

Financial inclusion sustainability pension system: A policy review of Malaysia and Thailand

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Abstract

Sustainable Development Goals (SDG) financial inclusion has been identified as a link to economic resilience, an important pension scheme element. Despite the international framework, however, most developing countries still face poverty among the aging population. Thus, this study aims to understand the pension scheme policies for developing countries. The focus discussion is the pension schemes, as they form the main retirement planning for an individual. This study reviewed secondary data such as previous studies, statistical data, newspapers, and official websites. This study is divided into four parts. First, to discuss the UFA2020 initiative and its broad strategies. Second and third, to identify strategies in both Malaysia and Thailand related to financial inclusion. Fourth, to discuss the pension schemes for both countries that provide economic resilience for an individual. The findings showed the policies adopted are essential to developing a comprehensive and applicable implementation of financial inclusion among the public. Overall, in terms of body of knowledge, this study's findings will contribute to the overall model framework development of comprehensive financial retirement planning. In terms of policy, this study verified the implication of pension scheme policy to enable authorities to identify adequate social security for the public.

Keywords: Financial inclusion; financial planning; financial resilience; pension scheme; sustainability

1. Introduction

Fundamentally, the United Nations (UN) developed Sustainable Development Goals (SDG) based on three broad pillars: environmental, social and social. Financial inclusion has assisted in economic and social pillars, supporting instability in the financial system and ensuring suitable products for all [1]. First, resource mobility within domestic by national savings enables assistance to increase government revenue. Second, to provide a range of suitable financial products available to all, focusing on those underbanked and unbanked to access on an ethically sustainable basis. In addition, financial inclusion has been identified as an essential enabler of SDG 2030 goals, which featured eight out of seventeen goals [1]. In fact, before the crisis, personal financial planning (FP) literacy had been the central focus of the financial inclusion notion. This FP become more critical post-pandemic COVID-19 crisis and has become an area of increasing concern among authorities and communities, as the crisis has significantly dampened individual savings.

This paper is awake due to the recent post-pandemic COVID-19 crisis on social security concerns among the Malaysian Employee Provident Fund (EPF). EPF, the largest pension scheme, declared 5.35 percent for conventional savings and 4.75 percent for Syariah savings. However, one of the highlights is the multiple allowable COVID-19 withdrawals in the year 2021 by the EPF members. According to EPF, via this, these special withdrawals, namely the i-Lestari, i-Sinar, and i-Citra, have recorded RM86.24 billion withdrawal the amount. Such massive withdrawals reduce retirement funds and concern among the public. According to EPF, the figures showed a concern for both authority and the public. Due to the special withdrawals, EPF showed a significant drop in savings among the citizens after COVID-19. Recently, EPF revealed shocking data amid post-pandemic for ethnic and income level groups. Bumiputera and B40 groups were the most affected group. Both decrease more than 68 percent of median income between April 2020 and December 2022. Particular withdrawal widens the gap between lower-income and higher-income groups. The lower income group suffers the most socio-economically disadvantaged. Subsequently, this group misses the compounding effect, affecting retirement funding, and social issues remain in the loop. Thus, it is essential to review the Malaysia policy, which is associated with financial inclusion, focusing on the pension scheme. This study also compares Thailand's national policy related to financial inclusion post-pandemic.

To support long-term global sustainability financial inclusion enablers, each country government is willing to take proactive initiative. One key initiative is promoting financial planning literacy [2] because it aligns with the financial inclusion initiative. In Malaysia, two leading associations have been established and recognized for assisting authorities in implementing and smoothly instilling financial planning literacy among citizens. In addition, the effect of financial services and high-speed broadband internet can move global closer to achieving financial inclusion through the fintech concept. Fintech can demonstrate potential lower costs, increasing speed, and broad accessibility. Besides money mobility within individuals, fintech also assists in channeling funds from authority and cross-border remittance transactions. Digital disruption is successful but challenging, involving financial integrity and stability, unconventional business models unable to fit existing frameworks, and consumers [3]. Thus, this led to the authority having difficulty balancing between fintech innovation enabler and financial system safeguarding. Therefore, leaders need to understand the fundamental financial behavior among citizens. Besides, the Organisation for Economic Cooperation and Development (OECD) conducted a pilot study on 14 countries to measure financial literacy, focusing on financial knowledge, behavior, and attitude variations [4].

