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All That Glitters In The Silver Economy

- **Old but gold.** This report attempts to analyse the dynamic shift in the population age profile across Indonesia, Malaysia, Singapore and Thailand. In view of the falling birth rates and longer life expectancy across ASEAN, the population of this region could be labelled as one that is ageing by 2030. We believe this could present potential investment opportunities, as businesses and healthcare service providers can gradually cater their products and services towards the growing aged populace.
- **Structural demographic shift.** The global portion of those aged 65 years and above is projected to rise to 16% of the total population by 2050, from 10% in 2022, according to the United Nations (UN). Key factors behind this growth: Higher life expectancy rate, drop in the fertility rate, longer life expectancy rate for women, coupled with the growing portion of women (55.7% of the global population) vs men (44.3% of the global population). China, the world's most populous country, now has a low birth rate of just 6.77 births per 1,000 persons in 2022, from 7.52 per 1,000 persons in 2021.
- **Redistribution of spending patterns.** The share of consumers aged 65 years and above is expected to outpace that of the other age groups, at 65.6% in 2020-2030. This segment will also make up 13.7% of the global population by 2030F, from 11.7% in 2022. The shift in consumer class would also mean a redistribution of consumer spending behaviour, as consumers in the senior age group may likely have greater purchasing power. The term "silver economy" covers products and services delivered to and consumed by people aged 60 years and over. Asia is expected to see a rapid growth of the silver economy, with annual consumer spending from senior citizens in China expected to triple from USD750bn to USD2.1trn over 2020-2030.
- **What does it mean for ASEAN?** The global growth of the silver economy is expected to shift from the Organisation for Economic Co-operation and Development (OECD) economies to Asia in the next decade. According to Ageing Asia, Asia Pacific's silver economy market size is estimated to grow at a 2020-2025 CAGR of 7.3% to USD4.6trn. According to Deloitte Monitor, there will be large differences in silver consumer spending across the top six sectors in different countries (Figure 55). This should create opportunities in aged care services and lead to advancements in healthcare services, given the increase in health complications as well as public infrastructure to accommodate this demographic change in the region.
- **Ageing ASEAN stock ideas.** Our actionable ideas are divided into two categories: Direct and indirect proxies. Companies categorised under the direct category are basically healthcare service providers, while the indirect proxies are companies involved in distributing and manufacturing medical equipment, health supplements and private nursing home operators. Direct proxies: KPJ Healthcare, Raffles Medical, Bangkok Chain Hospital, Bangkok Dusit Medical Services, Medikaloka Hermina and; Indirect proxies: LKL International (LKLI MK, NR), ComfortDelGro, Kalbe Farma, Mega Lifescience, First Real Estate Investment Trust (FIRT SP, NR) and Econ Healthcare Asia (ECON SP, NR).

Company Name	Rating	Target	% Upside (Downside)	P/E (x) Dec-24F	P/B (x) Dec-24F	ROAE (%) Dec-24F	Yield (%) Dec-24F
Bangkok Chain Hospital	Buy	THB23.50	14.6	23.7	3.7	16.3	2.3
Bangkok Dusit Medical Services	Buy	THB35.25	33.0	29.5	4.6	16.1	2.0
ComfortDelGro	Buy	SGD1.46	9.0	14.3	1.1	7.6	4.9
KPJ Healthcare	Buy	MYR1.46	14.1	19.8	2.2	11.6	2.5
Medikaloka Hermina	Buy	IDR1,700	11.1	33.4	4.9	15.8	1.0
Raffles Medical	Neutral	SGD1.15	13.9	21.1	1.8	8.7	2.4

Source: Company data, RHB

Top Buys

Top Buys	Target Price (local CCY)
Bangkok Chain Hospital (BCH TB, BUY)	THB23.50
Bangkok Dusit Medical Service (BDMS TB, BUY)	THB35.25
ComfortDelGro (CD SP, BUY)	SGD1.46
KPJ Healthcare (KPJ MK, BUY)	MYR1.46
Medikaloka Hermina (HEAL IN, BUY)	IDR1,700

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Case Study: Japan – Land Of The Setting Son

With a loose moniker of "the country of grandparents", Japan's portion of aged persons is among the highest in the world. In 2022, this segment – those aged 65 years and above – accounted for 30% of the country's total population. Note: The UN defines an aged society as one where those aged more than 65 years account for 25% of the country's total population. Previously, Prime Minister Fumio Kishida had flagged potential social-economic concerns with regards to the country's falling birth rates – the motivation for young Japanese couples to get married and have children remains low.

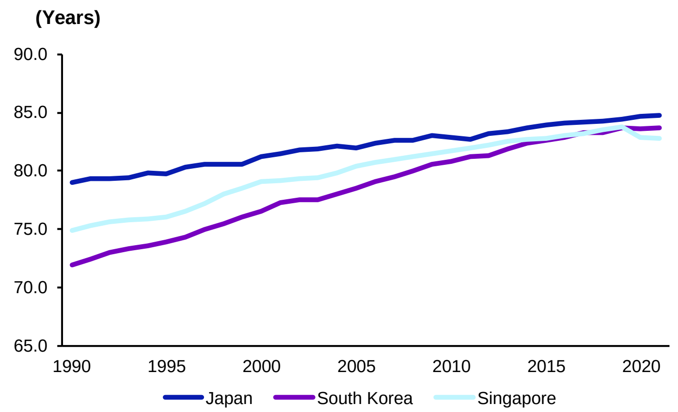
With this, we will be looking at the key drivers of an ageing society and government policies in tackling the ageing society phenomenon in ASEAN. We take Japan as our cornerstone – given its current ageing status – to determine the readiness of countries within South-East Asia, as ASEAN too approaches becoming an aged society within the next 10-20 years.

Key drivers of an ageing society:

i. **Life expectancy.** Japan's life expectancy is the highest in the basket of countries selected under our study, averaging 84.8 years in 2021. It is followed by South Korea and Singapore at 83.7 and 82.8 years. In fact, life expectancy in Japan continued to move higher despite COVID-19-related fatalities during 2020-2021;

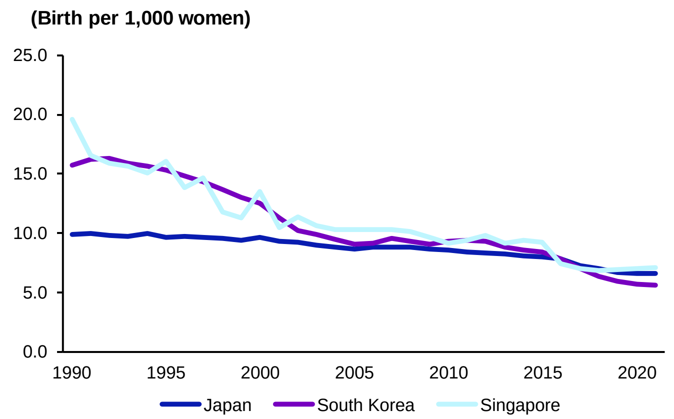
ii. **Low fertility.** According to the UN, South Korea recorded the lowest fertility rates in Asia – the second-lowest in the world – with 5.6 births per 1,000 women. Factors contributing to the falling fertility rates include low marriage rates among the country's youth, rising cost of living, and the unwillingness of married couples to have children.

Figure 1: Life expectancy in Japan, South Korea and Singapore



Source: UN, RHB

Figure 2: Birth rate per 1,000 women



Source: UN, RHB

Countries on the verge of becoming an ageing society. South Korea is expected to become an aged nation by 2030 when considering the various drivers mentioned above. While Singapore's aged population is expected to hit 22.8% by 2030, we believe the country's linear visa requirements could offer a respite with regards to the island republic attaining aged nation status. In the longer run, we believe policymakers will remain crucial in promoting a country's fertility rate – depending solely on immigrants to provide the necessary services in caring for the elderly will only offer near-term solutions.

Figure 3: Aged population as a percentage of the total population

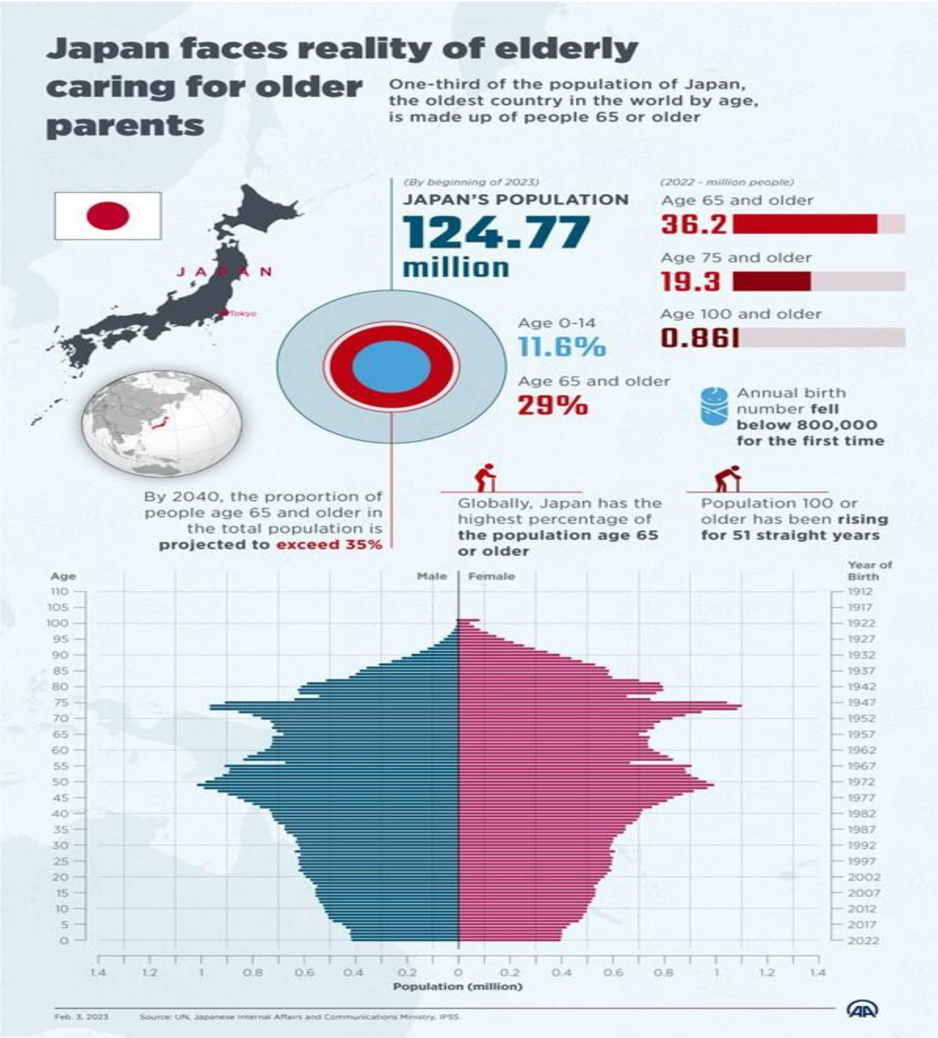
	2022			2030F		
	Total population (m)	Aged population (m)	%	Total population (m)	Aged population (m)	%
Japan	124.0	37.1	29.9%	118.5	37.2	31.4%
South Korea	51.8	9.1	17.5%	51.3	12.8	25.0%
Malaysia	33.9	2.5	7.5%	36.7	3.6	9.9%
Indonesia	275.5	18.9	6.9%	292.2	26.2	9.0%
Thailand	71.7	10.9	15.2%	72.1	15.3	21.3%
Singapore	6.0	0.9	15.1%	6.3	1.4	22.8%
China	1,425.9	195.7	13.7%	1,415.6	258.0	18.2%

