimately, results in actual use.

The UTAUT, which was developed in 2003, took TAM and other similar models as references in the development process (Venkatesh & Davis, 2000; Legris, Ingham & Collerette, 2003). It is also based on the premise of the causal relationship of behavioural intention and actual use behaviour. There are four significant constructs that determine such effects: performance expectancy, effort expectancy, social influence and facilitating conditions.

The senior technology acceptance model (STAM) was developed to explain technology usage behaviour of older adults in Hong Kong with the control variables of TAM being elaborated, including gerontechnology self-efficacy, gerontechnology anxiety, facilitating conditions, cognitive ability, etc. (Chen & Chan, 2014).

During the development of the questionnaire and semi-structured discussion guide for focus group discussion, constructs of these models were taken into consideration. Therefore, questions covered interests in the technology; senior financial products and estate planning; difficulties and other obstacles of these items; effort and performance expectancy; and overall perception towards the new financial technology.

5. Research Methodology

5.1. Overview of Research Design

This study used mixed quantitative-qualitative approaches in the study design, sampling, construction of measures and data analysis. Whilst qualitative findings can be used to improve the limitations of measures that have been implemented in quantitative survey instruments, qualitative protocols can also be developed from quantitative data.

As such, this project advocated that a quantitative survey be complemented with a qualitative approach to systematically collect data on particular items. In this study, two focus groups were conducted at the first stage. Using the analysed qualitative discussion on mature adults' attitudes and behaviours towards using in financial products and services, the questionnaire for the survey was developed. These two discussions suggested reasons for why people may like or dislike technology-enabled financial services as well as products targeting mature adults. The reasons based on qualitative findings were then implemented as options for the multiple choice questions for the quantitative inquiry. After the survey findings became available, another two focus groups were organised to further explore the most concerning issues in mature adults financial management, covering technology-enabled financial services, mature adult financial products and estate planning.

5.2. Focus Groups

5.2.1. Method Introduction

The most significant difference between using focus groups compared to other types of qualitative approaches is that the data were produced in a group setting. The participants influence and are influenced by one another (Stewart & Shamdassani, 2014).

A qualitative approach aims to understand how individuals make meaning of their experience and the social world (Smith & Firth, 2011). Data collection through focus group discussion emphasises interaction between participants to generate diversified and additional information from the data obtained from one-to-one interviews in a survey (Hyde et al., 2005; Parker & Tritter, 2006).

5.2.2. Overall Operation

Four focus groups were conducted in this project. The first and the second focus groups were conducted at the very beginning of the project, and the third and the fourth focus group were conducted after completing the survey. The first two focus groups were exploratory in nature and findings were used to design the questionnaire for the survey, whereas the second set of focus groups aimed to complement the survey findings and conduct an in-depth investigation of the respondents' experiences and feelings. At least eight respondents were recruited for each focus group.

The first two focus groups were held during April and May 2018, whilst the last two focus groups were held at the end of October 2018. Each group discussion lasted around 90-120 minutes. A total of 34 mature adults in their fifties and sixties participated in the focus groups. Using an open-ended interview protocol to orient discussion, Dr. Vivian Lou facilitated the focus groups with the assistance of co-investigators and research assistants. Discussion questions for the first two focus groups were developed by the literature review and major investigation goals of this project. It was designed to cover a range of issues about financial products, financial services and the acceptance of technology used in financial products and services. Then, the discussion guide for the third and the fourth focus groups addressed the survey findings. All the discussions were audio-recorded with the permission of the participants.

5.2.3. Sampling

The respondents were chosen by purposive sampling (diversity in social economic status, education level, gender, financial behaviours and the acceptance level of technology-enabled financial services) (Palinkas et al., 2015). The participants were recruited through non-governmental organisations and the researchers' personal network. Three NGOs actively facilitated the recruitment, including the Aberdeen Kaifong Welfare Association, Helping Hand and The Salvation Army. The study was designed to include mature segments aged 50-69, with as diversified demographic background as possible in each group. Of note, the profile of focus group participants is skewed towards those in their sixties.

Participation in the study was voluntary. The researchers encountered some difficulties in recruitment. Mature adults, particularly elderly aged 60-69, were highly sensitive to the discussion topic of personal finance; therefore, some of the respondents were unwilling to share personal experiences on this topic at the very beginning. To make participants feel comfortable, the researchers used both constructed groups and natural groups in facilitating focus groups. As analysed above, through purposive sampling, constructed groups were formed to voice disagreement. However, natural groups were simultaneously mixed with constructed groups to make the participants feel comfortable. Natural groups are typically used in studying natural interactions, such as within a family or peer groups or amongst acquaintances to elicit conversations and interactions in a normal environment. Therefore, for the four focus groups, there were four peer friends in each group, whilst the other participants were strangers (Kamberelis & Dimitriadis, 2013).

5.2.4. Data Analysis

Audio-recordings of focus group discussions were transcribed and analysed for subsequent phases of the study. At an initial stage, the transcriptions were analysed to obtain a general theme of the data and reflect on their meaning. Then, a more detailed analysis was operated and the data were split into different themes and divided into segments or units that reflected specific opinions, attitudes and the lived experiences of the participants. Following this conclusion, a list of topics was generated, and the topics were compiled into themes and analysed as key findings (Smith & Firth, 2011; Rabiee, 2004; Sim, 1998). Then, the data produced and collected from across four focus groups were analysed to fit into these themes. Based on this categorisation, the researcher contextualised the analysis to determine the interconnectedness of issues and conditions. Ultimately, a broad picture of the mature adults' financial behaviours and attitudes towards specific financial products and technology-enabled financial services emerged.