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The study indicated that a large proportion of Malaysian respondents were active savers and careful purchasers. However, only 3 percent can decide on a recent financial product after seeking independent guidance. The study also highlighted that Malaysians lack two important elements, namely financial knowledge and financial attitude, compared with the average value of 26 countries studied. Financial knowledge denotes understanding financial products and concepts, including interest rates, compounding and discounting, inflation, and risks. Conversely, financial attitude denotes the mental mindset toward planning for long-term objectives. This indicates Malaysians cannot still decide to achieve financial planning objectives. Thus, this might lead to an undesirable situation in the future.

In these few decades, sustainable had become the global discussion worldwide. As such, the United Nations (UN) has identified global issues, including poverty, environmental degradation, inequality, peace and justice, and climate change [2]. Thus, the UN has developed the Sustainable Development Goals (SDG) as the master plan for a sustainable future. One of the important enablers supporting SDG goals is financial inclusion, which has been identified as seven out of 17 enablers of the SDG [2]. Financial inclusion permits businesses and individuals to admit valuable and reasonably affordable financial products and services that meet their needs. These needs include monetary transactions, savings, payments, credit, and insurance, which deliver responsibly and sustainably [3]. As a result, the financial planning initiative aligns and fits this financial inclusion need.

To achieve financial inclusion, the first step is ability admittance to an account, which functions as the individual's financial monetary transaction account [3]. This transaction account acts to keep money sent and accept monetary expenditures. This account is a fundamental entry to subsequent facilities and other financial services. Furthermore, financial access facilitates daily living, long-term planning, or in the event of unexpected emergencies. In addition, individuals tend to engage in other services, including credit and insurance, business expansion, or investment, to improve overall quality of life. Understanding the essentials of this transaction account serves as the starting focus point of financial inclusion [3]. This is being highlighted in the Universal Financial Access 2020 Initiative (UFA 2020) at the end of year 2020. Furthermore, the global COVID-19 pandemic has also affected and strengthened the establishment of digital financial inclusion platforms. This digital platform denotes a platform arrangement using cost-saving means to penetrate the depth of financially omitted, excluded, and underserved groups.

2. Materials and Methods

This study relies on secondary sources such as previous studies, statistical data, newspapers, and official websites. This study is divided into four parts: the World Bank's UFA 2020 Initiative, Malaysia National Financial Inclusion Strategies, the Bank of Thailand's Strategic Plan 2020-2022, and the pension scheme for Malaysia and Thailand countries. First, to discuss the UFA 2020 initiative and its broad strategies. Second and third, to identify strategies in both Malaysia and Thailand related to financial inclusion. Fourth, to discuss the pension schemes for both countries that provide economic resilience for an individual.

3. Results and Discussion

3.1 The World Bank's Universal Financial Access 2020 Initiative

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Fundamentally, the UFA2020 framework is grounded by the Payment Aspects of Financial Inclusion (PAFI) in 2015, chaired by the Committee on Payments and Market Infrastructures (CPMI). In 2017, the G20 member countries were dedicated to advancing worldwide, supporting and recognizing the Global Partnership for Financial Inclusion (GPFI) tasks. The initial achievement effort of G20 Principles for Innovative Financial Inclusion in 2010 further brought to High-Level Principles for Digital Financial Inclusion in 2016 (Figure 1). Through offered digital technology, the purpose is to develop national circumstances successfully. Based on the latest framework, eight High-Level Principles are being identified for the ability to inspire countries' authority to promote a digital financial inclusion approach (Table 1). These principles fundamentally collaborate from both depth G20 experience together with international standard-setting bodies' standards guidance. Besides risk management and encouraging digital financial product services development, it supports innovation needs [5]. There is a need to understand that the key importance of financial inclusion is to achieve a goal by itself and to function as a platform means to an end country's economic growth enabler and accelerator [3]. Financial inclusion has been identified as a building block to overcome poverty and economic growth opportunity, and critically with the digital financial services accessibility to join the new digital economy. Before the UFA2022 Initiative, only 1.2 billion individuals globally secured a financial account. According to estimation, there is still a balance of 1.7 billion, in which 31 percent of the global adults still do not acquire any transaction account. The reasons for such a situation were lack of money, location distance of financial services institutions, deficiency needed necessary documentation, and low trust in the financial services institutions [3]. However, with the implementation of the UFA 2020 Initiative, within 10 years, between the years 2011 and 2021, account ownership in the global arena increased by 50 percent and reached 76 percent penetration among world adults. Besides, between 2017 and 2021, for developing countries, account possession ownership increased by eight percent in the average rate, from 63 percent to 71 percent [6].