Source: UN, RHB

Social issues in an ageing society. A declining birth rate is the most prominent issue faced by every developed nation. Birth rates among such countries are declining at a 2011-2021 CAGR of 1.6% vs the 1.8% rate of decline in less developed nations. An ageing society could potentially have negative implications, eg decelerating GDP growth, a shrinking labour force, lower national savings rates, and increasing the burden on national healthcare systems amongst others.

We hold the view that a growing elderly demographic means greater dependence and a bigger burden on society if the pace of growth of the younger generation fails to catch up with that of the ageing population. It is also a given that, as a country's population ages, its public expenditure on healthcare and pensions naturally rises. The situation could be further exacerbated by shrinking populations, where the active taxpaying labour force is on a declining trend. Note: Over 70% of social security benefits are generally distributed to the elderly, making policymaking decisions a challenge in terms of the sustainable maintenance of the funding structure, with regards to any particular country's pension systems.

Figure 4: Growth of Japan's "Silver Population"



Source: UN, Ministry of Internal Affairs and Communications of Japan, RHB

Case studies from Japan's pension system. Inclusivity and sound funding mechanisms of a country's social security scheme is crucial, in our view, to ensure the sustainability of an ageing population's wellbeing. Japan's pension systems have always strived to be inclusive, providing support and benefits to a wide range of individuals. They cover most workers, including employees, self-employed individuals, and public servants. Coverage is also extended to both Japanese citizens and foreign residents that meet certain requirements (eg foreigners need to have paid state pension contributions for 10 years before being eligible to receive such pensions after they retire). Additionally, Japan's pension systems offer various types of programmes to accommodate different employment statuses and circumstances, eg self-employed, dependent spouses relying on spousal income, and people with disabilities.

In terms of funding mechanisms, Japan's pension system operates on a pay-as-you-go basis, where contributions from the current workforce finances the benefits for the existing retirees. This mechanism involves a combination of contributions from employees, employers, and the Japanese Government. To ensure the sustainability of its pension systems, Japan regularly reviews and adjusts the contribution rates and benefits formulas based on demographic changes, life expectancies, and economic factors. These adjustments are made to maintain the balance between contributions and benefits, and to ensure the long-term viability of the country's pension systems. Additionally, the National Pension also covers disability, survivor, lump-sum death, and widow benefits.

Figure 5: Japan's pension systems

Category		Eligible participants	Contribution per month (JPY)	Benefits
1	National Pension (basic pension)	Aged 20-60	JPY16,520 per month (fully borne by the employee).	Eligible to claim after the age of 65. Entitled to JPY795,000 pa (JPY66,250 per month) upon reaching 65 years of age. Annual pension amount = full pension benefits x total months of contributions / (40 years x 12 months).
2	Employees' Pension Insurance or EPI	Employees under the age of 70	18% of employee's income (50:50 spilt between employee and employer) subject to annual increment of c.0.25%.	Entitled for an annual payout subject to the following calculations: 0.55% x (average annual salary) x (number of years in employment).

Source: Japan Pension Service

Analysis Of Aged Care Companies Listed On The TSE/TYO

Our analysis on eldercare service providers listed on the Tokyo Stock Exchange (TSE/TYO) indicates that most of the listed companies are involved in one of the following businesses (Figure 6):

i. Operating nursing homes (ie fee-based homes for the elderly);

ii. Providing serviced residences for the elderly;

iii. Operating hospice housing;

iv. Providing home visits for nursing care services.

While business models and corporate structures are quite varied among the aforementioned group, we tried to quickly assess the average revenue growth for this grouping of companies. We note that the 5-year average in terms of USD-denominated revenue growth stood at 8.1%. The average margins for these firms during the last fiscal year stood at 9.7%. This, however, was skewed higher due to the inclusion of Health Care & Medical Investment Corp, a healthcare REIT that operates nursing homes in Japan. Excluding this REIT, the average net margin for these group of companies would drop to 4.2%.

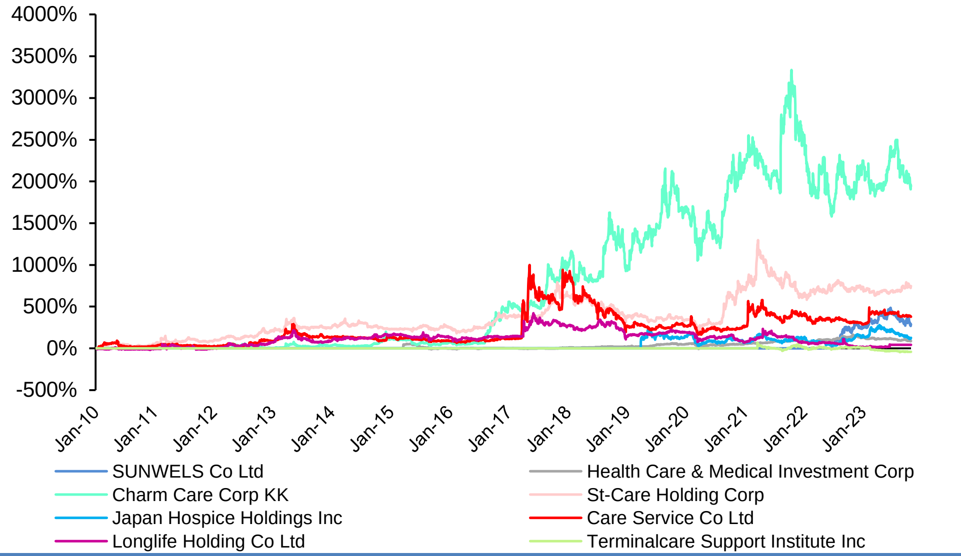
Additionally, the market cap-weighted trailing P/E for this grouping stood at 49.1x. Again, this was also skewed higher due to the high P/E of SUNWELS, a company with the largest market cap. Excluding SUNWELS, the market cap-weighted trailing P/E drops to 20.3x. Meanwhile, the market cap-weighted YTD return for this group of companies stood at -8.6%. This grouping underperformed the Nikkei 225 Index, which delivered 19% returns this year.

Figure 6: Japan's listed nursing homes

Bloomberg Ticker	Name	Descriptions	Market cap (USDm)	Sales three years ago (USDm)	Sales last year (USDm)	CAGR (%)	Net income (USDm)	Net margins (%)
9229 JP	SUNWELS	SUNWELS offers care services. The company provides elderly housing operations, day services, home visit nursing, care plan creation, and other services. It also operates welfare equipment rental, home re-modelling, and other businesses.	579	40	101	36.1	6	5.7
3455 JP	Health Care & Medical Investment Corp	Healthcare & Medical Investment Corporation is a REIT that mainly invests in housing, care facilities, and medical facilities for seniors.	336	37	35	-1.8	17	48.2
6062 JP	Charm Care Corp KK	Charm Care Corp KK provides residential and personal care services.	236	181	276	15.0	23	8.5
2374 JP	St-Care Holding Corp	St-Care Holding Corp mainly provides dispatch-base nursing care services for the elderly and handicapped. The company also provides meal delivery services, leases and sells nursing equipment and adult diapers, operates nursing homes for the elderly, and provides home improvement plans to meet the needs of the elderly and handicapped.	139	397	389	-0.7	13	3.3
7061 JP	Japan Hospice Holdings	Japan Hospice Holdings offers hospice-related services. The company provides home hospice care, hospice housing management, and other services. Japan Hospice Holdings also provides planning and design supervision commission services.	121	38	60	16.2	3	5.8
2425 JP	Care Service	Care Service provides nursing care services to the handicapped and elderly in Tokyo. The company's services include daycare, 24-hour home-visit care, homestay care, and bathing services. Care Service also conducts a funeral director service that assists families with funeral arrangements, bathes and embalms the deceased, and prepares the body by cosmeticising and dressing.	20	83	68	-6.4	2	3.5
4355 JP	Longlife Holding	Longlife Holding provides nursing services for senior citizens and patients with Alzheimer's disease at either its nursing facilities or a client's home.	14	121	100	-6.1	-1	-1.0
7362 JP	Terminalcare Support Institute	Terminalcare Support Institute offers care services. The company provides preventive home visit care, home care support, elderly housing, and other services. Terminalcare Support Institute provides its services throughout Japan.	12	22	31	12.8	1	3.8

