etwixt the Silver & Shadow Economies: Evidence from & Policy Recommendations for the Residential Care Industry in Thailand

By Orawan Nugprachaya, Poowin Bunyavejchewin, Chaiwat Meesanthan & Katamon Thepsida



Author Orawan Nugprachaya



Author Dr. Poowin Bunyavejchewin



Author Dr. Chaiwat Meesanthan



Author Katamon Thepsida

Abstract

Thailand is rapidly becoming a super-aged society amidst declining birth rates, presenting both opportunities and challenges for its economy. While existing research often emphasises the negative impacts, such as a reduced labor force and productivity, the aging population has also spurred demand for elderly care services, particularly in urban areas. The residential care industry has evolved in response to these demographic shifts. However, only a small fraction of older Thais can afford private care facilities, and state-owned options are severely limited compared to the pressing needs of the aging population, most of whom live in poverty. This unmet demand has fuelled the growth of an informal care services shadow economy, creating both opportunities and challenges for government oversight. This study examines these issues and offers policy recommendations to address the complex landscape of Thailand's aging society and its socio-economic implications.

Introduction

1. Background of the Study

As of 2023, Thailand has 20% of its population aged 60 years or over, rendering it as a completely aged society. Furthermore, the country is projected to transition to a super-aged society within the next 15 years. This demographic trend has garnered attention within academic and policy circles, given its potential to generate significant repercussions for the Thai economy and broader society. This heightened interest may stem from the consensus that Thailand is inadequately prepared to address the anticipated situation at all levels: national, community, and individual.

Academic and policy circles tend to perceive an aging population predominantly in negative terms. For instance, numerous scholars have focused on the potentially severe impact of a rapidly growing aging population on economic and industrial sectors. However, it is important to recognise that any phenomenon, like a coin, invariably has two sides. It may be beneficial and constructive to consider the merits and demerits of the trend towards a super-aged society.

This study explores and exemplifies the merits and demerits of the

rapid growth of the aging population in Thailand's residential care industry. This industrial sector was deliberately chosen because it clearly illustrates both sides of the proverbial coin and its multidimensional implications for the country.

2. Objectives

This study is policy-oriented. It was specifically designed to address the following questions:

- What is the current state of the elderly care provision in Thailand?
- What is the status of Thailand's residential care industry?
- What are the opportunities and challenges for the rapid growth of the aging population in Thailand's residential care industry?

Therefore, the objectives of this study are descriptive and exploratory. This study describes the dynamics of the residential care industry and formulates practical policy recommendations based on the frameworks and empirical evidence for relevant public and private stakeholders, by adopting the industry life-cycle (ILC) theory and Amine Abi Aad and James G. Combs' model of formal

and informal economy choice (hereinafter, FIEC) as broad conceptual frameworks.

Conceptual Frameworks

1. Industry Life-Cycle Theory

The ILC theory explains the patterns and paths of industries across different stages: emerging, transitioning, and maturity. It explicates the mechanisms leading to a certain life-cycle pattern that configures an industry structure by emphasising the role of innovation and technological development. This study uses the wellestablished ILC theory to explain the state of the residential care industry and prescribe practical policy recommendations based on the theory and empirical evidence.

Despite its nuances, this study relies, though not exclusively, on Mirva Peltoniemi's version of the ILC theory, which synthesises major scholarly work on the topic as one of our conceptual frameworks. Additionally, the key literature is reviewed and cited to inform the framework. The details of the ILC theory are provided in the subsequent paragraphs.

In contrast to the textbook explanation of linear industry life-cycle stages, Peltoniemi explicated the life-cycle pattern, dividing it into two distinct phases: industry emergence and transition to industry maturity. The mechanisms resulting in these phases are discussed subsequently.

1.1 Industry Emergence

Industry emergence is the outcome of a "discontinuity", which refers to a variety of changes that result in technological and innovation opportunities. These include changes in the competency required to produce a product, and changes in the physical product and in the production process. Such a discontinuity is precipitated by technological and innovation processes, usually produced by new entrants, which alter existing standards of competencies. Additionally, changes can be caused by "government policy": for example, the state agency may impose new regulations on mature industries and demand a novel set of standards, entailing de-mature.

Discontinuity is a sign of emerging industries and a starting point for innovative activities that follow. Firms that jumped into a young industry have recently emerged with differing backgrounds and experiences. This leads them to chase different types of innovation. Consequently, in young emerging industries, the research and development (R&D) programs of new entrant firms and their newly produced innovations will be divergent. In turn, innovations, which are the outcomes of diversity in new entrants' R&D activities, open up domains in which novel industries can grow. The aforementioned industry dynamics are characterised by the significant role of information, defined in terms of technological development, which is external to the industry. This is because new entrant firms with innovative products compete for market share.

This is similar to what Kim B. Clark called "movements up the hierarchy". It refers to "departure from existing approaches, and the setting out of a new agenda for subsidiary parameters...movements up the hierarchy destroy the value of established commitments and competence, and call forth new skills and resources". In other words, the established competencies must be eventually replaced.

The new entry rate is likely to be highest in the early stages of the life-cycle. Increasing entry entails "sales takeoff". The latter is conditional on product quality improvements and price reductions. Newly introduced versions of a product are usually basic and have a low demand. As the number of new entrants increases, competition among firms intensifies. Simultaneously, there is an improvement in product quality, while the price is likely to decline, thereby increasing the value of the products for purchasers; this is followed by a sales takeoff.

Despite the growth in the number of firms, exits were frequent in the early phase of the ILC. Furthermore, P. A. Gerosk pointed out that the exit and entry rates are significantly correlated. Young industries must navigate the turbulence stemming from the incessant entry and exit of firms. Finally, this would lead to two scenarios for industries: the first is characterised by high new entry and exit rates, and the second is that recent entrants become exiting firms. Persistent firms survive, but occasional firms frequently enter and exit. The former represents emerging industries, whereas the latter represents mature industries.

In emerging industries, interactions among firms can be classified into collective and vicarious types. A collective interaction manifests through a learning process in which multiple firms learn and follow good practices and procedures from those who are perceived as relatively successful. This process can occur in various forms, ranging from informal to formal connections, notably by establishing joint ventures and creating industry associations. The main goals are to develop business and industrial landscapes that are economically conducive, and resolve shared challenges such as the legitimation of the newborn industry. To accomplish these goals, firms must construct collective identities and voices to negotiate measures and regulations with government entities.