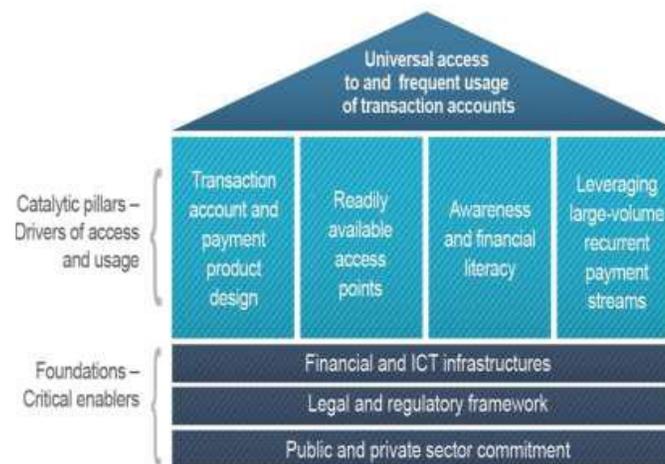


Figure 1. G20 High-Level Principles for Digital Financial Inclusion.

(Source: Adapted from The World Bank)

Table 1. G20 High-Level Principles for Digital Financial Inclusion.

Principles	Descriptions
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- Principle 1 Promote a digital financial inclusion approach – to initiate the expansion of inclusive financial platform systems, which include coordinated, monitored, and evaluated broad, high-level national strategies and action tactics plans involve
- Principle 2 Balance innovation invention and potential risk to accomplish digital approach – to stability in endorse promoting novelty innovation, to realize digital approach with recognizing identifying, assessing weighing, monitoring and managing to deal with potential new risk threat.
- Principle 3 Provide and permit and proportionate authorized legal and regulatory framework for the digital platform – to provide a legal regulatory framework by considering relevant G20 and worldwide international standard norm-setting body direction guidance into deliberation.
- Principle 4 Expand the digital infrastructure ecosystem – including financial, information, and communication technology arrangements. This is to safeguard the safe, reliable, and reduced cost provision digital platform by applying to applicable territorial geographic areas, mainly underserved rural zones.
- Principle 5 Establish responsible, accountable digital platform practices to safeguard and protect users – to create an inclusive method and data security protection that focuses on digital-specific issues platform.
- Principle 6 Strengthen digital and financial literacy and awareness – related to exclusive unique characteristics, benefits, digital risks, threats, and channels.
- Principle 7 Facilitate ease of user credentials identification for the digital platform – through over evolving user recognize identify methods, reachable accessible of products services, affordable, and verifiable and able fitting numerous requirements needs and levels risk threat, in which a risk-based method to due diligence investigation on the user.
- Principle 8 Track digital progress through a robust, vigorous, comprehensive data metric measurement assessment evaluation structure system. The structure system should leverage new input sources of digital data, allowing related stakeholders to examine and monitor the mutual demand- and supply of digital. Moreover, the structure system likewise empowers the evaluation to assess crucial agendas, programs, and reform transformations that effect.
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(Source: Adapted from The World Bank)

The focus of the UFA2020 Initiative is to envision that global adults will secure a transaction account or a digital electronic platform to store cash, withdraw for send payments, and deposit and receive monetary. This is the fundamental building block to succeed in individual financial economics lives, aligning with the financial planning perspective. Through the UFA2020 Initiative, the group has dedicated to caters 1 billion individuals to secure a transaction account platform through a targeted interventions approach [3]. The UFA2020 initiative concentrates on 25 countries where more than 73 percent of financially excluded individuals live (Figure 2). Some of the main countries with huge population such as India, China, and Indonesia, total 37.8 percent. Besides, the third-world countries are led by Pakistan, Bangladesh, and Nigeria. The centers approach focuses on a regulatory environment creating to permit access to the transaction accounts platform, intensifying the access points platform, refining financial capability, enhancing driving scale and viability feasibility

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through high-volume government authority agendas, attaining reaching underprivileged population groups, encouraging the use of financial services, and employ working through critical value chains to digitize payments platform. The three functionalities elements were adopted to achieve the center approach: biometric identity database, virtual payment addressing, and digital payment interoperability [2].