In the second qualitative phase, a focus group discussion guide was developed in accordance with the findings from the survey and the first two focus groups, which were conducted to elaborate on the discovered themes. The discussion guide was designed specifically to address topics that needed "more in-depth exploration" or clarification (McMahon, 2007, p. 360). Ultimately, contextualisation is another critical part of a multi-method strategy in creating and making sense of data.

The anonymity of the participants in the focus groups is protected in this report. In the following analysis, the researcher will use "they", "them" or "their" instead of the singular pronoun to protect the identity of participants and focus on illustrating how their statements were representative of many focus group participants.

5.3. Survey via street intercepts

5.3.1. Sampling

Stratified quota sampling was adopted for this survey. The sampling population included older adults aged between 50 and 69. Sixteen sample groups were assigned according to three criteria: gender; age (50-54, 55-59, 60-64 and 65-69); and employment status. Data from the Hong Kong Census 2016 were used to determine the sample size of each group. As some of the groups had a small sample size, oversampling of these groups was executed to increase the accuracy for performing subgroup analysis of the respective groups. The sample size of the different groups is shown in Table 1 below.

Table 1: Sampling framework of street survey

	Age band	Working population	Non-working population
Male	50-54	58	30*
	55-59	57	31*
	60-64	34	30*
	65-69	30*	31
Female	50-54	52	31*
	55-59	37	36
	60-64	31*	40
	65-69	31*	41

* Oversampling was applied in the group

The achieved sample size was 600. After weighting was applied, the weighted total was 499.

Face-to-face interviews via street intercepts were adopted for data collection and fieldwork was performed from 22nd August 2018 to 4th September 2018 at selected high-traffic locations throughout the 18 districts of Hong Kong. Interviewees were first subjected to three screening questions to determine whether they were eligible as well as whether the quota for each group had been reached. Institutional approval was obtained from the Human Research Ethics Committee of The University of Hong Kong prior to conducting the survey.

5.3.2. Measures

The questionnaire was constructed in the spoken Cantonese language, which is the primary language of most people in Hong Kong. The questionnaire consisted of five sections: sociodemographic characteristics; usage of financial products and services; adoption of new technologies in financial services; perceptions of financial products targeted at mature adults; and estate planning. Questions included whether they are aware of the financial products/services, if they had ever used or purchased said products/services, their interest towards the products/services, why they were or were not interested in using the products/services and how they perceived new financial technologies and products.

5.3.3. Characteristics of survey participants

A total of 600 mature adults participated in the survey. Their demographics are summarised in Table 2. The male to female ratio was around 1:1. A total of 42% of the participants worked full-time, 13% worked part-time and 45% were household workers, retired or non-working interviewees. The working interviewees came from a variety of job categories, with most of them serving as service and commercial sales (n=84, 26%), workmen (n=73, 22%), technical workers (n=71, 22%) and clerical workers (n=66, 22%). The majority of the interviewees had a household monthly income of HK$30,000-49,999 (n=201, 33%) and HK$20,000-29,999 (n=169, 28%). As for personal income, over half of them had a monthly income of HK$10,000-19,999 (n=175, 53%), whilst those who were not working had an average monthly income of HK$5,000-9,999 (n=148, 55%). The participants also had diverse education background. Most of them received a secondary school education (senior secondary: n=245, 41%; junior secondary: n=203, 34%), whilst only 79 (13%) received further education. Public housing was the major living place of the interviewees (n=237, 39%), followed by owned private housing (n=189, 31%). Around 90% of the interviewees were married, 55% of the participants had a spouse who was not retired and 33% had a retired spouse. Almost all of the interviewees had children, with 91% of them having at least one working child.

Table 2. Demographics of interviewees

	Freq. (N=600)	%
Male	301	50
Age groups		
50-54	171	28
55-59	161	27
60-64	135	23
65-69	133	22
Work status		
Full-time	250	42
Part-time	80	13
Household worker	133	22
Retired	95	16
Not working	42	7
Work categories (n=330)		
Service and commercial sales	84	26
Workmen	73	22
Technical workers	71	22
Clerical workers	66	22
Merchants, self-employed	19	6
Professional, managerial, administrative executive	17	5
Household monthly income		
Below $10,000	11	2
$10,000-19,999	118	20
$20,000-29,999	169	28
$30,000-49,999	201	33
$50,000-79,999	81	14
$80,000-99,999	20	3
Personal monthly income (working interviewees) (n=330)		
Below $5,000	3	1
$5,000-$9,999	66	20
$10,000-19,999	175	53

$20,000-29,999	64	19
$30,000-49,999	19	6
Above $50,000	3	1
Personal monthly income (non-working interviewees) (n=270)		
Below $5,000	59	22
$5,000-$9,999	148	55
$10,000-19,999	60	22
$20,000-29,999	3	1
Education		
Primary school or no education	73	12
Junior secondary school	203	34
Senior secondary school	245	41
College/diploma/associate degree	55	9
Bachelor’s degree	16	3
Master’s degree or above	8	1
Housing		
Public housing	237	39
Owned private housing	189	31
Owned subsidised housing	111	19
Rental housing	63	11
Marital status		
Married, spouse not retired	333	55
Married, spouse retired	201	33
Widowed	28	5
Not married	23	4
Separated/divorced	15	3
Children (n=577)		
Has children	564	98
No children	13	2
Details about the children (n=564)*		
Age≥18, working	516	91
Age≥18, in school	67	12
Age<18	41	7

* Multiple selection was allowed

5.3.4. Data analysis

Statistical analysis was performed to compare interviewees who were interested in each specific product/service, and $P<0.05$ was considered to be statistically significant. All statistical analyses were performed using SPSS 25.0.