In contrast to the collective type, a vicious interaction occurs when the industry matures. For instance, cooperative actions among firms become more competitive, and the rationale for forming business alliances changes accordingly. Despite this, the initial phase of industry formation, which reveals the dynamics of relevant firms, is a crucial determinant of the sales takeoff of the ILC. Thus, the potential of the business community to usher additional entries early is key to an industry's legitimacy, development, and sustainability.

1.2 Transition to Industry Maturity

The signals of transition to industry maturity generally include (1) shifts from product to process R&D, (2) emergence of dominant design, and (3) shake-out in the number of firms. As industries

mature, their focus shifts from the development of new products to the enhancement of existing processes (process R&D). Larger firms possess a strategic advantage in this transition as they can distribute R&D costs across their extensive production bases. This cost advantage is pronounced in process R&D and contributes to a reduction in product diversity.

Over time, rather than engaging in the creation of new products, product R&D has increasingly centred on the refinement and deepening of existing products. This process prioritises the enhancement and extension of current technologies, with the introduction of frequent novel innovations. Consequently, established firms or incumbents maintain their dominance because of their accumulated expertise and experience, which, in turn, creates barriers for new entrants. These incremental, small-scale innovations often reinforce an industry's existing structure.

Mature industries often converge upon a single, widely accepted product design, referred to as a "dominant design". This design is not necessarily a revolutionary innovation but rather an amalgamation of existing features that most effectively meet the needs and preferences of a broad customer base. The emergence of a dominant design signifies a pivotal shift from a product design-driven competitive industry to one that is price focused. As this design becomes firmly established, relationships with suppliers and customers stabilise, leading to enhanced production efficiency and more consistent product quality.

In the early stages of an industry, firms experiment with various product designs to identify the one that most closely resonates with customers. Over time, a particular design typically emerges as the most practical and widely accepted one, eventually becoming the dominant design. At this stage, firms tend to redirect their focus towards optimising production processes and reducing costs. This shift frequently results in a reduction in the diversity of available products as firms increasingly standardise their dominant design.

The selection of the dominant design is influenced by multiple factors. For instance, "network effects" play a crucial role, whereby a product's value increases with an increase in the number of customers adopting it, thus encouraging broader adoption. The establishment of a dominant design exerts a significant influence on the industry. Although this may constrain the range of new technological possibilities, it also creates opportunities for incremental improvements within the established framework. This shift generally reinforces the position of larger, well-established firms, contributing to industry stabilisation by reducing uncertainty and product variation. However, this poses increased challenges for new entrants seeking to disrupt markets.

Entrenched dominant design, marked by heightened product homogeneity and a shift in emphasis from product to process innovation, necessitates that firms scale up their operational capacities. As sales growth becomes sporadic, the market share is often redistributed. Firms with higher productive capabilities tend to

capture a greater market share, whereas a significant number of less capable firms are forced to exit the market. This phenomenon, known as a shake-out, can occur during the early and mature phases of industrial development.

According to Peltoniemi, two major factors contribute to shakeouts. The first is an influx of market entrants. This phenomenon occurs when substantial industrial growth attracts a multitude of new entrants, each anticipating effortless profits and a quick capture of market share. However, excessive entry intensifies competition among firms. A significant proportion of these firms lack sufficient capabilities and cannot survive for long periods. In other words, industry shake-outs naturally follow events of excessive entry.

The second factor that contributes to shake-outs is technological advancement. Such shake-outs occur during transitional periods marked by shifts in the dominant design, which encourages innovative activities. Firms that are unable to adapt to evolving standards of product homogeneity and process innovation are at a competitive disadvantage compared to those that drive the transition. As firms scale up production to exploit economies of scale, prices decline significantly, leading to a substantial number of firms exiting the market

Nevertheless, some scholars contend that mass entry and shakeouts are not causally related, but are correlated.

2. Formal-and-Informal Economy Choice Model

The FIEC model, as theorised by Abi Aad and Combs, seeks to explain the rationale behind managers in formal, developed markets opting to engage in business activities within the informal economy, especially in base-of-the-pyramid (BoP) markets. The model highlights the importance of social ties maintained by managers with formal institutions, which serve as catalysts for their involvement in informal economic activities. It also underscores the significance of a managerial mindset in shaping decisions. The following outlines the hypothetical essence of the model; however, it is imperative to first provide clear definitions of these two key terms.

The first key term, "formal economy", "...is characterised by government sanctioned institutions that write formally accepted rules, regulations and standards, and implement and enforce such rules." In contrast, an "informal economy" refers to "a set of illegal yet legitimate (to some large groups) activities through which actors recognise and exploit opportunities".

In developed countries, rules and regulations propel most business and economic activities into formal economies.

Management in accordance with legal frameworks is considered legitimate. Failure to adhere to such regulations may subject firms and their managers to the risks of detection and legal action. This encourages business entities to comply with the regulatory framework imposed by formal authorities, even when compliance is costly. Notwithstanding these constraints, informal managerial activities persist, with such illicit practices (unrecorded transactions)

typically accounting for less than 20% of total economic activities in developed economies.

The absence of well-regulated formal institutions (as found in developed markets) tends to create "institutional voids". These institutional voids increase transaction costs, because flawed formal institutions cannot maintain information symmetry between buyers and sellers. For instance, institutional voids in a politico-legal system would increase transaction costs, which manifest as bribery and corruption. In this context, managers and firms are prompted to conduct business activities, either partially or entirely, within the informal economy. This is more pronounced in emerging markets and developing countries, such as Thailand.

Institutional voids are intense and pervasive. Small businesses and entrepreneurs predominantly conduct informal economic activities which are unregistered with formal institutions. Registered firms, particularly in developing economies where formal institutional regulations are weak, also conduct a portion of their activities outside the formal economy. In emerging markets, approximately 40% of the economic activity occurs within the informal sector.

The formal activities of registered businesses can be organised within an informal economy. For instance, workers in a firm-owned facility may appear to be legally employed and perform identical tasks. However, in reality, they are not officially registered. By adopting such practices, business owners can reduce costs, including those associated with compliance, insurance, and taxation. They may employ undocumented workers informally and provide them with cash compensations to maintain their anonymity. Moreover, informal "handshake deals", which are legally unenforceable, are a common practise in some industries, including those operating within developed economies.