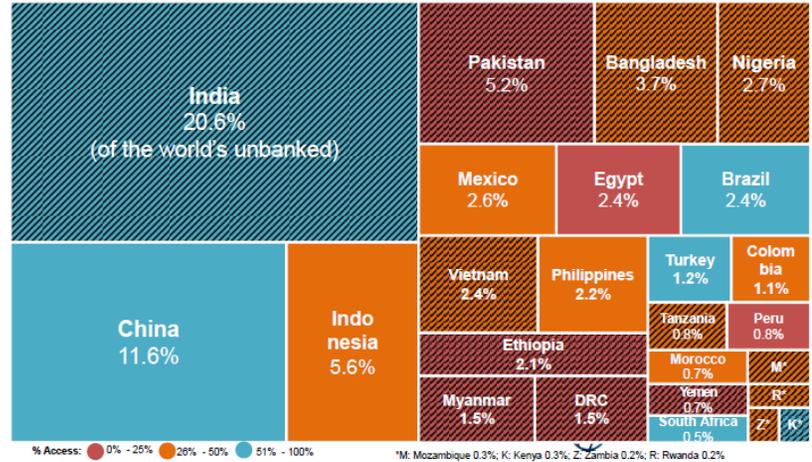


Figure 2. UFA2020 Initiative: The countries focus. (Source: Adapted from The World Bank)

3.2 Malaysia National Financial Inclusion Strategies (NFIS)

In practice, the World Bank contributes to the UFA2020 Initiative by supporting countries to develop and implement NFIS. NFIS refers to the blueprint plans of activities and actions granted, agreed upon, and distinctly defined at the national-state or subnational-state level, which related stakeholders follow to accomplish financial inclusion objectives. Fundamentally, NFIS development, based on three-element tasks [7], consists of identifying and engaging NFIS stakeholders (Figure 3), developing evolving NFIS drafting framework model and NFIS development blueprint roadmap, and conducting data collection and diagnostics work.



- Lead stakeholder – coordination by leads all NFIS elements development process
- Drafting stakeholders – NFIS development and drafting activities active engagement
- Consultation stakeholder – provide regular consultation and feedback

Figure 3. NFIS stakeholder roles by segmentation. (Source: Adapted from The World Bank)

Since the UFA2020 initiative implementation, a list of countries adopted The World Bank NFIS. Europe led the way in embracing NFIS, as the United Kingdom (UK) is one of the pioneer countries adopted in 2004, with further extension in 2007 and 2008 until 2011. Besides, African continent countries adopted NCIS, such as Malawi (2010-2014), Namibia (2011-2021), and Nigeria 2012. Then, the South American continent adopted NCIS by Brazil (2012, further 2021), Paraguay (2014-2018), and Mexico (2016, further 2020). Some of the pioneer Asia continent countries that adopted NCSI were Cambodia (2011-2020), the Philippines (2015, further 2022-2028), and Pakistan (2015).

Besides, some countries implement National Financial Sector Strategies that support and address financial inclusion by The World Bank. Some of the pioneer countries that implement its national strategies include Cambodia (2011-2020), Lesotho (2013), Mauritania (2013-2017), Thailand (2016-2020), and Fiji (2016-2025). In addition, some countries imbedded law strategies into financial inclusion, such as South Africa Financial Sector Regulation Act 9 in 2017 and France (2020).

In Malaysia, the Bank Negara Malaysia (BNM) introduced its National Financial Sector Strategies to address financial inclusion through the Financial Sector Blueprint 2022-2026. Fundamentally, this blueprint is initiated due to global economic recovery's uneven progress, the latest regulatory challenges and blurred boundaries in technology adoption, demographic financial exclusion, and climate-resilient economy landscape [8]. At the end of the year 2026, the blueprint expected to achieve outcomes consists of narrowing the financial literacy scores gap, increasing higher than 15 percent e-payment per capita, 4.8-5.0 percent insurance/takaful penetration, double micro-insurance/micro-takaful subscribed, enactment credit law on consumer and oversight related to body, one standard licensing regime rule apply to financial advisor practitioners, stable development in alternative channeled to new novelty innovative corporates, cross-border payment, 50 percent new fund financing adopted green environment and transitioning actions, and stable progress in value-based intermediation (VBI) associated possessions assets [8]. Under this blueprint, five strategies thrusts will be implemented, consisting of funding the country's economic revolution transformation, elevating the improvement of households' and corporation's financial well-being, advancing the progress of the financial digitalization sector, positioning the financial system to enable a systematic shift to a greener economy, and advance value-based finance through Islamic finance leadership.