6. Research Findings

6.1 Usage of Financial Products

- High penetration of different financial products observed, with 85% owning credit cards, 65% having taken out life insurance policies and 64% investing in at least one type of financial products.
- Stocks were the most common investment vehicle with 54% of surveyed respondents having traded or held stocks in the past year.
- In the focus groups, many respondents expressed that they invested in financial products to beat inflation and supplement their retirement funding. There was a consensus that *safe investment with stable returns* is the most important consideration when investing.

In the survey, interviewees were asked if they have purchased or owned any of the listed financial products (Table 3). About 85% of them had a credit card, 65% had purchased life insurance, and around half (54%) had invested in the stock market. The questionnaire included five investment products: stock; unit trusts or mutual funds; bonds; derivatives; and foreign currency. Around 64% had made an investment in at least one of the products (defined as "investors"), and 54% had made an investment in stocks and/or derivatives (defined as high risk-taking investors).

Table 3. Financial products interviewees purchased or owned in the past 12 months

Financial products	%
Credit cards	85
Life insurance	65
Medical insurance	44
Mortgage	13
Loans	9
Annuity	5
Stocks#	54
Foreign currency*	27
Unit trusts/mutual funds*	21
Bonds*	12
Derivatives#	5

*: Investment
#: High-risk investment

Significance tests were conducted on the survey data to identify demographic factors that correlated with the investment behaviours. Five factors were shared for both investors and high risk-taking investors: younger age (50-59), working, having a family income higher than $20,000, married and higher education status (senior secondary or higher) (Tables 4-5). Apart from the five factors, no housing burden, which was defined as owning an apartment, also predicted high risk-taking investing behaviour (Table 5).

Table 4. Factors correlated with being an investor

	Investor (n=321)		Non-investor (n=178)	
	Freq.	%	Freq.	%
Age 50-59	215	67	77	43
Working	197	62	79	44
Family income >$20K	291	90	104	60
Married	262	97	187	82
Senior secondary education or higher	210	65	58	32

Table 5. Factors correlated with being a high risk-taking investor

	High risk-taking investor (n=271)		Other (n=228)	
	Freq.	%	Freq.	%
Age 50-59	197	73	95	42
Working	176	65	100	44
Family income >$20K	252	93	146	64
No housing burden	187	69	70	31
Married	227	97	222	84
Senior secondary education or higher	181	67	86	38

In the focus groups, many participants were of the view that investing is an essential measure to beat inflation and stretch their retirement fund. And majority understood that investing inevitably involves some degree of risks, as aptly put by one respondent:

> *"No investment is 100% safe, maybe except for the government's public annuity scheme. You have to take risks in any case, at any rate, when you invest."*

Participants of the focus groups all agreed that "safe and stable returns" were the most essential and important factors when managing their investments at this life stage. When asked what types of investments they would consider as safe, blue-chip stocks, foreign currencies, annuities (particularly the public annuity scheme), gold and real estates were common mentions. In particular, quite some participants opined that gold has been one of the safest investments throughout the generations.

> *"The stock market is highly risky nowadays…if you want to invest for income in your later life stage, gold is the best choice. I think even banknotes are not reliable".*

> *"Before my parents suffered from stroke, the first thing they invested in was gold when they had savings. They locked the gold in their safe deposit box, which we could not even touch".*

> *"Buying gold is the safest choice, though the market has been not rising for a while".*

> *"…Gold prices will rise when the political situation is unstable…"*

Some participants with a relatively higher socioeconomic status emphasised that it was important to diversify investments to reduce risk. For those who had a certain degree of savings, they diversified their investments to guarantee stable returns. Some representative views were presented as: *"don't put all your money in one financial product – not even in the government's annuity scheme - try to balance the investment. Only in that way can you guarantee the finances for your retired life".*

6.2 Channels of Using Banking Services

- Visiting bank branches was the most used channel for using banking services among the mature adults and just over half (52%) of mature adults surveyed used online banking. Security was the greatest barrier over online banking, while many simply preferred face-to-face service with bank staff.
- Less than half (47%) of surveyed respondents used mobile banking apps, but users tend to use banking apps more frequently with 10% claiming to use it on a daily basis.
- Avoiding queues at bank branches and usage convenience were the main drivers for using online/mobile banking.

Survey respondents were asked how frequently they used banking services via different channels (Table 6). ATMs were the most frequently used service, with 94% using it a "few times per month" or more. Visiting branches was also a favourite option, with 51% of participants having reported doing so a few times per month. Online banking, mobile banking apps and phone banking were less common amongst the interviewees, with around 50% having never used any of these previously.

Table 6. Use of banking services

	Almost everyday		Few times per week		Few times per month		Once every few months		Few times per year		Never	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Visiting branches	9	2	39	8	204	41	143	29	99	20	5	1
ATM	0	0	185	37	283	57	9	2	5	1	17	3
Phone banking	5	1	16	3	59	12	63	13	130	26	226	45
Online banking	3	1	49	10	126	25	47	9	36	7	238	48
Mobile banking apps	49	10	46	9	80	16	32	6	27	5	265	53

Cash withdrawal (69%) and money transfers (63%) were the most common reasons to visit a branch (Table 7). Meanwhile, the most common activity when employing online banking or mobile apps was to check their account balance (95%) (Table 8). As to the drivers for online/mobile banking services (Table 9), 78% said they did so to avoid long queues at the branches and 76% said they were easy and convenient to use.