The informal economy reduces transaction costs through social relationships supported by culturally embedded reciprocity norms, leading to a greater tendency towards informal transactions. Abi Aad and Combs hypothesised that "...social ties with formal institutions reduce the risks of using the informal economy by protecting managers (1) from being singled out for enforcement and (2) from opportunistic behaviours by business partners."

Abi Aad and Combs posited that social ties with officials in formal institutions could ensure that managers' informal activities are overlooked by the authorities. As a result of that, managers with such social connections have greater latitude to conduct activities illicitly within the informal economy, where transaction costs are comparatively lower than those incurred in the formal sector. Furthermore, these social ties with formal institutions can function as deterrents, discouraging business partners from engaging in opportunistic behavior and violating well-embedded cultural reciprocity norms.

To summarise, managers with social ties to formal institutions are more inclined to engage in activities within an informal economy.

Methodology

1. Study Design

This study employed a case study to design the overall approach and address the research questions. A case study research methodology is defined as "an empirical research activity that, by using versatile empirical material gathered in several different ways. examines a specific present-day event or action in a bounded environment. Case study objective is to do intensive research on a specific case, such as...institute, or community... [and to make] it possible to identify essential factors, processes, and relationships." The unique advantages of this approach are as follows:

- Facilitates an in-depth investigation of complex phenomena within a specific context
- Describes real-life events, rather than making normative interpretations
- · Focuses on specific behaviors, attributes, actions, and interactions
- Utilises a range of empirical data collection tools and analytical methods (qualitative descriptive methods) to address the research questions.

This study employed the "residential care for elderly businesses" as a case study to illustrate the merits and demerits of Thailand's rapidly aging population on the country's economic sectors. This case was intentionally selected to align with the study conditions. including data availability and budgetary constraints at the time of the study.

2. Data Sources

This study used primary sources for data collection, although not exclusively. These included public records produced by government agencies (the National Statistical Office and the Department of Older Persons) and nongovernmental organisations. Additionally, several anonymous, informal in-depth interviews were conducted with the medical staff to gather first-hand information regarding residential care businesses operating in the informal economy.

3. Data Analysis

The quantitative and qualitative data was analysed using a qualitative descriptive method. This method facilitates the generation of a comprehensive thematic summary as a finding that extends beyond the singular object of analysis. A qualitative description of the issues pertinent to the research questions of this study, derived from rigorous analyses, was subsequently presented as a narrative.

4. Definitions

To facilitate accurate comprehension of the content, this section presents the definitions of key terms that hold specific meanings within the official Thai context. These terms are defined as follows:

4.1 Elderly Person

An elderly person, referred to as an "older person" (khon chara) under the Older Persons Act B.E. 2546, is defined as "a Thai national with completed age of 60 years or more". The elderly population is classified into four distinct categories.

- Young elderly: Persons aged 60 to 69 years
- Middle elderly: Persons aged 70 to 79 years
- Oldest elderly: Persons aged 80 years and above
- · Centenarians: Persons aged 100 years or older

4.2 Aged Society

The term "aged society" refers to "a population in which a significant proportion of the population is an older person". From a demographic perspective, this concept is sub-divided into three categories.

- Aged society: a society in which the proportion of persons aged 60 years or older exceeds 10% of the total population or the proportion of those aged 65 years or older exceeding 7%.
- . Completely aged society: a society in which the proportion of persons aged 60 years or older exceeds 20% of the total population, or the proportion of those aged 65 years or older exceeding 14%.
- · Super-aged society: a society in which the proportion of persons aged 60 years or older exceeds 28% of the total population or the proportion of those aged 65 years or older exceeding 20%.

4.3 Aging Society

The term "aging society" refers to "a society in which the population is aging as indicated by the continuous increase in the percentage of older persons in the total". This concept highlights the demographic shift towards a growing proportion of elderly persons in the overall population.

4.4 Residential Care Industry

The term "residential care industry" refers to "residential care activities for elderly businesses", as defined by the criteria set forth in the government's Thailand Standard Industrial Classification (TSIC) code 87301. In other words, the residential care industry is operationally defined as an industrial segment classified under TSIC code 87301. Specifically, TSIC code 87301 refers to "healthcare activities conducted in a facility that provides living accommodations and resident care staff for elderly persons".

Findings

This section presents the findings of this study and addresses the three research questions. It begins with an overview of the current state of elderly care provision in Thailand. Subsequently, it examines the residential care industry within the country's formal economy,

followed by an analysis of the same industry within the informal sector. Finally, drawing upon the aforementioned findings, it elucidates policy implications, encompassing opportunities and challenges, which serve as a foundation for policy recommendations in the subsequent section.

1. The Current State of Elderly Care Provision in Thailand

1.1 Aging Population in Thailand

In recent years, Thailand has experienced a negative natural population growth rate, marked by a higher number of deaths than births. This demographic shift was evident before the onset of the Covid-19 pandemic. According to 2022 statistics, the birth rate was 7.59 per 1,000 people, while the death rate was 9.01 per 1,000 people. This trend has been attributed to various factors, most notably, the prolonged impact of the Covid-19 pandemic on the Thai economy and society.

In 2022, Thailand had 12.47 million elderly persons, of whom 5.52 million were male and 6.95 million were female. The majority of these were young elderly, aged 60-69 years, comprising approximately 56% of the total elderly population. At the provincial level, Lampang, located in northern Thailand, recorded the highest proportion of the elderly population, with approximately 189,000 persons. In contrast, Narathiwat, situated in southern Thailand, had the lowest proportion, with approximately 99,300 elderly persons. The proportion of elderly population by province is shown in *Table 1*.

Regarding socio-economic dimensions, a summary report by the National Statistical Office indicates that, in 2022, the majority of the elderly population (73.3%) was either illiterate or undereducated. Of the total elderly population, 11.7% had completed primary education, 10% attained secondary education, and only 5% pursued higher education, such as college or university degrees.

Regarding employment status, over 4.5 million elderly persons in Thailand remained active in the workforce beyond the age of 60. Of these, 64.4% were self-employed, 19.7% were involved in family businesses, 12.8% were employed as wageworkers, 3% held positions as employers, and 0.1% were members of producers' cooperatives.