To empower and enhance consumer protection, the financing guidelines were introduced in year 2012. The purpose of guidelines is to safeguard financial institutions and maintain persistent cautions prudent in evaluating if the prospective borrower will possibly afford financing over the financing period. This means encouraging a more workable, sustainable credit market.

Accompanying these efforts, authorities continuously cooperate with the stakeholders in financial literacy. This is to support well-informed decision judgments by consumers themselves. Remarkably, in the year 2016, the Financial Education Network (FEN) was concluded. This FEN functions to manage and act as a national financial education strategy. Besides, advisory and reimbursement redress platforms are established to support consumers and corporations in financial distress. Such platform under financial institution establishment consists of the Small Debt Resolution Scheme, Credit Counselling and Debt Management Agency, Ombudsman for Financial Services, and Corporate Debt Restructuring Committee.

The National Strategy for Financial Literacy highlighted deliberate priorities strategically to promote financial literacy and responsible consumer financial behavior across the individual lifecycle between 2019 and 2023. On the other hand, FEN acts as a cohesive medium platform for financial inclusion advancement and financial education initiatives establishment to promote financial capability. To achieve this, authorities have advanced collaboration at the national level on financial education initiatives through the FEN partnership expansion strategy, increasing awareness thru digital platforms, and forming a research explore ecosystem. To promote financial capability among individuals, the FEN Programmatic Roadmap framework was developed to focus on Solutions, Access, Awareness, and Applications (Table 2).

Table 2. FEN Programmatic Roadmap: Focus areas and initiatives.

Focus Area	Initiatives
Solutions (right information, tools, and resources)	<ul style="list-style-type: none"> • Independent advice on financial education to guide consumers to make informed decisions • Guide by behavioral insights, inclusive financial education programs develop. • Improve financial resilience against unforeseen occasions thru financial education initiatives and implementation.
Access (Access to)	<ul style="list-style-type: none"> • Establish trustworthy and friendly user platforms • Companion guides consumers to the suitable paths to improve financial knowledge skills. • Promote digital financial literacy and financial inclusion, particularly the low-income groups and MSMEs
Awareness (aware that access)	<ul style="list-style-type: none"> • Reinforce the strength of cross-agency corporation • To increase awareness, particularly the low-income groups, youth and MSMEs, corporations with regional stakeholders, key opinion leaders, and media • Increase financial education programmes and resource awareness thru digital platforms and outreach programmes
Application (able to apply)	<ul style="list-style-type: none"> • To effectiveness measure financial education programs, implementation of evaluation framework • To assess financial knowledge progress and remaining gaps among consumer's social experiments, established • To measure the progress of financial capability levels in Malaysia and identify new consumer vulnerabilities, periodic nationwide surveys have been conducted.

(Source: Adapted from BNM)

3.2 Bank of Thailand's Strategic Plan 2020-2022

The previous Bank of Thailand's (BOT) Strategic Plan 2017-2019 laid the foundation to assist sustainable stability and inclusive growth of the country's economy. Besides, it forms the transition platform into the digital economy. Moving

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forward, BOT has foreseen the increasing challenge in volatile, uncertain, complex, and ambiguous (VUCA) situations. With disruptive technology it becomes the key drive for the financial services ecosystem. The BOT Strategic Plan 2020-2022 aims to directly navigate operations, strengthen economic resilience to prepare for upcoming challenges, and promote inclusive growth sustainability.

Understanding the importance of organizational capability success in the strategic plan, three foundations were established: unleashing people's potential, driving culture to become an agile organization, and leveraging digital technology and data in all operations. Guidance by these three foundations, seven strategic challenges are recognized (Table 3 and Table 4) [9].

Table 3. BOT's Strategic Plan 2020-2022 of three foundations.