Source: Bloomberg

Figure 7: Share price returns of Japan's aged care service providers



Source: The Government of Japan (JapanGOV)

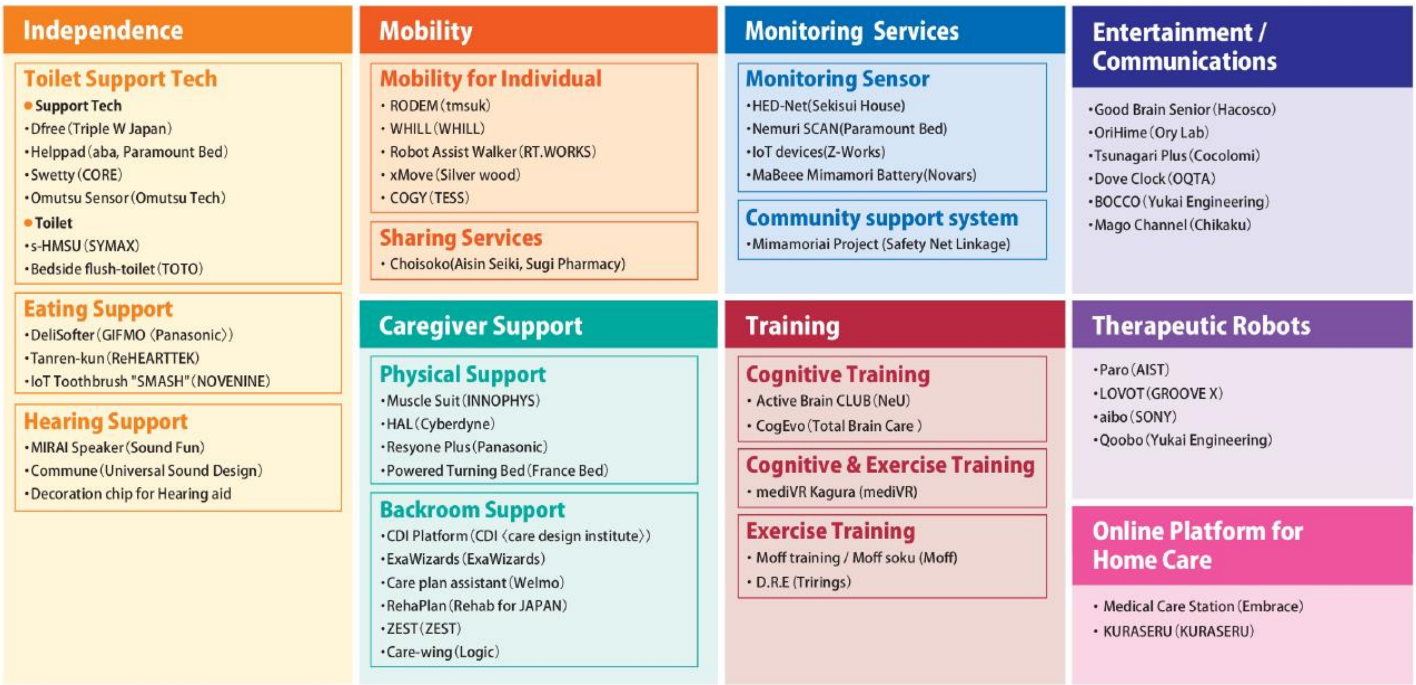
Key Takeaways From Japan's Aged Care Industry

What have we learnt from Japan? The country has long been known for its respect of its seniors and elders, and having a powerful sense of obligation in caring for them. The involvement and responsibility of family members in taking care of their elderly parents is even formally embodied in Japanese culture. However, as the country's shrinking demographic size is leading to a decline in the labour force, Japan has resorted to technology to address the mounting need to care for its growing elderly population.

Incorporating technology into aged care. Digital care systems have been the centrepiece of Japan's strategy in terms of looking after its ageing population. Apart from regularising patient medical data to facilitate more efficient healthcare services, Japan has also incorporated artificial intelligence (AI), digital wearables, robotics, and virtual reality (VR) technologies into its aged care services. Initiatives, which include digital healthcare systems, are also in place to make patient data accessible for insurers, healthcare service providers, and tech solution developers.

The combining of the concepts above can be related as Age Tech, a widely popular term used in Japan to define the emerging field of technology that focuses on improving the quality of life for the elderly. Functionality available under Age Tech may include mobility solutions, AI diagnosis and medication support, training and cognitive training services, unique transportation solutions, therapeutic solutions, remote monitoring and recording, and robot assistants and living companions.

Figure 8: List of Age Tech services available in Japan



Source: Government of Japan

For instance, Fuji Soft has developed a humanoid communication robot with advanced AI capabilities designed to mainly support preventive care activities. Sold only in Japan, this AI robot – called Palro – is widely used in nursing facilities nationwide. Besides carrying out nursing roles, Palro can also sing, dance, and perform exercises to help spur elderly patients' loco motor functions while stimulating brain functionality by playing games and participating in quizzes.

Meanwhile, the concept of AI is also being incorporated into various medical equipment and peripherals. Companies such as Sompo and its Future Care Lab are developing products such as AI wheelchairs that are able to move autonomously on pre-selected paths. Other Age Tech devices include convertible beds, and body sensors for baths and beds that can help the elderly live more independently. In the case with of VR headsets, Japan is making a breakthrough thanks to the VR headsets developed by Silver Wood Corp, which aid against the onset of dementia. This headset aims to simulate what it is like to have dementia, and helps provide an understanding of the effects of this condition and assists in its treatment.

Figure 9: Palro – a humanoid robot

Source: Japan External Trade Organisation

Figure 10: VR headset to simulate dementia

Source: Silver Wood Corp

Figure 11: High-tech bed developed by Paramount Bed

Source: Paramount Bed

Figure 12: PARO – a therapeutic seal robot designed to provide mental care assistance for the elderly

Source: Washington Post

Reimagining quality nursing care services. The household configuration in Japan has been shifting from multi-generational to nuclear and single households since the early 1960s. By 2040, statistics stated that more than 9m people will be living alone in Japan, whether by personal choice or due to circumstances. This can be viewed as a paradigm shift since, traditionally, there was more of an imperative and structure via which several generations lived in the same dwelling, with the younger generation caring for their ageing elders at home. According to figures released by its Ministry of Health, one in five senior citizens in the country or c.7.3m people will have dementia by 2025 (from around 4.6m now). Coupled with the high life expectancy here, there is no doubt that technological advancements will be handy in terms of providing solutions for this group of people.

From the basic foundations of nursing care service to the integration of building up elderly-friendly living spaces, Japan can pride itself for the standard of elderly care service it has to offer. For instance, Paramount Bed – a Japanese bed-manufacturing company – has developed a high-tech bed with a motion control system aimed at addressing issues such as bedsores or worsening health conditions for the elderly who are required to remain in bed due to old age or illness. The high-tech bed incorporates a motion control system based on human engineering, which can determine the least uncomfortable body positioning and minimises feelings of discomfort. Caregivers are able to adjust the bed's position via the built-in controller or a mobile phone. Ultimately, the bed not only makes it more comfortable for the person lying on it to rise, but also significantly reduces the burden on the caregiver.

One must also not forget the importance of patience, attention, and time needed to be spent on senior citizens with dementia. Japan's National Institute of Advanced Industrial Science and Technology or AIST has developed a seal-like communication robot – PARO. Its main function is to provide comfort and joy while acting as a distraction for those with dementia who make repeated demands to their caregivers throughout the day.

As a person picks up PARO and caresses or speaks to it, the seal robot responds as if it were alive, by blinking, moving its limbs, and tilting its head. An elderly person who does not have a conversation partner can communicate with PARO, which appears to be just like a living animal. The robot not only serves the mental care needs of the elderly in Japan, but has also been exported to c.30 countries, including the US and Europe.

Conclusion. Japan's high-level technology is continuously being put to good use in various areas of nursing care. It has developed a whole new industry in the country and, at the same time, contributes to building a society more accommodating to the needs of aged people. As our population ages further, the Age Tech industry is poised for significant growth. In view of this, the countries under our coverage should take formative steps to look into various initiatives and support structures to gradually integrate technology infrastructure into the aged care industry while setting long-term targets to promote its growth.

Underlying opportunities for aged care players in ASEAN

Underlying opportunities for ASEAN. The Age Tech business in Japan is estimated to be worth JPY30bn (EUR210m) by 2025, according to Asian Insiders. In 2018, the Japan Government spent well in excess of USD300m to fund R&D for such technology. The country has also been developing robots to care for older people for over two decades now, with public and private investments accelerating markedly since 2010. Japan's total population aged 65 years and above accounted for 23.6% of its total population in 2010. The number is still considered high, even for the comparative year of 2022, for countries like Singapore, Malaysia, Thailand, and Indonesia that have aged population ratios of 15%, 7.5%, 15%, and 7%. While the impact of an ageing society could be potentially associated with a declining labour force, we think this may present an opportunity for countries with a growing ageing population to gradually invest in Age Tech, as the future of nursing care is expected to follow Japan's current practices.

In light of these factors, South-East Asia stands to reap substantial benefits, primarily from embracing digital health solutions for elderly patient care systems. This potential is driven by the region's sizeable and ageing population, which is exerting growing pressure on the existing healthcare infrastructure. This ageing demographic is a consequence of declining birth rates and extended life expectancies, signifying a rising burden of non-communicable diseases like dementia and diabetes, and necessitating costly long-term treatment and care. Consequently, there is an opening for healthcare providers to utilise digital health solutions, including AI applications, to deliver care to elderly patients in the comfort of their homes.