Table 7. Reasons for visiting branches (n=395)

	Freq.	%
Cash withdrawals	274	69
Fund transfers	249	63
Currency exchange	177	45
Buying financial products	130	33
Others	19	5

Table 8. Services used in online banking/mobile banking apps (n=267)

	Freq.	%
Check account balance	254	95
Fund transfers	169	63
Check monthly statement	161	60
Pay bills	163	61
Stock trading	157	59
Currency exchange	83	31
Redeem credit card spending rewards	78	29

Table 9. Reasons for using online banking/mobile banking apps (n=267)

	Freq.	%
Avoid long queue at branches	**208**	**78**
Convenient/easy to use	**204**	**76**
Can be done anytime and anywhere	159	60
Quick process and immediate confirmation	133	50
Lower transaction costs	105	39

On the other hand, among the few non-users of ATMs (n=17 only), security concerns and difficulties in memorising password were the key barriers cited.

In the focus groups, majority of participants had no issue with using automated teller machines (ATMs), except for two older participants who said that they had never used and would not ever use ATMs. They insisted on visiting branches to get cash or perform transactions.

> "*I don't know how to use the machine/press the right buttons. What if I pressed the wrong buttons with my hand tremors?*"

> "*I have plenty of time to wait in the queue at banks now that I am retired. I can take a cup of coffee in branches while waiting for the service… I don't see the need to use other channels as long as the option of visiting bank branches remain available.*"

For online banking (Table 10), 69% of those not using it worried about the security while 59% preferred face-to-face services. About one third said they did not know how to operate a computer and that the online banking interface was inconvenient for them. Of note, access to computers and Internet coverage was not an issue.

Table 10. Reasons for not using online banking (n=238)

	Freq.	%
Worry about network security	**165**	**69**
Prefer face-to-face services	**141**	**59**
Inconvenient interface	87	37
Do not know how to operate computers	83	35
Hard-to-read instructions	55	23
Do not have internet coverage	26	11
Do not have computer	13	5

The focus group discussions revealed that concerns over security for e-banking often did not come from personal experience, but rather due to the negative news coverage of incidents involving hackers.

> "*There is news about hackers and financial frauds every single day! I read a news article about big financial losses due to online transactions this morning*".

> "*Hackers are everywhere, especially international hackers. You cannot track them, and you will never have an opportunity to get your money back*".

Many participants also shared difficulties with the use of passwords.

> "Although I know I should use different passwords for different accounts and services for better security, I just use the same password for all accounts for easy memory."

> "*As we are ageing, we will decline in memory. How will we be able to handle so many passwords?*"

Among the small group of mature adults who used online banking but not mobile banking apps (Table 11), the main reasons they cited for keeping off banking apps were concerns over the app security. Inconvenient interface and small screen of mobile phones were also common deterrents.

Table 11. Reasons for not using mobile banking apps (among those who use online banking but not mobile banking apps, n=33)

	Freq.	%
Worry about app security	**27**	**82**
Inconvenient interface	**18**	**54**
Small mobile phone monitor	**13**	**40**
Limited choices of services	5	14
My bank does not provide an app	4	11
Do not have mobile data/internet coverage	1	3

In the focus groups, some participants pointed out that the choice of services available in mobile banking apps are less than those available with online banking and therefore they only use online banking. They were also of the view that mobile banking was not user-friendly for older people because of the small screen.

Significance tests were performed to compare interviewees who use and do not use online/mobile banking. Six factors predicted the use of online/mobile banking: younger age (50-59), working, having a family income higher than $20,000, married, no housing burden and higher education status (senior secondary or higher) (Table 12).

Table 12. Factors correlated with the use of online/mobile banking

	Use online banking (n=261)		Do not use online banking (n=238)		Use mobile banking apps (n=234)		Do not use mobile banking apps (n=265)	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Age 50-59	199	76	93	39	179	77	113	43
Working	173	66	103	43	156	67	121	46
Family income >$20K	242	92	155	65	248	93	179	68
No housing burden	169	65	88	37	154	66	104	39
Married	227	97	222	84	227	97	222	84
Senior secondary education or higher	172	66	95	40	155	67	112	42

In the focus groups, many participants who did not use e-banking were in fact interested in the service because of the perceived convenience. And they again pointed to improved security as the key driver for usage.

6.3 Drivers & Barriers of Using Technology-enabled Financial Services

- Overall speaking, the surveyed mature adults were lukewarm towards the new financial services enabled by technologies and less than half (45%) agreed they need to keep abreast of the development of technologies in financial services.
- On the flip side, well over half of the surveyed respondents agreed that demonstrations and user manuals would boost their confidence in using the technology-enabled financial services.
- High awareness of mobile wallets (91%) while less than half of the surveyed mature adults had heard about the various biometrics authentication technologies in financial services.
- As much as 65% of the mature adults have used mobile wallets in the past year, and about one third of those who never used it before were interested.
- As with online/mobile banking services, tangible benefits and convenience were the key drivers for various relatively new financial service enabled by technologies.