Foundation	Strategic Issues	Strategic Directions
Foundation 1: Unleashing Our People's Potentials	Employees prepared to meet the complex and interconnected financial world; difficulties in attracting and retaining high caliber workforce; many employees retired; competitive with leading organizations.	<ul style="list-style-type: none"> • Strategic staffing plan • Staff developments • Promote staff voice and choice • Diversity embracement • Build future strong leadership
Foundation 2: Driving Culture to Become an Agile Organisation	Insufficient traditional design and operating model to thrive in a fast-changing environment	<ul style="list-style-type: none"> • Establish bottom-up culture • Use appropriate model and structure • Smooth rules and work process • The risk management framework strengthens
Foundation 3: Leveraging Digital Technology and Data in All Operations	Operating systems and work processes upgrading; productivity increase and resources efficiency; more agile work techniques development; existing data leveraging; cyber risks protection and management.	<ul style="list-style-type: none"> • Digital workplace transformation • Strengthen data-driven and evidence-based decision-making organization capability. • IT platform enhancement • Employee's Digital mindset and Capability enhancement • Cyber security strengthens

(Source: Bank of Thailand, 2022)

Table 4. BOT's Strategic Plan 2020-2022 of seven strategic challenges.

Strategic Challenge	Strategic Issues	Strategic Directions
Strategic Challenge 1: Rapid Digital Transformation of the	Technological advancement provides a platform for digital financial services development faster, cheaper, and more	<ul style="list-style-type: none"> • Enhance rapid digital financial system transformation. • Hasten open infrastructure and common

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Financial System	convenient.	standards development
		<ul style="list-style-type: none"> • Central Bank digital currency develops and formulates policies and regulatory framework • Data Ecosystem • Digital payments
Strategic Challenge 2: Financial Stability Oversight in a Transformative Environment	Digital finance created new business models and more diverse financial service institutions, thus posing liquidity risks.	<ul style="list-style-type: none"> • Principal-based approach supervision • Risk culture • Technology-based supervisory tools • A forward-looking approach to assessing financial stability • Set-up supervision • National Financial Stability Institutional Arrangement
Strategic Challenge 3: Macroeconomic Management under Structural Constraints	Face more limitations where policy is constrained by zero bound and long inflation; an aging society will raise the fiscal burden on social welfare expenditure.	<ul style="list-style-type: none"> • Monetary policy framework develops and review • New monetary policy tools • Restructuring economy •
Strategic Challenge 4: Exchange Rate Volatility and Private Sector's Role in Exchange Rate Risk Mitigation	Global economic and geopolitical uncertainty; continued current account surplus	<ul style="list-style-type: none"> • The foreign exchange ecosystem builds • Exchange control regulations review • Shift to capital flows surveillance and analysis • Other central banks collaboration • Foreign exchange reserves proactive strategies formulation
Strategic Challenge 5: Cyber Threats and Technological Risks as Major Risks to the Financial Sector	Information Technology (IT) risks and cyber threats	<ul style="list-style-type: none"> • Resilience of Critical Information Infrastructure enhancement • Supervisory framework development • Supervision data privacy and data governance enhancement • Collaboration and information exchange mechanisms strengthen

<p>Strategic Challenge 6: Increase in environmental, social, and sustainability (Environmental, Social, and Governance) as an Integral Part of All Operations</p>	<p>Increase in environmental, social, and governance problems</p>	<ul style="list-style-type: none"> • Capacity development of human resources mechanism establishment • Organizational cultural embrace • Encourage financial service providers • Proactively collaboration • Support consumer protection and digital financial literacy enhancement
<p>Strategic Challenge 7: Challenges to Central Bank Independence and Credibility</p>	<p>Rapid economic change; expectations on the role of authorities; trend towards populist policies increasing trend; social media's growing influence</p>	<ul style="list-style-type: none"> • More direct engagement and communication • Communication as major tools • Network of domestic and international alliance expansion • Governance to be more transparent countable

(Source: Bank of Thailand, 2022)

3.2 Pension Scheme for Malaysia and Thailand

Financial resilience is a significant feature of financial inclusion [10]. While financial inclusion refers to accessibility to the appropriate financial tools, financial resilience refers to the ability of individuals and firms to recover from adverse economic shocks. These events, ranging from sickness to damage to asset property, challenge individuals' ability to cope with financial emergencies such as a sudden loss of income or unexpected expenses. This creates a significant hardship for people who lack resilience. To build economic resilience, the pension system is the key funding to prepare for the individual's future aging expenses. In Malaysia, the pension system is divided into three main streams, pensionable civil service, armed forces, and private sector and non-pensionable civil service, under different authority's management (Table 5) [11]. The pensionable civil group is managed under Federal appointed agent, namely Kumpulan Wang Persaraan (KWP), an armed force group managed under Lembaga Tabung Angkatan Tentera (LTAT), while the private sector and non-pensionable civil service operated under Employee Provident Fund (EPF). According to statistics, as of August 2022, the labor force in Malaysia stood at 16.63 million, accounting for 69.7 percent of the total population. Besides, 1.7 million government civil servants and 113,000 work in the armed forces department. Thus, the private sector and non-pensionable civil service contribute to the most significant labor force in the country. According to the regulation, the contributor must contribute to the individual EPF account fund. The employee and employer will contribute according to the pre-agreed percentage of the wages. The fund will divide the money contribution into two accounts, namely Accounts 1 and 2. As of 2021, EPF consist of 15,217,902 members, an increase of 2.22 percent compared to the previous year. Out of the total members, 7,691,973 active members are still active to contribute to the funds.