Concurrently, the adoption of digital technology – encompassing online platforms, mobile apps, wearables, and the IoT – is surging throughout the region. This surge, coupled with emerging trends – ie remote care and the proliferation of smart living services – showcases the potential of digital health technology in addressing the challenges associated with an ageing population. These technologies have the capacity to enhance access, service quality, and promote cost-effectiveness in healthcare. The current range of digital health solutions span from personal health data devices to intricate systems that manage health information for entire communities.

Around the world, patients already benefited from wearable robotic devices that provide continuous care and companionship – allowing healthcare providers to shift certain aspects of care to patients' homes. This transition alleviates the burden on overworked and less cost-effective hospitals while simultaneously improving care's accessibility, efficiency, and reliability. However, widespread adoption of this technology remains far away. While China and the US lead in global AI deployment – and Singapore is making giant strides in catching up – other ASEAN countries are still establishing the foundations of digital infrastructure and data ecosystems necessary to harness this potential.

For instance, during the 11th Asia-Pacific Eldercare Innovation Awards held in Singapore – in conjunction with International Ageing Week (22-26 May) – the host nation came second behind Australia, with 66 winners and finalists. Singapore outpaced other Asian countries like Hong Kong (23 winners and finalists) and Japan (19 winners and finalists). Most importantly, Bekind Solutions of Singapore was crowned the winner of the prestigious Ageing Asia Start-up of the Year 2023 award. The company impressed judges with its innovative and impactful solutions for an ageing population. It produced the smart walking stick, which is equipped with numerous cutting-edge safety features. This device incorporates features such as LED illumination, automatic fall detection alerts, integrated radio and MP3 players, carbon fibre construction, an integrated seating option, a built-in umbrella, and a modular quad base system.

Figure 13: Bekind Solutions' smart walking sticks

Source: Company data

A number of healthcare IT investments has been directed towards the following domains below, according to a report from Duke-NUS Medical School.

Monitoring and tracking: This involves the usage of technology to collect and transmit health-related data through mobile, wearable, and home-based devices. These technologies are applied to monitoring clinical indicators, tracking high-risk patients, and enhancing response times during emergencies or incidents like falls.

Case study of products or services innovation: Hypoband, developed in Malaysia, serves as a wearable that detects cold sweats, which can be an early sign of a hypoglycaemic crisis – particularly in elderly diabetic patients. Devices like SOS Buddy and the OMG Elderly GPS Watch are being employed to track dementia patients by integrating GPS tracking components into wearables. These technologies enable caregivers to monitor the movements of dementia patients, ensuring that, if they ever get lost or disoriented, their precise location can be readily shared with family members. Siam Cement Group has initiated the DoCare Protect project, which utilises sensors and cloud technology to send distress alerts when an elderly individual at home has a sudden collapse or prolonged immobility. These alerts are relayed to a dedicated care centre staffed by professional nurses that are available around the clock to verify the urgency of the situation. If deemed necessary, an ambulance will promptly be dispatched to the affected individual's residence

Supporting individual self-management: Digital health technologies aid independent living, reduce daily challenges, and promote overall well-being. They include personalised lifestyle and disease management with data analytics, timely reminders, and real-time feedback. Platforms and applications are designed to assist individuals and their families in maintaining independent lifestyles – before or after the onset of chronic illnesses. Such technologies encourage healthy ageing by promoting physical and mental well-being, offering health education, goal-setting activities, and providing support for disease management. Such support can come through self-care or a shared relationship with a health coach or care provider. Gamification and VR encourage healthy behaviour, particularly benefitting those who find behaviour change or chronic disease management challenging.

Case study of product or services innovation: Robocoach, a prototype robotic fitness instructor, is now operating in selected senior activity centres in Singapore. It guides elderly individuals in gentle exercise routines through built-in sensors – customising exercises to each user's needs. During the pilot phase, Robocoach gained popularity and increased participation in community fitness classes. Alo Health is testing VR technology in Singapore's nursing homes, providing elderly residents with immersive experiences ie virtual travel and swimming with fishes. This stimulates cognitive function, enhances mood, and combats social isolation as residents discuss their virtual adventures. SilverActivities, a Singaporean company, develops games, apps, and devices for seniors, including the dementia-specific SilverPad tablet. These activities support cognitive functions by enhancing memory and problem-solving skills in a user-friendly format. The tablet offers a straightforward interface, large buttons and text, and caters to the needs of elderly Singaporeans with content available in four local languages.

Facilitating access to professional healthcare services: These solutions aim to reduce the cost of service delivery and enhance accessibility to healthcare goods and services. It is achieved by offering telehealth solutions and efficiently connecting consumers with third-party providers. These technologies empower users to manage information and healthcare-related decisions, provide support to caregivers, and seamlessly integrate online services into their daily lives.

Case study of product or services innovation: Various platforms such as Caregiver Asia, Care Concierge, Carer, Homage, Jaga-me, and Health at Home in Malaysia, Singapore, and Vietnam are dedicated to connecting elderly individuals and their families with nurses, therapists, or trained caregivers. These platforms offer flexible care solutions tailored to the specific needs of both patients and caregivers. Services range from on-demand or scheduled care to caregiver training (Caregiver Asia), specialised post-hospitalisation rehabilitation (Care Concierge), and dementia patients care. These platforms prioritise user-centricity by providing tools that allow caregivers to monitor performance, access digital diaries, and make informed decisions about patient care and nursing staff through feedback and rating systems.

Thailand is currently testing a comprehensive city-wide project, the Saensuk Smart City, in Chonburi District. This initiative is tailored to meet the needs of elderly residents living alone, and is supported by a team of community nurses who conduct regular home visits. The project utilises cloud technology, IoT, and wearables to monitor elderly patients' health and home environments, enabling them to request assistance from anywhere and establish secure zones for dementia patients. Individual health data is transmitted to a central nursing headquarters cloud system, providing real-time citywide updates, which allows nurses to prioritise their interventions and deliver timely and appropriate care.

Engaging community-based resources: Technology within this domain is geared towards crowdsourcing health information or involving the wider community beyond the formal healthcare system – to offer support and foster inclusion.

Case study of product or services innovation: In Singapore, digital technologies are employed to organise community support networks in eight pilot neighbourhoods. When a dementia patient goes missing, the Dementia Friends app sends alerts to partners, caregivers, and the public. Whoever finds these patients can transport them to specific go-to points within these neighbourhoods where trained community partners help reunite such patients with their caregivers. The app also offers guidance on interacting with dementia patients and providing effective assistance – increasing public awareness of dementia-related challenges.

While digital health technology offers greater potential for supporting healthy ageing in South-East Asia, we identify several challenges and gaps that need to be addressed to fully realise its benefits and serve the ageing population effectively:

i. There are fewer digital health solutions available in low- and middle-income countries. This could be attributed to a less conducive environment for health technology start-ups, investment challenges, or limitations in our research scope;

ii. From the user's perspective, one of the major hurdles to the adoption of digital health and AI is trust, particularly concerning the handling of sensitive healthcare data. Healthcare service providers must be transparent in informing patients about the storage and utilisation of such data;

iii. The digital divide remains a concern, with issues related to access, capability, and outcome. The region still lacks comprehensive infrastructure, especially in rural areas, and cost remains an obstacle. Furthermore, there is a need for senior-centric designs to accommodate the ageing population. Elderly users may have limited technology capabilities, necessitating user-friendly design elements. Steep educational gradients among older adults also poses a challenge;

iv. Elderly patients who can access technology may face age-related physical and psychological barriers, ie declining dexterity, visual impairments, or lack of confidence. We believe personalising technology can help overcome these barriers, provided that the products' designers consider the intricacies of ageing during the design process.

In summary, while digital health technology holds great promise for enhancing the well-being of the older generation in South-East Asia, there are significant challenges and gaps that need to be addressed to fully unlock its potential and provide effective support for healthy ageing.

Key Essentials

Healthcare spending

Healthcare spending trend. The total amount spent on healthcare, relative to the size of the overall economy, varies over time. This is due to differences in both the growth of a country's healthcare spending and overall economic growth. Prior to the COVID-19 pandemic, OECD countries spent an average of c.12% of their GDP on healthcare – a figure more or less unchanged since 2010. The US spent by far the most on healthcare, ie equivalent to 19.8% of its GDP in 2020, followed by other high-income nations such as Germany, France, Canada and Japan.

Notably, healthcare expenditure in Japan is the highest in Asia, with an average of 11% of its GDP spent over the past 10 years, vs countries in East Asia and the Pacific, which spent an average of 7%, given its aged population. It is worth noting that healthcare expenditure as a percentage of GDP spiked significantly in 2020, reflecting the surge in government spending to fight the pandemic.

Beyond 2020, healthcare expenditure is expected to continue to chart positive growth, underpinned by gradual innovations in healthcare services, continued growth in medical insurance adoption, as well as increasing awareness among policymakers to boost the countries' readiness for an ageing society.