A number of statements were used to gauge the mature adults' attitudes towards the new financial services enabled by technologies (Table 13). Over one third (43%) felt the new technology-enabled financial services are for young people and not suitable for them, and 37% claimed they did not feel comfortable using the new services. Nevertheless, 60% were confident that they would be able to use the new technologies if sufficient guidance such as demonstrations and manuals were available.

Table 13. Attitudes towards new financial services enabled by technologies

	Disagree		Neutral		Agree	
	Freq.	%	Freq.	%	Freq.	%
I should keep abreast of the development of technologies in financial services	93	19	181	36	225	**45**
It is easy for me to use the new financial services enabled by technologies	186	**37**	137	27	176	35
The technology-enabled financial services are for young people and not suitable for older people	174	35	109	22	217	**43**
I think I cannot cope with the new developments and I'm worried that my choices of financial services would become limited	106	21	179	36	214	**43**
If someone could demonstrate how to use a new service enabled by technologies, I would have confidence in using it	70	14	122	25	307	**61**
If there is a well-illustrated user manual for a new service enabled by technologies, I would have confidence in using it	78	16	123	25	299	**60**

A total of five relatively new financial services enabled by technologies were covered in the study (Table 14). Among these five items, mobile wallet saw the highest awareness and usage, with 91% of the surveyed mature adults aware of it and 65% having used one within the past year. Meanwhile, less than half of the respondents were aware of digital teller services and the various biometrics authentication applications. Usage was even lower at around 10% only whereas roughly one third of those who had not used respective services were interested in these items.

Table 14. Awareness, usage and interest in new technologies in financial services

	Awareness		Used within 12 months		Not used before but interested*	
	Freq.	%	Freq.	%	Freq.	%
Mobile wallet	453	91	297	65	47	30
Fingerprint/finger-vein authentication	231	46	57	12	66	38
Face recognition authentication	191	38	35	8	66	42
i-Teller/digital teller	200	40	38	8	52	32
Voice authentication	148	30	20	4	45	34

*Top 2 boxes on a five-point scale

Reasons for using (Table 17) and not using (Table 18) a mobile wallet were examined. Convenience (78%) and incentives from merchants (74%) were the key drivers, while over half of the respondents quoted positive experience from using mobile wallets when visiting Mainland China (where it has become widely prevalent) as a trigger. On the other hand, most of those who were not interested in using mobile wallets were concerned about safety, and about one third felt current payment methods were already good enough.

Table 17. Reasons for using a mobile wallet (n=297)

	Freq.	%
Convenient to use	**233**	**78**
Discounts/incentives from merchants	**220**	**74**
Used in mainland China before and liked it	**172**	**58**
Relatives and friends are also using it	145	49
Cash rebates from service providers	108	37
It looks cool to use new technology	86	29
Want to try something new/trendy	82	28

Table 18. Reasons for not being interested in using a mobile wallet (n=60)

	Freq.	%
It seems unsafe	**41**	**68**
Current payment methods are sufficient	19	31
It seems difficult to use	16	27
Inconvenience	13	23
Bad past experience	0	0

In the focus groups, quite some participants shared that they first used mobile wallets when visiting Mainland China, where it has become a must-have payment method. Interestingly, while many were concerned about cyber-security for using e-banking services, they thought mobile payment was secure – they were of the view that it is similar to using a credit card or Octopus but even safer since it requires access to their mobile phones which is protected by passwords. They also pointed to the fact that there is an upper limit for mobile payment and therefore potential loss is limited.

> *"I think it is much more secure to use mobile pay than even credit cards, since it has double authentication. Firstly, I unlock my mobile phone by fingerprint, then a password is required."*

On the other hand, some focus group participants opined credit cards and Octopus cards were sufficient for day-to-day payment use.

> *"So far, credit card and* ***Octopus card*** *can cover all my daily payments. I don't think I need an extra mobile wallet. But, I know it has been everywhere in mainland China. If this becomes the case in Hong Kong one day, I will learn how to use it. Most of my friends are using it now. Maybe it's time to give it a shot".*

Furthermore, those who did not use mobile wallets due to safety concerns were also attracted by the benefits.

> *"I don't usually use mobile pay apps. But at some supermarkets, you can enjoy a good discount if you use mobile pay. I used to download the app to pay and uninstall it after enjoying the discount."*

Six factors predicted usage of mobile wallets which were similar to those of using online/mobile banking (Table 19). This includes younger age (50-59), working, having a family income higher than $20,000, married, no housing burden, higher education status (senior secondary or higher).

Table 19. Factors correlated with the use of a mobile wallet

	Use mobile wallet (n=297)		Do not use mobile wallet (n=202)	
	Freq.	%	Freq.	%
Age 50-59	215	72	77	38
Working	196	66	80	40
Family income >$20K	271	92	125	62
No housing burden	188	63	69	34
Married	283	96	165	82
Senior secondary education or higher	206	69	61	30

For digital tellers, which were only available at a few bank branches at the time of the study, many survey respondents did not have an idea what they are. In the focus groups, when explained that it is like having a video call with a remotely located human teller, some participants felt sceptical about the safety and service level – they doubted if the system would be easily hacked into or broken down while in use. Many also reiterated they preferred face-to-face communication with human tellers.

> *"It seems a little bit weird if I have to talk to a machine at banks.*"

As to the biometrics authentication in financial services, interest level was also not high with only one third of surveyed matured adults indicating interest while majority felt undecided. Among the minority who were negative towards the biometrics authentication, concerns over safety of the technologies were again a key deterrent. They also felt current authentication means were already sufficient.