Among the working elderly population, 59.2% were engaged in the agricultural sector, 30.8% in the trade and service sector, and the remaining 10% in the production sector. In terms of monthly remuneration, elderly persons employed in the agricultural sector earned an average monthly income of 5,459 baht; those in the trade and service sector earned 13,209 baht; and those in the production sector received 13,623 baht.

As reported in the 2021 nationwide census, there were seven sources of income among the elderly: work, children and relatives, government living allowance, pension, spouse, savings interest, and other sources. The primary source of income for the elderly was work (32.4 %), followed closely by financial support from children and relatives (32.2 %). Government living allowance was the third

TABLE 1 **Elderly population rates by province (mid-2022)**

Province	Total population	Percent of elderly population	Number of elderly persons
1. Lampang	721,734	26.2	189,096
2. Phrae	432,625	25.75	111,392
3. Lamphun	400,348	25.67	102,763
4. Sing Buri	203,662	25.65	52,243
5. Chainat	319,370	24.65	78,731
6. Samut Songkhram	190,148	24.39	46,370
7. Phayao	462,968	24.23	112,162
8. Ang Thong	273,675	23.81	65,160
9. Uttaradit	444,549	23.59	104,886
10. Phichit	527,670	22.7	119,778
11. Sukhothai	583,502	22.58	131,779
12. Nan	475,207	22.33	106,130
13. Nakhon Sawan	1,031,921	22.33	230,386
14. Suphan Buri	833,028	22.21	184,986
15. Uthai Thani	324,488	21.77	70,631
16. Bangkok	5,511,462	21.62	1,191,363
17. Chiang Mai	1,790,929	21.59	386,698
18. Nakhon Nayok	260,419	21.31	55,498
19. Lopburi	737,383	21.13	155,833
20. Phitsanulok	845,939	21.08	178,324
21. Chiang Rai	1,299,031	20.97	272,415
22. Phetchaburi	482,913	20.82	100,532
23. Nonthaburi	1,292,275	20.51	265,042
24. Ratchaburi	867,043	20.5	177,741
25. Phatthalung	522,080	20.14	105,135
26. Phetchabun	975,879	20.1	196,116
27. Ayutthaya	820,465	20	164,112
28. Chaiyaphum	1,120,095	20	224,028
29. Chanthaburi	536,351	19.84	106,404
30. Kamphaeng Phet	710,459	19.65	139,634
31. Loei	638,037	19.57	124,850
32. Trat	228,092	19.52	44,518
33. Khon Kaen	1,787,751	19.41	347,071
34. Chumphon	509,432	19.15	97,562
35. Nakhon Ratchasima	2,632,105	19.14	503,710
36. Maha Sarakham	946,458	19.13	181,078
37. Nakhon Pathom	922,025	19.07	175,785
38. Roi Et	1,293,572	19	245,838
39. Nakhon Si Thammarat	1,547,243	18.89	292,349

Province	Total population	Percent of elderly person elderly person	
40. Yasothon	532,497	18.81	100,173
41. Prachuap Khiri Khan	553,234	18.72	103,559
42. Saraburi	641,273	18.66	119,630
43. Chachoengsao	725,433	18.58	134,771
44. Phangnga	267,729	18.36	49,157
45. Prachinburi	496,552	18.01	89,423
46. Surin	1,374,570	17.99	247,233
47. Kalasin	973,835	17.98	175,055
48. Nong Khai	516,318	17.81	91,934
49. Amnat Charoen	375,866	17.73	66,635
50. Sisaket	1,456,139	17.68	257,502
51. Trang	638,997	17.65	112,797
52. Buriram	1,578,360	17.54	276,902
53. Kanchanaburi	894,167	17.36	155,213
54. Songkhla	1,431,300	17.07	244,376
55. Samut Prakan	1,358,337	17	230,870
56. Nong Bua Lamphu	508,663	16.95	86,221
57. Udon Thani	1,564,779	16.92	264,755
58. Samut Sakhon	588,106	16.64	97,853
59. Ubon Ratchathani	1,869,163	16.55	309,274
60. Surat Thani	1,073,064	16.51	177,154
61. Sa Kaeo	562,404	16.51	92,825
62. Nakhon Phanom	716,844	16.29	116,763
63. Mukdahan	351,536	16.19	56,927
64. Sakon Nakhon	1,145,737	16.11	184,601
65. Ranong	194,400	16.11	31,310
66. Pathum Thani	1,195,795	16.07	192,129
67. Bueng Kan	421,840	15.27	64,422
68. Chonburi	1,589,215	14.95	237,656
69. Rayong	755,365	14.33	108,276
70. Mae Hong Son	286,347	14.3	40,958
71. Satun	325,069	14.03	45,603
72. Krabi	479,703	13.46	64,562
73. Tak	680,360	13.33	90,671
74. Phuket	418,338	12.87	53,845
75. Yala	544,114	12.8	69,626
76. Pattani	731,268	12.56	91,830
77. Narathiwat	811,890	12.23	99,316

Note: Data was extracted from the report by the Department of Older Persons.

Source: Compiled by the authors

largest source, contributing 19.2%, while pensions ranked fourth at 7.5%. Income from spouses, savings interest, and other sources accounted for 4.5%, 1.5%, and 2.7%, respectively.

In financial terms, the 2021 census revealed that approximately 46% of the elderly population had no savings, whereas 54% possessed some form of savings. Among those with savings, only 12% accumulated more than 400,000 baht. The majority, constituting approximately 41%, had savings of less than 50,000

baht. However, the Thai elderly population is relatively poor.

In summary, while Thailand is rapidly transitioning into a superaged society, most of its elderly population appears unprepared for aging and has only an adequate quality of life. This is evident because many have minimal or no savings. Therefore, this increases the likelihood that the fast-growing elderly population will impose a substantial economic burden at multiple levels, ranging from individual households to the national economy.

1.2 Provision of Elderly Health Care in Thailand

Given the significant proportion of elderly persons in Thailand who continue to experience economic hardship, it is not surprising that they rely heavily on government-provided welfare stipends and healthcare services. This section examines three key aspects of government support for the elderly: financial assistance programs. state-funded caregivers, and public residential facilities.

A significant proportion of Thailand's elderly population (approximately half) subsists at or below the poverty threshold and many lack financial reserves. While Thailand has implemented government-managed welfare and pension systems to ensure postretirement income security, these benefits are primarily restricted to the "in-system" workforce. This category encompasses civil servants and registered private sector employees.