Figure 14: Healthcare expenditure as a % of GDP

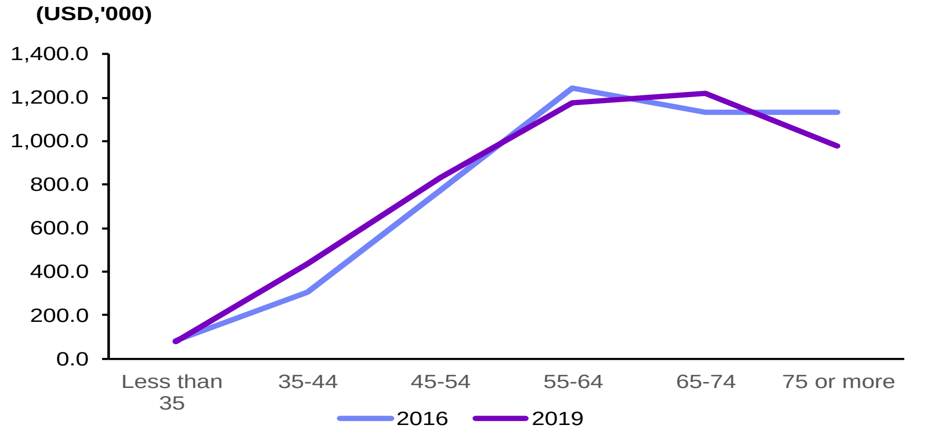
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Asia											
Malaysia	3.2%	3.3%	3.5%	3.5%	3.7%	3.8%	3.7%	3.7%	3.8%	3.8%	4.1%
Japan	9.1%	10.5%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.8%	10.9%
South Korea	5.9%	6.0%	6.1%	6.2%	6.5%	6.7%	6.9%	7.1%	7.5%	8.1%	8.4%
Singapore	3.2%	3.2%	3.3%	3.7%	3.9%	4.2%	4.4%	4.4%	4.1%	4.4%	6.1%
Thailand	3.4%	3.6%	3.5%	3.5%	3.7%	3.9%	3.9%	3.9%	3.9%	3.9%	4.4%
Indonesia	2.8%	3.0%	2.9%	2.9%	3.0%	2.9%	3.0%	2.9%	2.9%	2.9%	3.4%
China	4.2%	4.3%	4.6%	4.7%	4.8%	4.9%	5.0%	5.1%	5.2%	5.4%	5.6%
Average	**4.5%**	**4.8%**	**4.9%**	**5.0%**	**5.2%**	**5.3%**	**5.4%**	**5.4%**	**5.4%**	**5.6%**	**6.1%**
Developed countries											
US	16.2%	16.1%	16.1%	16.0%	16.2%	16.5%	16.8%	16.8%	16.6%	16.7%	18.8%
UK	10.0%	9.9%	9.9%	9.8%	9.8%	9.8%	9.7%	9.6%	9.7%	9.9%	12.0%
Germany	11.1%	10.8%	10.9%	11.0%	11.0%	11.2%	11.2%	11.3%	11.5%	11.7%	12.8%
Switzerland	9.9%	10.0%	10.2%	10.5%	10.6%	11.0%	11.3%	11.5%	11.4%	11.3%	11.8%
Average	**11.8%**	**11.7%**	**11.8%**	**11.8%**	**11.9%**	**12.1%**	**12.3%**	**12.3%**	**12.3%**	**12.4%**	**13.9%**
Economic region											
EU	9.9%	9.8%	9.9%	10.0%	10.0%	10.0%	10.0%	9.9%	9.9%	9.9%	10.9%
OECD members	11.6%	11.6%	11.7%	11.7%	11.9%	12.2%	12.4%	12.4%	12.3%	12.5%	13.9%
East Asia & Pacific	6.3%	6.7%	6.8%	6.5%	6.5%	6.5%	6.6%	6.5%	6.6%	6.7%	6.9%
Average	**9.2%**	**9.4%**	**9.5%**	**9.4%**	**9.5%**	**9.6%**	**9.6%**	**9.6%**	**9.6%**	**9.7%**	**10.6%**

Source: OECD

A look at the spending power of seniors. The senior consumer class made up 11.7% of the global consumer class in 2020. Taking the US as an example, the average net worth of a household (inhabitants aged 65-74 years) peaked at USD1.2m in 2019 as the individual approached retirement and was rewarded with pension benefits accumulated throughout the years.

Also, senior citizens who remain in the workforce tend to have high incomes (especially in OECD countries, thanks to old-age pensions) and higher healthcare needs (taking into account medical and specialised care) compared to their younger cohorts. This group of consumers are the biggest spenders on healthcare – and its size continues to grow. The total number of the global silver population is expected to reach 760m by 2023 from 459m in 2020, according to World Data Lab.

Figure 15: US households' mean net worth (2016 vs 2019)



Source: UN, RHB

Figure 16: Global consumer class

	Consumer class (m)				
	2020	2030	changes %	% of age group in consumer class (2020)	% of age group in consumer class (2030)
Children (0-14 years old)	728	1,008	38.5%	18.5%	18.1%
Young adults (15-29 years old)	858	1,185	38.1%	21.8%	21.3%
Professional middle (30-44 years old)	890	1,206	35.5%	22.6%	21.7%
Professional old (45-64 years old)	1,000	1,402	40.2%	25.4%	25.2%
Seniors (>65 years old)	459	760	65.6%	11.7%	13.7%
Total	**3,935**	**5,561**	**41.3%**	**100.0%**	**100.0%**

Source: World Data Lab

Importance of technology in healthcare

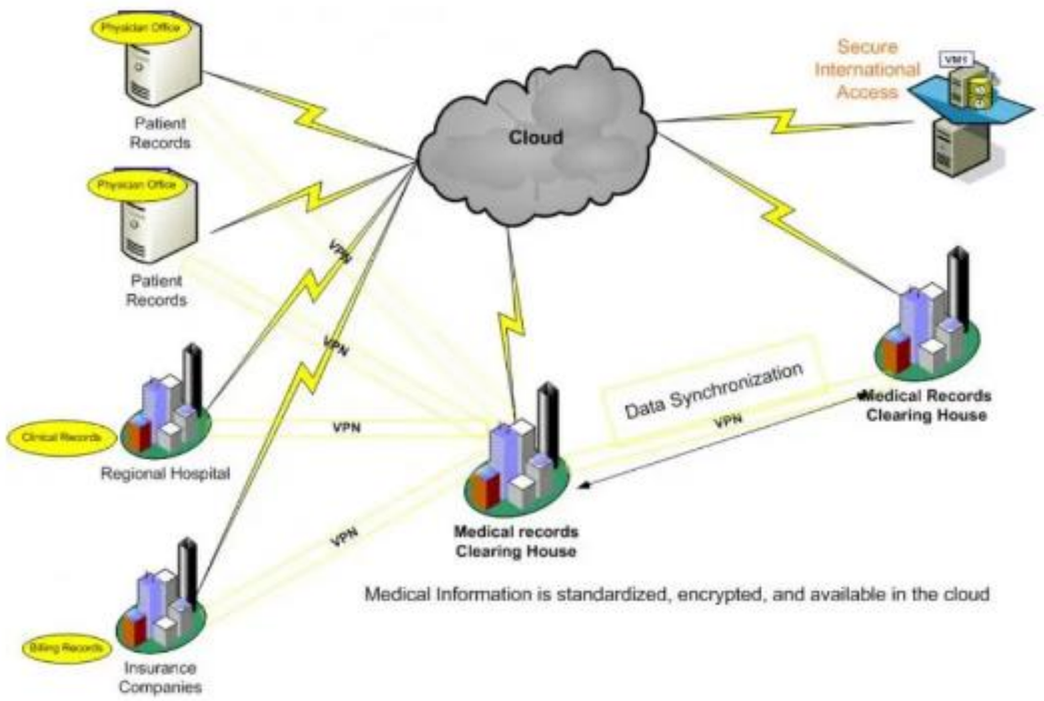
Accelerating technological innovations and digital integration. Digital healthcare will be the key transformation pillar in the silver economy, given the greater health awareness and as developing preventative measures require technological advances so that solutions like hardware (smartphones and wearables for early detection) and software (health-related apps) are continuously upgraded and made easier to use. Meanwhile, the need for immediate medical response (on-site and off-site) has always been a concern for patients, given the lack of data integration in these scenarios:

i. Personal health records with health service providers;

ii. Coordination between public and private hospitals;

iii. Claims procedures between insurance companies and private hospitals.

Figure 17: Mechanism of digital healthcare



Source: Computer World

Growth drivers. Asia will inevitably experience technological adoption in the healthcare industry, driven by the aforementioned factors. Digital health could potentially impact over a billion lives. According to McKinsey, the size of Asia's digital health market could collectively be valued at USD100bn by 2025, from USD37bn in 2020, representing a 5-year CAGR of 22%. There are three fundamental drivers in the adoption of digital healthcare:

i. **Supply constraints.** The average doctor/physician per 1,000 persons in the region is far behind the World Health Organisation's (WHO) standard, with the exception of Malaysia and Singapore among the countries under our coverage. In addition, average hospital beds per 1,000 people within the three countries (Malaysia, Indonesia, and Thailand) were below the developed nations' average of 2.5. We believe the investments into hospitals and physician training will continue to rise in ASEAN. However, we note that the global shortage of nurses could be as high as 9m by 2030, with some of the worst affected countries being in South-East Asia and Africa, according to the WHO. In view of this, digitalising healthcare services could be a more sustainable solution to meet Asia's rising health needs;

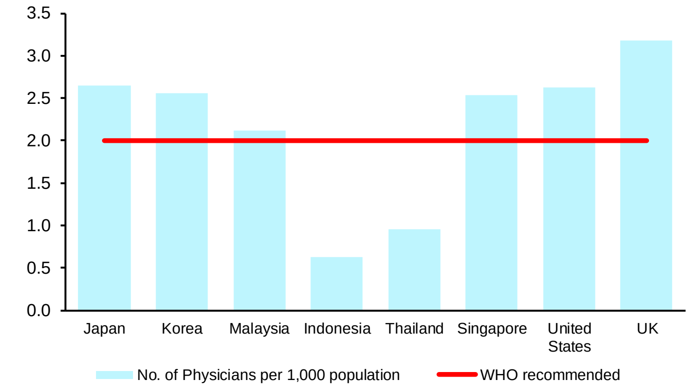
ii. **Rising consumer expectations.** Consumers are expected to spend more on health and wellness, and increasingly demand for access to convenient and affordable care. According to research from McKinsey, consumers are up-trading in their health spending. For example, consumers in China were willing to spend more on branded health products during the pandemic. McKinsey also found that 43.5% of Chinese consumers have been spending more on their health in the past 12 months, and 23.1% are spending more on their nutritional needs;

iii. **Growing financial burden.** Governments in East Asia and the Pacific spent an average of 6.9% of their GDP on healthcare, compared with the OECD's average of 13.9% and Europe's 10.9%. As these Governments are dominant players in Asia, accounting for 60% of all health expenditures in 2019, finding ways to address the rapid growth of healthcare expenditure remains an urgent public priority, while also prioritising quality and access for patients.

iv. **Digitalisation in other areas.** There has been a paradigm shift in the shopping habits of older adults in the current digital landscape. Many adults have moved away from the traditional approach of purchasing goods from brick and mortar stores, and are embracing the convenience offered by online platforms. As people are expected to live longer, having mortgage-free homes and accumulated wealth as they age, the need for digital inclusion will remain crucial to facilitate the silver generation's access to information, socio-economic participation, and to ensure daily chores are carried out without interruption.