Table 5. Pension system in Malaysia.

Category	Policy setting	Contribution collection, investment policy guidelines, investment management, administration of the members, benefit payments
Pensionable civil service	Treasury <ul style="list-style-type: none"> • Financial effect calculation • EPU policies approval Develop and policies review PSD Develop and review policies.	Pensionable civil service
Armed forces	MINDEF Develop and policies review	Member contribution collection, investment policy and guidelines, investment management, and member administration:- LTAT <ul style="list-style-type: none"> • Contribution collection from armed forces workforces and the Federal Administration • LTAT refund calculation to KWAP • Communicate with an active member • Members' account balance administrates Members administration and benefit payments:- Veterans Affairs (Ministry of Defense) <ul style="list-style-type: none"> • Communicate with retirees • Calculation benefits • Withdrawals disbursement • Refund calculation to KWAP
Private sector and non-pensionable civil service	Treasury <ul style="list-style-type: none"> • Financial impact calculation • Approve EPU policies 	EPF

(Source: Adapted from KWAP)

In 2021, total contributions received from employees and employers amounted to RM72.89 billion, and EPF total assets grew to RM1.01 trillion. As the country's largest pension fund, EPF mainly focuses on enhancing capabilities to meet the individual members and employers evolving needs and expectations from time to time. This ensures that individuals are

furnished with needed knowledge and skills to deliver excellent services and continue improving products services to assist individual members in making more efficient and informed decisions about their savings and retirement well-being [12].

In late 2019, unknown etiology pneumonia was detected in Wuhan, China. Further, on 30 January 2020, the World Health Organisation (WHO) declared the COVID-19 epidemic. Subsequent, a call to public health emergency worldwide concern. The main problem was the potential spread to geographic countries with weaker health systems unprepared to deal with the outbreak. In the COVID-19 pandemic crisis that hit the country, EPF continues to assist the member's needs by providing facilities withdrawal to overcome the difficulty of surviving hardship. During the pandemic, EPF has rolled out three key facilities: *i-Lestari*, *i-Sinar*, and *i-Citra* (Table 6). In addition, EPF also gives flexibility to the employers to extend the duration of the employer's contribution amount portion in the form of late payment exemptions and late payment reduction charges. These facilities are timely to relieve the financial burden and sustain cash flow [12]. As of 2021, EPF recorded a total amount withdrawal of RM86.24 billion via these three facilities. Besides, during the same year, EPF recorded a total withdrawal of RM44.68 billion (including both retirement and pre-retirement leaves).

Table 6. EPF *i-Lestari*, *i-Sinar*, and *i-Citra* facilities details.

	<i>i-Lestari</i>	<i>i-Sinar</i>	<i>i-Citra</i>
Application period	1 Jan – 31 March 2021	1 Jan – 30 June 2021	12 July – 30 Sept 2021
Number of approved applications	320,523	6.57 million	5.15 million

(Source: Adapted from EPF Integrated Annual Report 2021)

On the other hand, Thailand adopted a multi-tier system of protection pension coverage and adequacy in financially sustainable (Table 7 consists of three leading tiers and one civil servant tier [13]. Tier 0 (pension floor), the Old-Age Allowance (OAA), covers the majority of older individuals who received some pension income. This tier is complemented by the State Welfare Card (SWC) and Disability Grant. Tier 1 (social insurance), the Social Security Office (SSO), highlights options for extending guaranteed and periodic earnings-related pension benefits thru mandatory schemes for non-salaried employees outside SSO article 33 scheme. Tier 2 (complementary schemes), functions to harmonize to complement ones saving. This tier consists of the National Savings Fund (NSF), National Pension Fund (NPF), Government Pension Fund (GPF), and provident funds. This tier offers a clear, vibrant, coherent, and effective individual saving landscape.