Civil servants are entitled to several forms of pension benefits after retirement. Those with a service period of 25 years or more are granted monthly pensions to support their post-retirement livelihoods. Conversely, persons between 10 and 25 years of service receive a lump-sum pension payment. Furthermore, if they participate in the Government Pension Fund (GPF) scheme, they are eligible to receive either a lump-sum payment or instalments, contingent on the amount of their own contributions as well as those from the government.

Private sector employees, either directly or through their employers, are required to enrol in a compulsory savings system, commonly referred to as the Social Security Fund (SSF) schemes. administered by the Social Security Office (SSO). While the SSF encompasses various schemes tailored to meet the needs of employees under different circumstances (disability), it was recently expanded to provide old-age pension benefits, which have been criticised as insufficient and comparatively low. To be eligible for these benefits, private sector employees must fulfil the stipulated years of contribution to the SSF.

Notwithstanding the aforementioned provisions, these government transfers do not extend to persons within the "out-of-system" workforce. Informal sector workers, who constitute a significant

proportion of Thailand's older population, are eligible only for public transfers through the Old-Age Allowance (OAL) and the State Welfare Card (SWC) programs. The OAL provides Thai citizens aged 60 and above with monthly payments ranging from 600 to 1,000 baht depending on the recipient's age. However, this amount is regarded as insufficient to meet basic subsistence needs, even for those living below the poverty line. The SWC program serves as an additional welfare initiative aimed at supporting low-income persons, including the elderly.

While public transfers for older persons in Thailand, particularly those living at or near the poverty line, remain relatively modest, lowincome elderly persons from the informal economy benefit from better access to public healthcare services, including outpatient and inpatient care, compared to many other developing countries. This is primarily attributable to the Universal Health Coverage (UHC) scheme introduced in 2002.

Acknowledging the challenges faced by elderly persons with limited resources, particularly those residing outside major urban areas. Thailand introduced a "community-based long-term care (LTC) program" in 2016. This initiative delivers integrated care services including initial assessments, case management, and regular in-home visits by caregivers. Additional healthcare services were provided based on the specific needs of each elderly person. Administratively, the program was supervised by the National Health Security Office in collaboration with the local administrative organisations (LAOs) to ensure the provision of healthcare services to the elderly population nationwide.

The *modus operandi* of the community-based LTC program and its associated initiatives are primarily sustained by state-funded caregivers. These caregivers comprise village health volunteers, Ministry of Social Development and Human Security (MSDHS) volunteers, Bangkok Metropolitan Administration (BMA) volunteers, caregivers, care managers, and community aged care volunteers. Table 2 provides an overview of the number of governmentsponsored caregivers between 2020 and 2022. A brief description of their roles is provided below.

Number of government-funded caregivers (2020-2022)

	2020	2021	2022
Village health volunteers	1,027,036	1,039,729	1,041,834
MSDHS volunteers	24,293	44,807	48,594
BMA volunteers	10,979	10,614	10,328
Caregivers	86,829	94,968	98,575
Care managers	13,615	15,114	16,117
Community aged care volunteer	13,190	13,387	13,112

Note: Data was extracted from the report by the Department of Older Persons.

Source: Compiled by the authors

Village health volunteers (VHVs) constitute the largest segment of government-funded caregivers. The VHV program originated in the 1960s. Despite this, their responsibilities are not focused on the care of the elderly population, but encompass a wider range of healthrelated duties. These duties include health communication, the coordination and promotion of healthcare activities and campaigns. and provision of first aid and basic primary medical care. To become a village health volunteer, candidates must be selected with the support of their local community and must undergo training programs mandated by the Ministry of Public Health.

The volunteers of MSDHS receive specialised training in providing care for elderly persons and those with disabilities. Their responsibilities encompass visiting communities across the country to deliver health-related and social care services, in addition to collecting and maintaining health records.

The volunteers of BMA are a distinct group of health volunteers whose responsibilities, while similar to those of the VHV program, differ in key aspects. The primary distinction is that BMA volunteers perform healthcare-related duties, specifically within the Bangkok metropolitan area.

Caregivers are generally categorised into two groups: volunteers and paid caregivers. Irrespective of the category, all caregivers are required to complete and pass a mandatory 70-hour training program. Their duties include making regular home visits, supporting the daily activities of homebound and bedridden elderly persons, monitoring their health behaviors, and maintaining communication with their relatives. Additionally, they are responsible for coordinating with and reporting relevant information to care managers. A significant number of candidates aspiring to become caregivers have already been involved in the VHV program. Nevertheless, to qualify as paid caregivers, candidates are required to undertake further training courses.

Care managers supervise the work of five to 10 caregivers. Their core responsibilities include assessing and identifying the care needs of the elderly, developing personalised care plans for specific cases. and liaising with multidisciplinary health teams. To qualify as care managers, candidates – most of whom are public health technical officers or nurses – are required to complete training sessions

covering topics such as the legal rights of older adults, fundamental care management, and care delivery, as well as engaging in practical assessments, including home-visit simulations. Most care managers are selected from Tambon Health Promoting Hospitals, previously referred to as health stations, which are located within or in close proximity to local communities.

The final category of caregivers comprises community-aged care volunteers, commonly referred to as aged care volunteers. These volunteer programs have been initiated and implemented by various entities, including LAOs, at various levels ranging from subdistricts to individual communities. Despite the provision of various statefunded caregiving services by the government, children, relatives. and spouses continue to serve as principal caregivers for elderly persons in Thailand, constituting nearly 90% of all caregivers.

Although the community-based LTC program is recognised as a public health model in other countries, it is frequently considered insufficient for addressing the growing needs of Thailand's rapidly aging population. This inadequacy is particularly evident in the context of government-funded residential living facilities for the elderly, a topic explored in a subsequent discussion.

The number of government-funded residential care facilities available is markedly insufficient compared to the rapidly increasing elderly population in need of such services. Nationwide, only 12 Social Welfare Development Centres for Older Persons are managed by the MSDHS. In 2022, these MSDHS centers were able to accommodate 1,242 elderly residents. Besides these, certain LAOs have been established and operate residential facilities for the elderly. In 2022, these LAO-managed facilities provided care for 764 elderly residents. *Table 3* summarises the number of elderly residing in the state-funded residential care facilities.