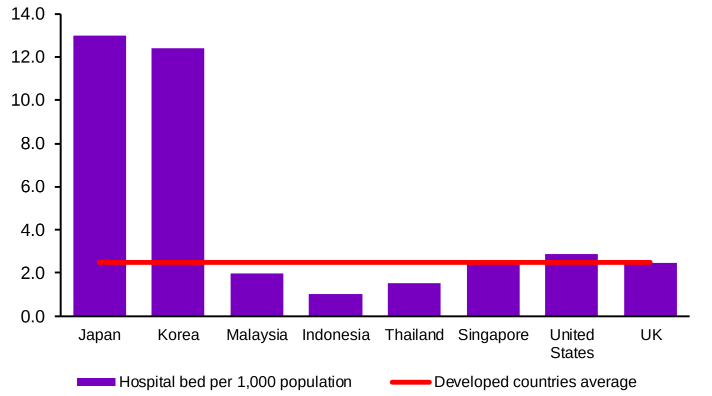
Local businesses should strive to encourage innovative solutions while integrating digital inclusion into our daily needs. Governments in the respective countries should examine digital adoption by age and ethnicity, and improve computer literacy rates. In addition, measures against emerging risks such as misinformation, cybercrime, online safety and privacy issues are important to safeguard the interests of digital users.

Figure 18: Number of physicians per 1,000 persons



Source: World Bank

Figure 19: Number of hospital beds per 1,000 persons



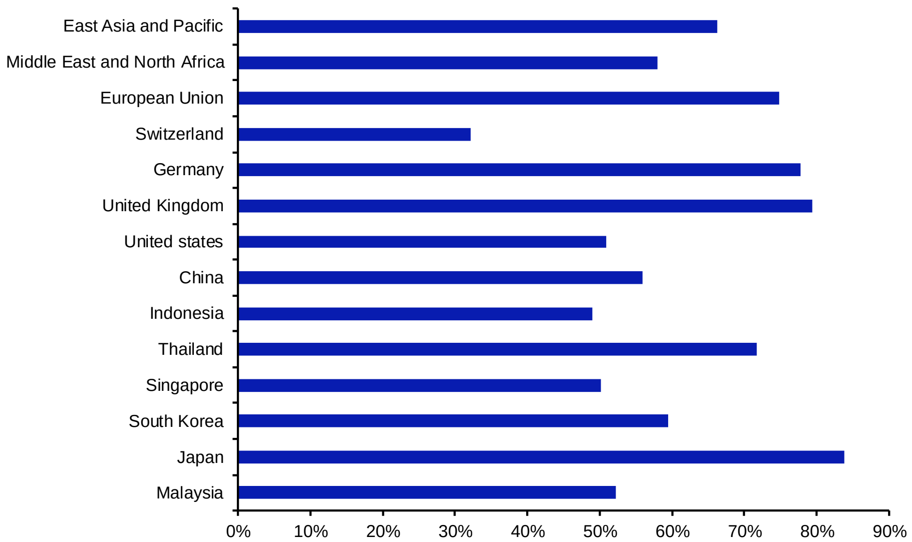
Source: World Bank

Figure 20: Market size of digital healthcare

			Market size in Asia, USDbn		
Category	**Benefits**	**Example of technologies**	**2020**	**2025F**	**CAGR**
Wellness and disease prevention	To improve wellness and disease prevention	Wearables, activity & fitness trackers	2.3	6.6	23.5%
Screening and diagnosis	Intercept disease through screening	Genomics and other omics	3.5	11.7	27.3%
	Identify the right patients	Digital diagnostics, AI imaging	1.6	3.6	17.6%
Care delivery	Provide more effective therapies	CDM, digital therapies (CDS, cognitive games)	6.1	7.6	4.5%
	Provide more patient support	Telemedicine, remote monitoring	16.8	37.1	17.2%
	Supply therapies to patients	Digital pharmacies	7.1	33.8	36.6%
Total			**37.4**	**100.4**	**21.8%**

Source: McKinsey

Figure 21: Government healthcare expenditure as a percentage of total healthcare expenditure



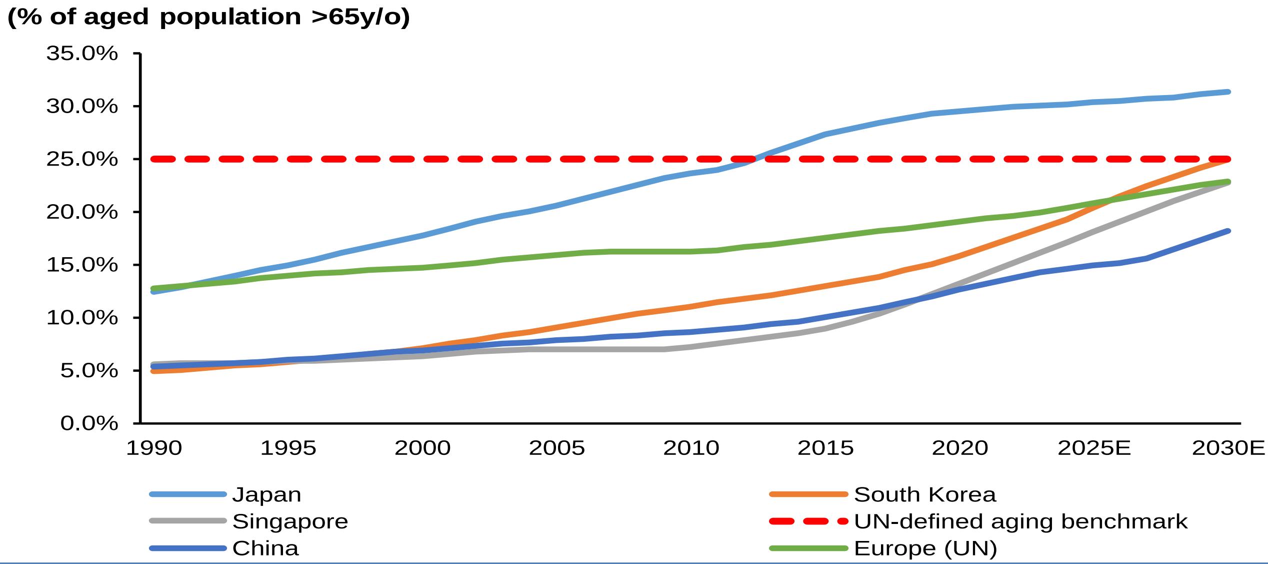
Source: WHO

Ultimately, the advancement of technological innovation in the healthcare industry will bring more good than harm to a country. Digital healthcare will not only improve the quality of services but also create opportunities for equal access to healthcare. To sustain this growth rate, digital health solutions must be designed to reach previously excluded or under-represented groups. While market opportunity is big, it still lacks homogeneity and integration between public and private organisations. As such, we think technology platform service providers will need to rethink their segmentation strategies to cater their services, while organisations (public and private hospitals) will need to decide on the need to transform their core businesses, as well as decide on potential integration with government platforms. Lastly, government support measures such as regulations on data protection, funding mechanisms, and advancement of digital platforms will play crucial roles in fulfilling the rising need for better and more accessible healthcare.

Investment opportunities in ageing societies

Market size of the silver economy. According to the 4th Asia Pacific Silver Economy Business Opportunities Report 2020, Western economies will remain the top silver economies over the next decade. While three Asian countries – China, Japan and India – are expected to be in the top 10, only the silver economies of China and India are expected to grow rapidly, in comparison to Japan, which attained ageing status in 2011. In China, the value of its silver economy is expected to chart a 5-year CAGR of 9.9% to USD2.6trn by 2025 from USD1.6trn in 2020. This would overtake Japan, where senior spending is expected to plateau at USD900bn. Today, the total annual spending power of silver consumers is equally distributed across Asia, North America, and Europe (USD2.3trn each). By 2025, the growth of the Asia-Pacific's silver economy is expected to overtake the Western peers, as the market size is estimated to hit USD4.56trn, representing a 7.3% 5-year CAGR from 2020.

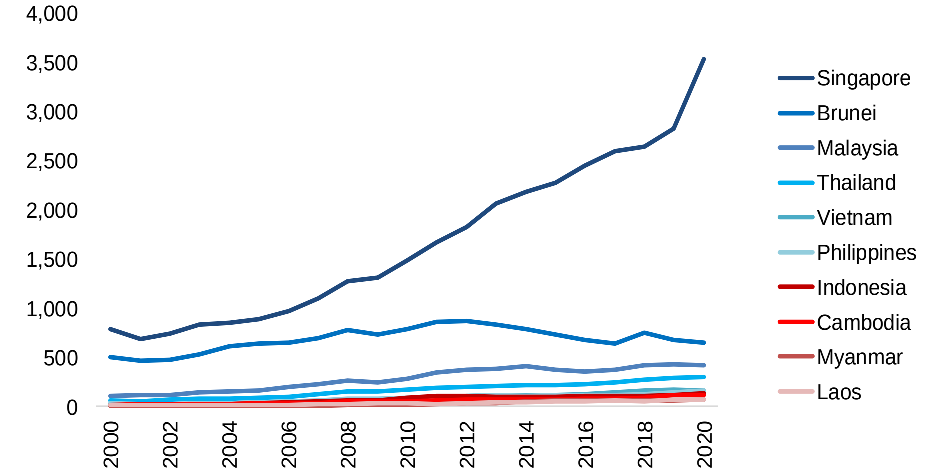
Figure 22: Percentage of the aged population in various countries



Source: United Nation, RHB

Growing market demand. There are investment opportunities in multiple business sectors related to the ageing population. Urbanisation as well as developments in technological and healthcare services have resulted in longer life expectancies. These factors have led to an increasing senior population that is living longer and consuming more, creating various business opportunities with growth potential in multiple sectors including healthcare, technology, mobility, and real estate. Therefore, the demand for products and services in the "silver economy" market is continuously growing in ASEAN countries. These silver economy businesses not only serve local seniors, but also foreign seniors immigrating into the region.