In the focus groups, participants also held mixed views. On the one hand, many participants saw the benefits of biometrics in replacing passwords;

> *"We cannot remember so many passwords. It will be great if we can safely use other choices like fingerprints to replace passwords for using financial services.*"

On the other hand they felt uncertain about the current biometrics technologies. Many participants were concerned that fingerprints could not be recognised in the system due to age-related skin abrasion.

"*My fingerprint was not recognised when I was using the e-Channel immigration clearance service. I tried many times but failed. I guess it was because of the skin abrasion as I aged*".

And majority was unaware of the finger-vein technology adopted by some ATMs. They also felt unsure about voice and facial authentication.

"Can v*oice be used as unique identification? Some people sound alike. And our voices will change as we grow old."*

"Facial recognition seems more reliable, but there are also factors like lighting, wearing accessories, make-up, etc that may affect the recognition."

Overall, participants agreed it is good to have biometrics authentication as options to existing authentication means, especially for dual authentication. Yet they still felt hesitant as to whether the current technologies were mature enough to offer the security they need.

6.4 Interest level in Financial Products Targeting Mature Adults

- Over half of the surveyed mature adults were concerned that they might outlive their retirement savings.
- Almost all surveyed respondents were aware of the public annuity scheme but only a fifth of them were interested in it. Those interested were mainly attracted by the perceived safety of the investment considering it is backed by the government. On the other hand, many thought the return rate was too low to satisfy their need.
- Awareness of annuity products in the commercial market, reverse mortgage and the introduction of voluntary health check schemes was also high while interest level remained lukewarm.

When asked about concerns about their financial well-being in the later life stage (Table 24), majority of surveyed mature adults were concerned that they might fall into financial difficulties due to unforeseeable happenings (67%) and outlive their retirement funds (59%).

Table 24. Financial concerns for later life stage

	Not worried		Neutral		Worried	
	Freq.	%	Freq.	%	Freq.	%
I might outlive my retirement savings	70	14	134	27	195	**59**
I might not be able to handle a major expenditure shock due to accidents	52	10	114	23	334	**67**

Financial well-being in old age has been a topic of interest in the society in recent years and a number of new financial products, many led by the government, are made available for mature adults. Five products including the public annuity scheme, annuity products offered by insurance companies, reverse mortgage, silver bonds and voluntary health check schemes (VHIS) were covered in the survey (Table 25) and awareness of all five products were high. Almost all surveyed mature adults were aware of the public annuity scheme (the scheme was open for subscription at the time of the survey) and 87% were also aware of annuity products in the commercial market. VHIS and reverse mortgage were also on their radar, while silver bonds received lower attention.

Meanwhile, interest in these products was on the low side with less than one third indicating interest.

Table 25. Awareness of and interest in financial products targeting mature adults

	Awareness		Interested in*	
	Freq.	%	Freq.	%
HKMC Annuity Plan	489	99	104	21
Voluntary health insurance schemes	464	94	143	31
Annuity products in commercial markets	428	87	87	21
Reverse mortgage	354	72	67	19
Silver bonds	317	64	87	28

*Top 2 boxes on a five-point scale

Only about one fifth of surveyed respondents were interested in the public annuity scheme. Among those who were interested, majority were attracted by the fact that it is backed by the government and therefore a safe investment as well as stable returns (Table 26). On the other hand, 62% of those who were not interested thought the return rate was not satisfactory (Table 27).

Table 26. Reasons for being interested in HKMC Annuity Plan (n=104)

	Freq.	%
Safe investment as the plan is backed by the government	**78**	**75**
Provides stable returns	**61**	**59**
Offers acceptable return rate	39	38
Can apply for Old Age Living Allowance by transferring assets into the plan	17	17

Table 27. Reasons for not being interested in HKMC Annuity Plan (n=385)

	Freq.	%
Return rate is not satisfactory	**240**	**62**
I may not live long enough to get back the principal that I paid into the plan	119	31
I do not have enough savings	108	28
I have sufficient savings for retirement	45	12
Joined other annuity plans	12	3
Other reasons	5	1

Subgroup analysis was performed by comparing street survey participants who were interested and not interested in annuity schemes. Three factors were found to correlate with such interest, including a higher family income (higher than $30,000), married and senior secondary education or higher (Table 28).

Table 28. Factors correlated with the interest in annuity

	Interested in annuity (n=104)		Not interested in annuity (n=395)	
	Freq.	%	Freq.	%
Family income >$30K	28	30	56	14
Married	99	96	349	88
Secondary education or higher	99	95	344	87

In the focus groups, some respondents spontaneously mentioned the public annuity scheme when discussing about investment products that they perceived to be safe. And while all thought the return rate was too low, many also see the benefits of the regular and stable income throughout retirement.

> "*It's not much, but still provides a regular and stable income every month. 'Regular and stable' is super important in your retired life, especially in Hong Kong as you don't have any pension".*

They concluded the investment to be *"a longevity competition versus the government"* (同政府鬥長命).

6.5 Drivers & Barriers of Estate Planning

- Three quarters of the surveyed mature adults were worried that they might be affected by cognitive impairment in their old age. Leaving assets to family members was a lesser concern, still a significant 43% had their mind on it.
- Only 9% of the mature adults had set up a will, and a further 22% planned to do so.
- About one third of mature adults said they had heard about Enduring Power of Attorney (EPA) but less than half of them had a clear idea what it was. None of those surveyed had set up an EPA themselves.
- Over half of the surveyed respondents had made other arrangements for their finance with transferring personal assets into joint ownership with family members being the most common.