Government-funded residential care facilities are evidently insufficient to meet the needs of Thailand's increasing aging population, many of whom either live alone (or with a spouse) or depend on care provided by children or relatives. This underscores the urgent need for the expansion of public residential care services and the enhancement of care management quality.

Number of elderly persons living in government-funded residential facilities (2020-2022)

	2020	2021	2022
Under the provisions of the Ministry of Social Development and Human Security	1,293	1,286	1,242
Under the provisions of the Local Administrative Organisations	965	910	764

Note: Data was extracted from the report by the Department of Older Persons. Source: Compiled by the authors

2. The Silver Economy of the Residential Care Industry in Thailand

The rapid transition towards a super-aged society has had a structural impact on the Thai economy across multiple dimensions. While the inevitable demerits of the country's economic structure have been extensively examined, it is equally important to explore the potential merits and opportunities that the aging population may present for businesses and the economy.

In Thailand, the public and private sectors have increasingly prioritised issues related to the so-called Silver Economy. Within the Thai context, the Silver Economy is defined as "an economy that generates economic activities and productivity from the needs of older persons and sectors involved in population aging". Nonetheless, the needs of the elderly population in Thailand have not yet been transformed into effective demand despite the growing size of this demographic group.

This study examined the "residential care industry" by exemplifying the merits and demerits of the demographic shift towards a super-aged society.

Meanwhile, a range of public and private sectors, particularly those in primary, secondary, and higher education, have been profoundly affected by the precipitous decline in the population of children and young persons, necessitating the dissolution of numerous institutions. In contrast, businesses providing residential care services have experienced a surge in demand, which is attributable to the significant increase in the elderly population. especially from the middle-class. This industry appears to be thriving.

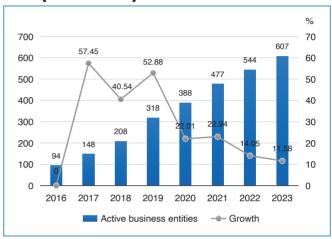
2.1 A Profile of Businesses Engaged in Residential Care for the Elderly

The residential care industry was delineated according to the Department of Business Development's TSIC code 87301 business category (Section 4.4.4). By 2023, the industry comprised 607 active registered business entities providing residential care services for the elderly across the country. Of these, 238 were situated in Bangkok: 149 in the Central region, 22 in the Western region, 51 in the Eastern region, 29 in the Northeastern region, 94 in the Northern region, and 24 in the Southern region.

The nationwide number of active businesses providing residential care for older persons in 2023 was approximately six times greater

CHART 1

Nationwide number of active registered businesses providing residential care for the elderly in Thailand & its growth rate (2016-2023)



Note: Data was obtained from the DBD DataWarehouse+

Source: Compiled by the authors

than that in 2016 (Chart 1). In terms of growth rate, the industry expanded by approximately 58% in 2017, declined to approximately 41% in 2018, and increased to approximately 53% in 2019. Subsequently, the industry experienced a significant decline in growth, with growth rates dropping to approximately 22% in 2020 and 23% in 2022, followed by a steady decline. By 2023, the growth rate had further diminished to approximately 12%.

Concerning the total income of the residential care industry, the industry generated approximately 119.21 million baht in 2016, followed by a substantial increase to 466.92 million baht in 2019. By 2022, the most recent year for which data is available, the industry's income had risen to 986.84 million baht. These details are mentioned in *Table 4*, and the corresponding growth rates are shown in *Chart 2*.

By 2023, there were at least two registered and active operational associations comprising businesses engaged in residential care services for the elderly. These associations are the Health and Elderly Establishment Confederation (HEC), and the Senior Health Service and Trade Association (SHSTA).

The residential care industry is emerging. Although the number of

TABLE 4

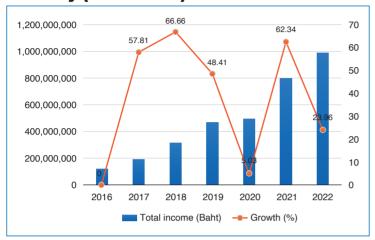
Total income of the residential care industry (2016-2023)

2016	2017	2018	2019	2020	2021	2022
119,621,129.75	188,774,843.90	314,612,057.83	466,926,603.08	490,414,572.01	796,119,777.65	986,843,603.73

Note: Data was obtained from the DBD DataWarehouse+; all values presented are in Thai Baht.

Source: Compiled by the authors

CHART 2 Total income of the residential care industry (2016-2023)



Note: Data was obtained from the DBD DataWarehouse+. Source: Compiled by the authors

business entities entering this sector has not experienced a significant surge in recent years, the overall size of the industry has gradually expanded, corresponding to an increase in the middleclass elderly population.

2.2 Cost of Residing in Residential Care Facilities for the Elderly

As of 2022, nearly half of Thailand's elderly population had no savings, whereas approximately 63% of those with savings had less than 100,000 baht. Due to this financial landscape, the majority of elderly persons experienced economic insecurity, if not outright poverty. This predicament has rendered them unable to afford services from residential care facilities for the elderly, including those sponsored by the state.

For instance, at the Ban Bang Khae Social Welfare Development Centre for Older Persons (commonly referred to as Ban Bang Khae), the oldest government-funded residential care facility for the elderly in Thailand, the initial living cost for residents is 1,500 baht per month, equating to 18,000 baht annually, and 360,000 baht over a 20-year period. Elderly persons wishing to reside at Ban Bang Khae are required to submit a letter of intent and subsequently endure a prolonged waiting period, as there is a consistently lengthy queue. Some cases have reportedly necessitated a 15-year wait for admission to the facility.

According to a 2024 report, the initial monthly living costs of private residential care facilities for the elderly range from 10,000 to 140,000 baht. It is important to note

that these figures do not encompass expenses for medications, medical treatments, or specialised health-related activities that may be required for some elderly residents. *Table 5* presents the monthly living costs of private residential care facilities for the elderly.