Figure 23: ASEAN countries' healthcare spending per capita (USD)



Source: WHO

The ASEAN region has seen a significant increase in healthcare expenditure in recent years. New technologies, costs of chronic disease treatment and government health coverage schemes may cause the amount of money spent by the ageing population to increase further. We believe the needs of an ageing population include financial and personal security, mental health, a strong healthcare system, and self-actualisation. Despite the basic nature of these needs, specific solutions are required when creating products and services for seniors.

For healthcare service providers, there are preparations made to cope with an ageing society. These include: i) The opening of a geriatric department that provides treatment specific to senior citizens; ii) developing senior care projects ie nursing homes, daycare facilities, and retirement communities; iii) establishing elderly care schools to create more healthcare professionals to support the rising trends; and iv) applying technologies to enhance treatment quality and efficiency, such as wearable devices, AI, medical robotics, a remote patient monitoring system, and telemedicine.

Managing elderly care. The ageing populace presents unique challenges and opportunities to the medical field. The healthcare system must evolve to cater to older adults' needs, including chronic disease management, palliative care and rehabilitation services. Technological advancements and innovative research in medicine are crucial to addressing the health concerns specific to the ageing population. Medical conditions like cardiovascular diseases, dementia and osteoarthritis necessitate tailored interventions and treatment modalities.

Meanwhile, healthcare professionals must have effective communication skills, especially when dealing with the elderly. Communication obstacles could obstruct access to suitable healthcare or cause misunderstanding and sub-optimal care. Encouraging digital literacy among older adults could bridge the communication gap, allowing them access to healthcare and telemedicine services.

Transformation into an ageing nation also means more attention should be paid to older adults' mental health. A country may invest in comprehensive mental health services tailored for older adults, including counselling, therapy and community support. Integrating mental health services into primary care and training healthcare professionals in geriatric mental health can facilitate early detection and suitable intervention.

Figure 24: Key summary of respective countries' investment ideas

	Indonesia	Malaysia	Singapore	Thailand
Demographics	• Entered the ageing society since 2021 when the elderly population reached 10.8%. • Still has a better demographic profile compared to other South-East Asian countries. • One out of five Indonesians will be elderly by 2045.	• Aged population growth expected to be the second highest among the countries under our coverage, expanding at a CAGR of 4.5% over 2022-2030. • Share of the elderly will rise to 20% by 2056. • Key reasons: A rise in life expectancy, and a declining birth rate.	• One of the lowest fertility rates in the world. • c.16.7% of residents were 65 or older in 2022 (2010: 9.0%, 2000: 7.2%). • c.19.1% of Singaporean citizens are 65 or older in 2023 (2010: 10.1%, 2000: 7.5%). • By 2030, one in four people will be aged over 65 years.	• Aged population is expected to grow at a CAGR of 4.4% over 2020-2030. • The share of the elderly population set to grow from 14% of the total population in 2020, to 21% by 2030 and 32% by 2050. • 2021 was the first time ever where the number of Thai deaths (0.56m) exceeded births (0.54m).
Challenges for ageing population	• There is an 8-year gap between life expectancy and a healthy life period of the population at birth – at least people will spend eight years of their lives in conditions of illness or disability (disability). • The healthcare budget has decreased by c.20% YoY in 2023, but it is still higher than 2022's regular budget and the allocation prior to the pandemic in 2019.	• The number of Malaysians under 25 years and 26-64 years are expected to chart CAGRs of -0.7% and 1.5% over 2019-2030 • The shrinking of the working population will lead to a narrower tax base, causing government revenue to plunge. • Tendency of delaying the retirement age due to insufficient pension savings.	• Rapidly ageing population or the "Silver Tsunami" may lead to a rise in chronic diseases, rising taxes, a tight labour force, as well as greater dependence on immigration. • Healthcare spending will amount to c.SGD27bn by 2030, having already increased it to SGD17.3bn in 2021 from SGD1.9bn in 2006.	• 2023 would be the first time that the number of retirees (60-64) is larger than those entering the workforce (20-24 years old). • Healthcare expenditure was THB696bn, or 4.4% of GDP in 2020, and the number is estimated to reach THB993bn (+7.4% CAGR) in 2025, and will represent 5.6% of the kingdom's GDP by 2030.
Government's initiatives and policy actions that required attention	• Develop strategies; a number of sustainable preparations in various aspects have been made to create a healthy and productive elderly segment. • Implement cash and non-cash assistance programmes to empower the aged segment. • Increase efforts to enhance the quality and equal distribution of internet networks, so that all regions can have proper access to digital technology.	• Insufficient and high-cost aged care services – building up the necessary talent to achieve an optimal caregiver support ratio. • Extending the retirement age – it is still lower than that of other countries. • Measures to increase the proportion of workers actively contributing to the EPF, and ensure that retirement savings could be sustained for longer should be introduced. • Budget-friendly measures for the elderly ie by EPF and KWAP.	• Singapore's sustainable population objectives and a more holistic approach through long-term action plans. • Focusing on preventive healthcare and expanding healthcare infrastructure. • Government-supported assisted living. • Others such as adjusting the retirement age, Central Provident Fund or CPF adjustments, ComCare Long Term Assistance, The Silver Support Scheme, etc.	• The 3rd NPE (2023-2037) • State welfare programmes ie the Social Security Fund (SSF), the National Health Security Office (NHSO), the National Pension Fund. • Seniors' residential complex development and the introduction of reverse mortgages. • To extend the legal retirement age for private sector employees from 55 to 60.
Investment opportunities	• Clinical testing, healthcare assessment tool and services pertaining to elderly people. • Advanced medicine products and FMCG products for elderly people with specific conditions. • Hospitals' CoEs that focus on diseases and infections of the elderly. • Nursing homes.	• Aged care services. • Retirement villages.	• Telemedicine and health-tech. • Elderly nutrition. • Privately managed assisted living. • Travel and leisure activities for the well-being of older adults.	• Pharmaceuticals. • Medical devices that cater to senior citizens. • Medical food and food supplements • Healthcare facilities and senior living communities • Smart electronics, software and digital technology
ESG	• Fully aware of impact on environment. • Looking at opportunities to run greener operations. • Most of the healthcare companies we cover did well in our ESG scoring system, and are generally above the country median score (except SILO).	• Comprehensive ESG reporting framework disclosed on an annual basis. • Three of four companies under our coverage (KPJ, IHH and Duopharma Biotech) have separate ESG disclosures in their Sustainability Reports. • Most of the covered healthcare companies' ESG scores are in line or above the country median score (except Duopharma).	• Focus on driving sustainability efforts within their organisations with an emphasis on strategic areas of customers, employees, environment and the community. • RFMD: Regulatory compliance and patient safety are among the highest priorities. • RFMD's ESG score is one notch higher than the country median.	• Major listed Thai hospitals have been implementing sustainability management to cope with the rising health issues ahead • Mostly engaged with the environmental and social pillars, with hazardous waste and personnel seen as the most important issues for them • BDMS earned the highest ESG score, while other covered hospitals are close to the country median score

Featured stock ideas	• Medikaloka Hermina (HEAL IJ, BUY, TP: IDR1,700)	• KPJ Healthcare (KPJ MK, BUY, TP: MYR1.46) • LKL International (LKLI MK, NR)	• Raffles Medical (RFMD SP, NEUTRAL, TP: SGD1.15) • ComfortDelGro (CD SP, BUY, TP: SGD1.15) • Econ Healthcare (ECON SP, NR) • First REIT (FIRT SP, NR). • Parkway Life REIT (PREIT SP, NR)	• Bangkok Dusit Medical Services (BDMS TB, BUY, TP: THB35.25) • Bangkok Chain Hospital (BCH TB, BUY, TP: THB23.50) • Mega Lifesciences (MEGA TB, BUY, TP: THB55.50) • Thonburi Healthcare Group (THG TB, NR) • The Klinique Medical Clinic (KLINIQ TB, NR) • Master Style (MASTER TB, NR)

Source: RHB

The effects of an ageing society on other sectors

Banking. In an ageing society, we believe higher savings rates among seniors will lead to an increase in banks' liquidity in the form of customer deposits. Yet, opportunities to turn available funding into loans will be limited due to lower credit demand from these seniors. Consequently, this would result in lower NIMs and depress banks' returns. On the other hand, while lending opportunities are adversely impacted, we think there could be better fee income prospects via wealth management activities to help banks cushion some of the NIM pressure.

How are banks expected to react under such a scenario? We believe there may be an increased focus to channel capital abroad, ie to higher-growth countries as banks search for growth (eg Japan banks). Banks that already have a regional footprint should be better placed compared to a pure domestic-focused bank. Also, a bank's risk appetite may change in an ageing society. Bank for International Settlements (BIS), in a working paper titled "Population ageing and bank risk-taking", found that US banks that are more exposed to ageing counties increased their risk appetite in search for yields, which resulted in a sharper rise in NPLs during the Great Recession.

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Property and REITs. The ageing population trend as well as retirees' growing wealth in South-East Asia are expected to drive the demand for retirement homes or senior assisted living properties in the longer term. The senior housing market is more popular in Australia, New Zealand and, perhaps, Japan. According to Trade Me (New Zealand's largest online auction website), property prices at retirement villages were 34% higher YoY in May 2023, vs a 10.5% decline in residential property prices.