Table 7. Thailand multi-tier system for protection pension.

Scheme	Scopes	Eligible category group	Descriptions
<i>Tier 0: The pension floor</i>			
OAA	Citizens do not obtain civil pensions	Non-contributing (tax-financed)	Contributions: None Benefit: B600-B1,000 monthly (depending on recipient age)

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			Minimum pension age: 60 years
<i>Tier 1: Social Insurance</i>			
SSO (Article 33) – Social Security Fund	Private organizations employees (exceptions including seasonal and domestic workers)	Mandatory defined-benefit contribution scheme (partially funded)	Contribution rate: 7% (3% employer, 3% employee, 1% government) Benefit: Must contribute 180 months (5 years); pension calculated on the average of the last five years salary Minimum retirement age: 55 years
SSO (Article 39) – Social Security Fund	Employees previously under Article 33 members	Voluntary defined-benefit contribution scheme (partially funded)	Contributions: 9% of B4,800 base salary (flat rate of B432 monthly) Benefit: same as Article 33 Minimum retirement age: 55 years
<i>Tier 2: Complementary schemes</i>			
SSO (Article 40) – Social Security Fund	All employees uninsured by mandatory schemes	Voluntary defined-benefit contribution scheme	Contributions: B100 monthly; additional B50 monthly by the government (option 2); B300 monthly additional by the government (option 3). Contributors can opt for B1,000 monthly (even though the government remains capped at B150 monthly) Benefits: (Lump sum on monthly contributions) X (months) + interest Minimum retirement age: 60 years
NSF	All employees uninsured by mandatory schemes	Voluntary defined-benefit contribution scheme	Contributions: B50-B12,200 annually; government contribute B600, B960 or B1,200 annually (depend member's age) Benefits: (Total savings with interest) / (12 months X 20 years); minimum cap at B600 monthly, which expires when savings depleted; if die before 80 years old, heirs obtain the remaining amount Minimum retirement age: 60 years (except disabled)
Provident Funds (Private management)	Employees (voluntary schemes initiated by employers)	Voluntary defined-benefit contribution scheme	Contributions: Employers and employees contribute 15% and 2%, respectively Benefits: (Lump sum accumulated contributions with investment return) – (charges); variety of tax privileges provided Minimum retirement age: 55 years

Schemes for Civil Servants			
Civil Service Pensions	Civil servants	Defined-benefit, non-contributory (tax-financed)	Contribution: None Benefits: With 25 years of service, benefits are calculated based on service years and final salary; with 10-25 years of service, benefits obtain a lump sum Minimum retirement age: 60 years
GPF	Civil servants	Defined-contribution, contributory, mandatory	Contribution: Employees contribute 3%-15% (above 3% are voluntary basis); government contribute 5% Benefits: Lump sum or gradual withdrawal Minimum retirement age: 60 years

(Source: Adapted from International Labour Organization, 2022)

The findings indicated Malaysia's policy is more comprehensive in terms of prepared public financial resilience and financial planning literacy than Thailand's. This is due to the establishment of the National Strategy for Financial Literacy in 2019 to promote financial literacy and responsible consumer financial behavior across the lifecycle. Besides promoting financial capability, FEN is a cohesive medium for advancing financial inclusion and financial education initiatives. In terms of the pension scheme, Malaysia's authority adopted a mandatory contribution pension scheme among the private sector, which enables basic economic resilience during retirement age. On the other hand, although less financial stability and literacy are being discussed in Thailand's BOT policy, the adopted multi-tier pension scheme enables economic resilience among the public.

4. Conclusions

In conclusion, pension schemes are one of the keys to financial inclusion in retirement planning. During the crisis, this pension scheme can be used as a contingency plan to overcome short-term difficulties, such as by Malaysia EPF to overcome short-term hardship. However, caution in developing initiatives policy needs to be done to ensure the public money is to be used appropriately. Such an initiative is important as it will be associated with individual future retirement hardship. Subsequently, this will directly lead to social issues and the collapse of national financial social security sustainability overall. Thus, this study can contribute to the knowledge and authority policy overall. First, contribution to the body of knowledge, this study finding will contribute to the overall model framework development of comprehensive financial retirement planning. Second, this study can assist the authority in verifying the implication of pension scheme policy as one of the keys to SDG financial inclusion success. Further studies should concentrate on understanding policies and initiatives on other aspects of financial planning due to the broad aspects in nature.

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