As illustrated in *Table 5*, public and private residential care facilities for the elderly are inaccessible to most older Thai persons. Therefore, it is reasonable to assert that Thailand's residential care industry is predominantly oriented towards the urban middle-class. Moreover, there is a growing demand for residential care facilities in

Cost of residing in residential care facilities for the elderly

	Cost per month (Thai Baht)	Cost per year (Thai Baht)	Cost for 20 years (Thai Baht)
Ban Bang Khae Social Welfare Development Center for Older Persons	1,500	18,000	360,000
2. Ban Yen Chit	10,000	120,000	2,400,000
3. Sansiri Home Care	16,000	192,000	3,840,000
4. Kunta Kunyay Nursing Home	16,000	192,000	3,840,000
5. Elderly Club Nursing Home	16,000	192,000	3,840,000
6. Goldencare Nursing Home	16,000	192,000	3,840,000
7. Taozi Home	20,000	240,000	4,800,000
8. Ditsara Nursing Home	26,000	312,000	6,240,000
9. Geriatric Kluaynamthai 2 Hospital	30,000	360,000	7,200,000
10. Velasook Senior Smart Village (Paolo Hospital)	100,000	1,200,000	24,000,000
11. Bangkok Hospital	140,000	1,680,000	33,600,000

Note: Data sourced from Amarin TV. Source: Compiled by the authors

major urban centers, particularly within the Greater Bangkok metropolitan area.

3. The Shadow Economy of the Residential Care Industry in Thailand

The preceding section concludes that the residential care industry is highly class-centric, as only a small proportion of the Thai elderly can afford to reside in public or private residential care facilities. Nonetheless, economic challenges have made it increasingly difficult for family members to relinquish full-time employment to care for older parents or relatives, particularly those who are homebound or bedridden. Given that state-funded residential care facilities, which offer relatively low costs, are consistently at capacity, whereas private facilities remain prohibitively expensive, there is a demand for residential care services at more affordable prices.

This demand, particularly in Greater Bangkok and in provinces with high purchasing power, has contributed to the emergence of an informal economy within the residential care sector. These informal residential care establishments operate outside legal parameters, as they fail to register with relevant governmental authorities. This section presents a concise analysis of the shadow economy within the residential care industry by drawing on data gathered through anonymous interviews.

According to informants from the medical profession, registered residential care businesses for the elderly in Greater Bangkok constitute approximately 30% of all operational residential care facility providers, commonly referred to as "nursing homes" (banphak khon chara) among Thai citizens. These unregistered providers have proliferated substantially throughout Greater Bangkok and the urban areas of high-income provinces, particularly in tourist destinations such as Chiang Mai, Chon Buri, and Rayong. Therefore, deciphering the true economic value of this industry is a significant challenge.

The demand for more affordable residential care services has attracted retail investors, many of whom are not affiliated with the healthcare system and have recognised this potential opportunity for revenue generation. Concurrently, a significant proportion of proprietors comprises medical staff working within the healthcare system, the majority of whom are reportedly "registered nurses" employed in public and private hospitals.

The living facilities of unregistered residential care providers are typically situated within residential zones with structures resembling ordinary dwellings. Because of this, these facilities are housed in residential buildings of various types and sizes, including detached houses, terraced houses, and townhouses. The interiors of these structures resembled hospital wards. However, in contrast to registered residential care services, these unregistered living facilities generally possess only rudimentary medical equipment and lack in-house healthcare staff.

The modus operandi of healthcare activities within informal

residential care businesses varies depending on the living costs. However, these establishments typically employ registered nurses (phayaban wichachip) and/or practical nurses (phuchuai phayaban) and provide them with a per-shift compensation (approximately 8–12 hours). A physician (phaet) is engaged on an hourly basis and does not conduct daily visits but is remunerated for being on standby in the case of emergencies. Additionally, a medical technologist (nak theknik kan phaet) occasionally collects the samples for laboratory testing.

Non-resident healthcare staff at unregistered residential care facilities are recruited through social networks of physicians and nurses employed full-time in hospitals. These physicians, but more frequently nurses, function as intermediaries (khonklang) to allocate part-time jobs in unregistered living facilities to members of their professional networks. Moreover, they serve as agents (naina) who persuade patients and their families to place elderly persons, particularly those who are housebound, in informal residential care facilities.

As reported by the informants, after deducting a commission of approximately 500 baht from their intermediaries, registered nurses earn a remuneration of at least 1,500 baht net per shift. Practical nurses receive remuneration ranging from 800 to 1,200 baht net per shift. In contrast, physicians are compensated at a rate of several thousand baht per hour or per case.

Numerous informal residential care facilities offering services at reduced costs typically employ only practical nurses working in shifts. These facilities often hire migrant workers to assist the practical nurses and provide care to elderly residents, particularly at night. Generally, these migrants are unregistered, thus working in contravention of labor laws. They acquire healthcare skills primarily through on-the-job training.

The elderly residing in unregistered residential care facilities are generally required to pay an advance fee of approximately 10,000 baht. Given the illegal status of these facilities, elderly residents, their children, and legal guardians are compelled to enter into various forms of agreements with the business proprietors. These agreements typically aim to preclude legal action in the event of a resident's death regardless of the circumstances.

In summary, the informal economy within the residential care sector has continued to expand in major urban centers, driven by demand from persons unable to afford or gain admission to registered elderly care facilities. In light of this development, there is an urgent need for government intervention, particularly the imposition and enforcement of regulations and legislation to ensure that older residents receive safe and adequate care.

4. Policy Implications

The preceding sections present the findings of the study. This section synthesises these results, translating their essence into implications delineated in terms of opportunities and challenges for policymakers in Bangkok and pertinent stakeholders. Below are the opportunities synthesised from the findings:

- The residential care industry remains in the early phase of its life-cycle, characterising it as a young, emerging sector. The number of new entrants to this industrial segment has increased incrementally. Accordingly, the Thai residential care market is poised for continued growth, albeit not at a rapid pace. This trend is in response to the burgeoning demand from the rapidly expanding older middle-class population in major urban centers;
- There is evident potential demand for moderately priced residential care services. As a large proportion of elderly persons have limited income (primarily from pensions) and modest savings, smaller entrepreneurs can invest in and operate economical residential care facilities. These establishments would cater to lower-middle and middle-class elderly persons seeking affordable living arrangements;
- There is a significant demand for registered and practical nurses. This need has become increasingly pressing, as the number of students enrolled in colleges and universities has declined considerably. A viable solution to attract students, who are the primary revenue generators for these institutions, is to offer degree and training programs that align with the needs of the growing industrial sectors, such as the residential care industry. This approach is particularly effective, as it provides students with a degree of assurance regarding post-graduation employment prospects.