With the growing coverage of dementia in mainstream media in recent years, it is not surprising that majority of the surveyed mature adults were aware and worried about the possibility of being affected by cognitive impairment as they aged. Meanwhile, traditional values of leaving estates for family members have led 43% of the respondents to worry about accumulating sufficient assets for inheritance purpose.

Table 29a. Concerns for later life stage

	Not worried		Neutral		Worried	
	Freq.	%	Freq.	%	Freq.	%
I might be affected by cognitive impairment	43	9	76	15	380	**76**
I might not be able to leave sufficient assets to my family	102	20	181	36	216	43

Regarding estate planning arrangements, only 9% of the mature segments had set up a will, and a further 22% had made a plan to do so. When probed, majority (69%) of them just thought it was about the right time to make the necessary arrangement at this life stage while about half did so to avoid arguments over money matters amongst their families' members (Table 29b).

Table 29b. Reasons for being interested in setting up a will (n=153)

	Freq.	%
It is about time to make an arrangement to settle the financial affairs after my death	**105**	**69**
To avoid arguments amongst my family members	**81**	**53**
To make sure my estates will be distributed to my intended recipients	43	28
Many assets are involved and I need to plan ahead	25	16

Among the 70% of mature adults who did not plan to set up a will, about half (54%) spontaneously responded that they did not see the need as they did not have much money to leave behind, and 40% felt they were too young to need a will (Table 30).

Table 30. Reasons for not being interested in setting up a will (n=346)

	Freq.	%
I don't have much money	**188**	**54**
I am still young and don't need a will yet	**137**	**40**
I think it's fine to distribute my estates in accordance with the law	88	26
I haven't decided how to distribute my estates	57	17
I don't have any offspring to inherit my estates	12	3

Comparing respondents who had already set up or were interested in setting up a will with those without any interest, factors such as being male, working, having a family income higher than $20,000, no housing burden, married and higher education status (senior secondary education or higher) were key determinants associated with higher interest in setting up wills (Table 31)..

Table 31. Factors correlated with the interest in setting up a will

	Interested in wills (n=153)		Not interested in wills (n=346)	
	Freq.	%	Freq.	%
Male	85	56	158	46
Working	92	60	184	53
Family income >$20K	87	84	311	79
No housing burden	52	81	206	47
Married	63	98	385	89
Senior secondary or higher education	99	65	168	49

Focus group discussion revealed that the topics about death and wills were not a taboo among mature adults. Many did carry the misconception that wills are only necessary for the wealthy people. Some respondents shared that they felt the default arrangement (per the Estates Ordinance) that the surviving spouse will inherit the deceased spouse's estates is already sufficient for them.

"All my properties and assets will be passed to my wife by law if I pass away which is what I want anyway, so I don't need to bother with a will."

Only a few respondents had set up a will, and one pointed out that she shared that she did not have any children and she did so to avoid her estates from falling into the hands of relatives that she didn't like. Others saw the benefits of making preparations for accidents that might hit any time.

Compared to wills, the mature adults were much less aware of Enduring Powers of Attorney (EPA). Only 33% of the surveyed respondents had heard about it; and among them less than half (45%) said they had an idea what it is about. None of the surveyed respondents had set up an EPA, whilst only 39% of those who were aware of EPA expressed an interest in it. The most common reason cited for the lack of interest was preferring to be at ease with their assets (45%). And 29% of respondents mentioned the high cost as a deterrent while 27% said they trusted their family to take care of things should they be affected by cognitive impairment (Table 32).

Table 32. Reasons for not being interested in EPA (n=100 respondents who have heard of EPA but not interested in setting up one)

	Freq.	%
I prefer to be at ease with my assets	**45**	**45**
It is expensive to set up an EPA	**29**	**29**
I trust my family to take good care of my assets in the event that I lost my mental capacity	**26**	**27**
I do not want to bother my relatives/friends	26	26
The process of setting up an EPA is complicated	22	22
I cannot think of a suitable person to appoint as my attorney	18	18
I do not think I will be affected by cognitive impairment	14	14

Among respondents who were interested in setting up an EPA, majority said they had yet to understand the details such as costs and legal considerations (Table 33).

Table 33. Perceived obstacles to setting up an EPA (n=64 respondents who were interested in setting up an EPA)

	Freq.	%
I have yet to understand the details such as related costs and legal considerations	**46**	**72**
I would like to wait until EPA becomes more popular	20	32
I still have not decided whom to assign the power	19	29
I do not know how to find a suitable lawyer and doctor	14	22
I still have not decided how to delegate the power	11	18

The major predictors for interest in setting up an EPA were younger age (50-59), working, having a family income higher than $30,000, married, no housing burden and higher education status (senior secondary or higher), which is of similar pattern for interest in technology-enabled financial services, annuities and wills (Table 34).

Table 34. Factors correlated with interest in EPA

	Interested in EPA (n=64)		Not interested in EPA (n=435)	
	Freq.	%	Freq.	%
Age 50-59	44	69	248	57
Working	44	69	232	53
Family income >$30K	56	88	198	46
No housing burden	63	98	385	89
Married	63	98	385	89
Senior secondary or higher education	43	67	224	52

In the focus groups, after the moderator explained what an EPA was, most participants felt the procedures of setting up one were daunting. Some were quick to point out they did not want to burden their family members or friends with the workload and responsibilities. Many also considered that specific financial and family caregiving arrangements due to a sudden event/situation could be resolved within the family without the need for an EPA.

> *"My family members will take good care of me if I got dementia. My partner knows all my bank accounts' passwords."*

> *"I have already written down all my accounts' passwords in an excel spreadsheet and put them in a secret folder; it is shared only with my daughter. I fully trust her, so I won't need EPA to add to her workload".*

In fact three quarters of the surveyed mature adults had made other financial arrangements for their later life stage apart from wills and EPAs (Table 35), with the most common one being setting up joint asset ownership and providing financial matters in detail to their families (31%).

Table 35. Other financial arrangements made

	Freq.	%
Transfer my personal assets to joint ownership e.g. by setting up joint bank accounts	**265**	**53**
Provide details of my financial matters (such as passwords to bank accounts) to my family members	**154**	**31**
Transfer my properties from sole ownership into joint tenancy	114	23
Purchase life insurance for estate planning purpose	105	21
Transfer my assets to my family members/others	98	20
Set up a trust for my estates	14	3
None of the above	113	23

7. Recommendation

International research has ascertained the benefits of raising financial capabilities which help people better allocate their resources over their lifetime (Lusardi et al., 2013). In Hong Kong, retirement has become a life stage characterised by financial instability, complexity and uncertainty. From a macro perspective, uncertainty in financial management in later life stages is increased by longevity risk (Hong Kong has the world's highest life expectancy) and insufficient retirement protection.

Financial education focusing on equipping mature adults who are about to enter old age with the knowledge and skills to manage their finance well in old age is meaningful on both the social and personal level. The findings of this study are relevant to financial education and even retirement policies, and recommended considerations for financial education strategies are highlighted below:

Broaden the target group with tailored deliveries: Traditionally financial education tailored for the mature segment tend to focus on retirees or elderly in their sixties or older. However, considering the growing longevity and the increasingly complex financial decisions regarding life in retirement, it is recommended to extend financial education coverage to those in their 50s on topics related to preparing for financial matters in old age. Our study also shows that the younger group of mature adults in their 50s have higher interest in different financial products such as annuities and arrangements like EPAs, and they are also more receptive to adopting technology-enabled financial services. Equipping them with the right knowledge, skills and attitudes will enable these mature adults to have a longer horizon to prepare well for their later life stages.

Nevertheless, within this segment of mature adults in their 50s and 60s, there are two distinct groups – those nearing retirement and those who have already retired. The two groups have different characteristics and financial education needs which called for tailored financial education tactics.

Address the knowledge gaps and cultivate the right attitudes: Our research points to a number of misconceptions and inadequacies in managing personal finance.

- ***Technology-enabled financial services***

  Hesitations among mature adults to use online banking and the relatively new financial services enabled by technologies largely stemmed from security concerns, which are in turn due to a lack of understanding of the applications. But while some mature adults were resistant to use technology-enabled financial services, many were attracted by the convenience and incentives such as shopping discounts. Further, majority were positive that they could learn how to use the new services through demonstrations and user manuals.

  Financial education that seeks to promote financial inclusion and enable mature adults to enjoy more options in financial services should focus on equipping mature adults with the skills and confidence in using the technology-enabled services. Simulations or step-by-step pictorial guides could be effective measures.

  It is equally important to ensure they have a healthy and neutral attitude towards technology-enabled financial services – that they understand the benefits as well as potential risks related to the new services. Education should cover precautions to avoid potential risks, such as setting transaction limits, and seeking support in the event of running into problems.

- ***Investment products***

  Financial risk taking is steeply reduced in older age (Bakshi & Chen, 1994; Mata, Josef, Samanez-Larkin & Hertwig, 2011; Zamarian, Sinz, Bonatti, Gamboz & Delazer, 2008). Scholars have further pointed out that age differences in financial risk taking typically emerge around retirement (Jianakoplos & Bernasek, 1998; Deakin, Aitken, Robbins & Shahakian, 2004). This has also been demonstrated in this research and many focus group participants shared that safe investments with stable returns were what they sought after. Yet, people may not have a correct understanding of the risks associated with different investment vehicles. For one thing, over half of the surveyed mature adults invested in stocks in the past year amidst a rather volatile market in 2018.

  Our research also shows insufficient understanding of annuities – many just saw annuities as another investment product and solely focused on the return, failing to understand the intended functions of annuities in countering longevity risks.

  All these point to a need in strengthening financial knowledge of different investment products and the basics of prudent investment. This is especially important in view of the growing array of new financial products made available as retirement planning tools.

- ***Estate planning***

  Majority of the mature adults in this study lacked a good understanding of estate planning. There are misconceptions that only wealthy people need to set up wills, and many considered themselves “too young” to need a will. There was also a low awareness of Enduring Powers of Attorney and many did not understand the benefits of setting up one.

  When educating mature adults about the benefits of estate planning, it is important to take note of the cultural considerations - as influenced by traditional values, many mature adults are against legal interventions in what they perceive to be family issues.

Incorporate financial education into development of new financial products and services: With the fast development of fintech and financial innovations in the area of retirement planning, it is essential for the government and financial services sector to incorporate financial education into the process of planning the new developments. This is especially important for the mature segment as older people, facing the challenge of cognitive and physical decline as they age, are slower in adopting new technologies and understanding new products.

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