The challenges synthesised from the findings are as follows:

- The preponderance of elderly Thai persons lack the financial means to access services provided by the residential care **sector.** Moreover, their utilisation of state-sponsored residential care services is substantially constrained, owing to the acute scarcity of available placements within these facilities;
- There is an urgent need for affordable residential care facilities that cater to persons with potential demand but limited financial means. The lack of low-cost registered living facilities precipitated the emergence and proliferation of informal economic activities, as exemplified by the rapidly increasing number of unregistered residential care homes;
- · Whilst unregistered residential care providers operate outside legal parameters, they are not perceived as illegitimate, particularly by financially vulnerable persons. The detection and regulation of informal care business activities present significant challenges due to their informal yet socially acceptable position and proprietors' established connections with formal institutions, such as public health agencies and hospitals.
- A substantial proportion of medical staff, particularly nurses

employed in hospitals, have deliberately engaged in informal **economic activities.** Some of these persons transitioned to small-scale entrepreneurship and became proprietors of unregistered residential care facilities. Their social connections with officials within state agencies present an impediment to inspections and legal enforcement by the authorities.

The preceding points constitute significant policy implications. encompassing opportunities and challenges synthesised from the results and discussion of this study. The subsequent section provides policy recommendations addressing crucial issues pertaining to the residential care industry, intended for consideration by government policymakers and relevant stakeholders.

Policy Recommendations

Drawing on the preceding results and discussion, this final section formulates and presents policy recommendations for the government and relevant stakeholders to enhance the capacity of the residential care sector and promote an improved quality of life for elderly persons amidst economic constraints. These recommendations – which might aptly be termed as the 5R strategy - may be considered "early harvest projects" as all are immediately actionable. These are delineated as follows.

Repurposing

The government should repurpose state-owned and LAO-operated nurseries and schools, which have experienced a decline in enrolment and have become financial burdens, into public residential facilities for the elderly. In recent years, the nursery and basic education sectors have been severely affected by the declining birth rate, prompting the government enforce school closures. This trend has similarly affected private kindergartens and schools in rural and peri-urban areas beyond major metropolitan centres.

Consequently, the country has several abandoned buildings of former public and private nurseries and schools. However, the government could substantially reduce construction costs by repurposing these structures and those with low student enrolment. The primary expenditure would be confined to the renovation and installation of care equipment, thus adapting the facilities for their new function as residential care centers for the elderly.

The government should introduce incentive packages (subsidies and temporary tax exemptions) for entrepreneurs who operate private nurseries and schools facing declining enrolment to diversify into residential care activities. These incentives can be a form of encouragement to restructure their businesses and transition to the residential care sector.

Reskilling

Given the potential repurposing of nurseries and schools, a

pertinent question arises regarding reallocation of the existing workforce. Although civil servants may be redeployed, most are typically engaged in temporary contracts. To avert this situation, the staff members can be given two options: either accept redundancy with appropriate compensation or participate in reskilling and training programs (practical nursing courses) to facilitate continued employment within new care facilities.

The government should promote practical nursing programs. typically offered as certificate courses by colleges and universities, to increase the number of qualified practical nurses. Government initiatives may include providing low-interest loans, thereby creating opportunities for persons whose current qualifications do not align with the market demand, particularly for those facing unemployment.

Nevertheless, it is imperative that the government regularly monitors and regulates practical nursing courses, ensures their quality, and verifies that graduates are well-trained and competent to work in residential care facilities. Graduates should be capable of assisting registered nurses in performing medical activities.

Concurrently, as registered nurses are key personnel in the residential care workforce owing to their ability to perform certain physician-level activities, the government should encourage and subsidise public and private higher education institutions to establish undergraduate degree programs in nursing. Furthermore, given the substantial workload of registered nurses, the government should consider increasing their remuneration and providing additional opportunities for advanced nursing training.

Re-segmenting

The impact of declining birth rates extends beyond nurseries and schools to higher education institutions, including public colleges and universities. This phenomenon is pronounced in institutions outside Greater Bangkok and other major urban centers. As the number of enrolments has steadily decreased, lecture rooms and dormitories have become increasingly underutilised, and these can be repurposed to promote the well-being of local communities focusing on the elderly.

In this context, this study recommends the re-segmentation of public higher education facilities. Specifically, dormitories owned by public colleges and universities should be re-segmented and reconfigured to accommodate living care facilities for the elderly. These dormitories can be partitioned into distinct zones for elderly residents and students. To foster intergenerational communication, institutions could assign specific tasks to students residing in the same dormitory or area, such as engaging in conversations with older residents or monitoring their medication adherence, in exchange for stipends.

The implementation of these proposed activities is likely to alleviate feelings of loneliness among elderly residents, not only maintaining their social engagement, but also potentially preventing psychological symptoms such as depression.

Revitalising

Revitalising PPPs is crucial for the practical enhancement of the residential care sector. As previously noted, government efforts alone are insufficient because of various factors, including institutionalised bureaucracy. Moreover, the government has limited capacity to drive the Silver Economy within the residential care sector. Given these considerations, PPPs have emerged as a viable solution, striking a balance between private gains and public benefits.

Therefore, the Thai government must create an environment conducive to investment in the residential care industry. This may be achieved by introducing incentives (subsidies, temporary tax waivers, or reductions) and ensuring that all procedures related to investment flows are fair, transparent, and open to public scrutiny. These investment flows need not be limited to domestic sources and can be extended to foreign investments.

Therefore, synergy has emerged as a key principle for revitalising and realising the potential of PPPs.

Regulating

Considering the proliferation of unregistered residential care facilities, the government should not remain indifferent. However, abruptly enforcing regulations and incarcerating informal entrepreneurs appears counterproductive. Instead, the government should establish a grace period allowing these operators to register without legal repercussions, thereby legitimising their care activities and businesses. Following this period, the authorities should rigorously enforce laws and regulations governing residential care businesses. Hence, the government can benefit from implementing this approach as it would lead to increased tax revenues. JS

Orawan Nugprachaya, Researcher, Institute of East Asian Studies, Thammasat University, Thailand;

Dr. Poowin Bunyavejchewin, Senior Researcher, Institute of East Asian Studies, Thammasat University, Thailand;

Dr. Chaiwat Meesanthan, Director, Institute of East Asian Studies, Thammasat University, Thailand;

Katamon Thepsida, Academic Affairs Officer, Institute of East Asian Studies, Thammasat University, Thailand