We think the development of the senior housing segment in South-East Asia will take time to grow, as the concept of a retirement home is still relatively new and, perhaps, may be met by a cooler reception from locals due to cultural reasons or customs. Nevertheless, it offers a new wave of business opportunities, in our opinion, considering the growing trend towards living alone amongst seniors who are unmarried or divorced, as well as an anticipated increase in the number of widowed elderly people, and potentially foreign retirees.

More recently in June, the award of the Parry Avenue site in Singapore to Perennial Holdings for a private assisted-living development represents a big step forward in the country's private senior housing market. In Thailand, some listed and private companies are tying up with healthcare players to move into the senior living property sector.

Listed developers and REITs in the region woth exposure to senior housing development include UOA Development (UOAD MK, NEUTRAL, TP: MYR1.86), First REIT (FIRTR SP, NR), Parkway Life REIT (PREIT SP, NR), LPN Development (LPN TB, SELL, TP: THB2.80), and Pruksa Holding (PSH TB, SELL, TP: THB11.70).

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Consumer. By and large, we believe the ageing population theme is still not a pronounced focus in the sector, as we have not noticed any company that has set its sights or formulated any customised strategies in order to capture the opportunities from this aspect. Hence, we can only envisage, at this point, how the future of the ageing population could play out in consumer sector. We expect to see rising demand for food products that meet senior nutritional needs – this may include easy-to-digest foods and health supplements that fortify various organ functions or boost vitality. As such, the leading staple food producers may intensify their R&D efforts, to roll out more of these products to meet demand. Second, we expect the demand for convenience retail to increase as senior citizens are likely to buy more convenient ready-to-eat (RTE) or ready-to-drink (RTD) F&B products, if they were to remain independent without requiring much assistance from family members. In the same vein, convenience stores may also need to upgrade their home delivery services to cater to the ageing population. Meanwhile, we believe packaging companies will need to innovate or tailor their product designs to cater to the older demographic. Examples include arthritis-friendly open mechanisms, larger font sizes, and clear nutritional labelling.

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Indonesia – Transitioning Towards Sustainable Retirement

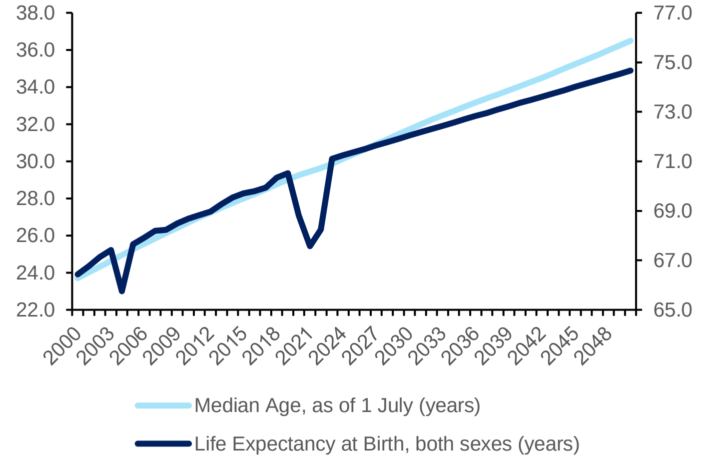
Demographic profile

Ageing status. It is estimated that, by 2030, at least one out of six persons in the world will be 60 years old or more (WHO, as per its 2022 data). The proportion of the global population aged over 60 years will double from 1bn in 2020 to 2.1bn in 2050. Not only will the number and proportion of the elderly increase, but also this segment's life expectancy. The proportion of elderly people (over 80 years) has also increased. In fact, from 2020 to 2050, this number is expected to triple to 426m.

Although Indonesia still has a better demographic profile compared to that of other South-East Asian countries, we believe that the increase in the size of the elderly population is inevitable. The UN expects the number of births to decline, and this should lead to a shift in the median age of Indonesians, as life expectancy would be expected to increase as well.

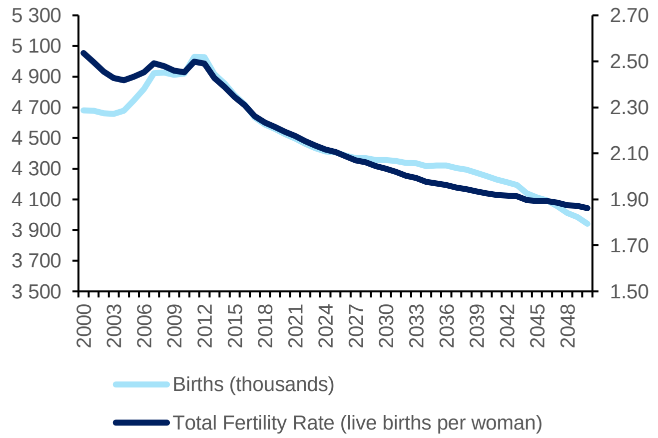
Indonesia entered the aged society status in 2021, when the percentage of the elderly population accounted for over 10% of its total population. In fact, the percentage increased by at least 3% during 2010-2021, so the elderly actually represents 10.82% of the country's total population. The National Socioeconomic Survey (SUSENAS) estimates that one in five Indonesians will be part of the aged demographic by 2045 – in line with UN estimates. The UN expects to see an increasing proportion of people aged more than 65 years old in the country going forward. This, in turn, should spike the demand for healthcare treatment.

Figure 25: Indonesia's median age and life expectancy



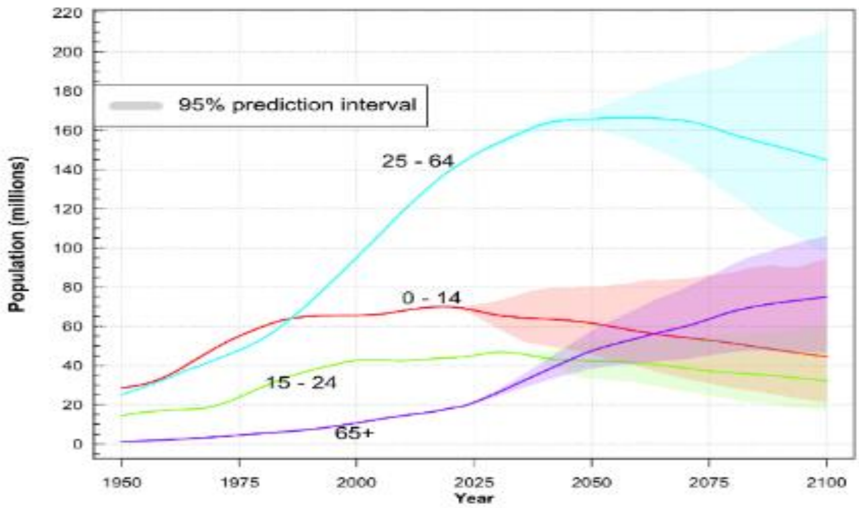
Source: UN

Figure 26: Indonesia's number of births and fertility rate



Source: UN

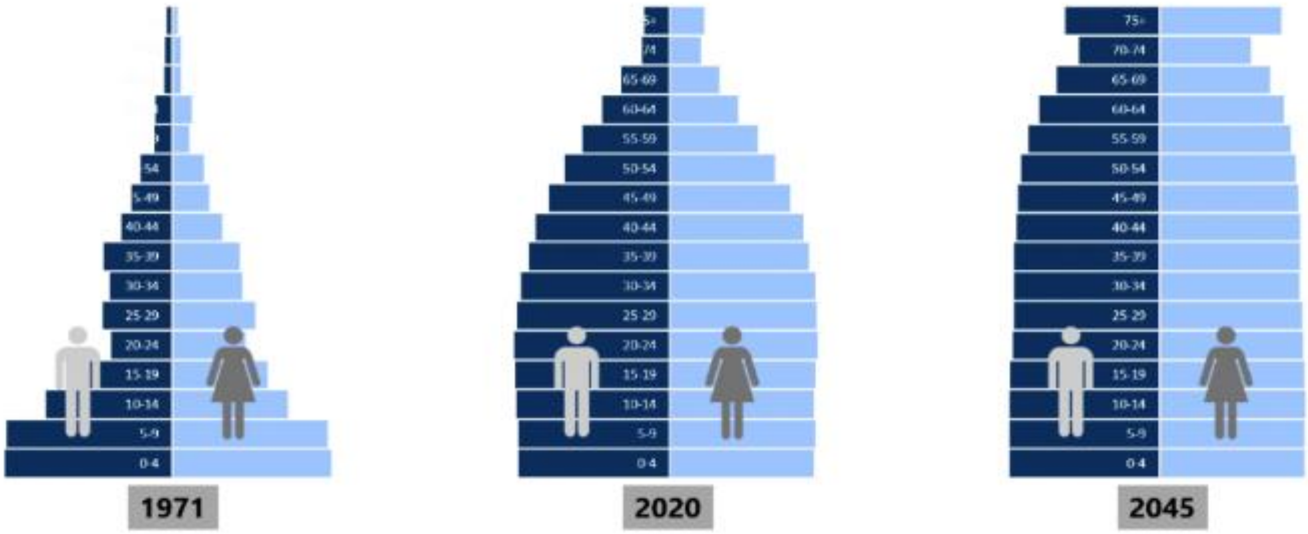
Figure 27: Population by age group



Source: UN

- The UN expects Indonesia's population aged 65 years and older to gradually increase going forward
- This is line with data that shows decreasing fertility and birth rates

Figure 28: Indonesia's population pyramid



Source: Statistics Indonesia (BPS)

Challenges from an ageing population

Challenges with an ageing society. The abovementioned phenomenon – besides providing benefits in terms of development – can also be a challenge. We hold the view that this can be a second demographic bonus, ie when the proportion of the elderly increases but they remain productive and are capable of providing assistance to the country's economy. However, they can become a challenge to economic development.

SUSENAS data as of Mar 2022 shows that that the elderly dependency ratio was at around 16.09. This means that every elderly person is supported by around six people of a productive age, ie 15-59 years old. This is possible because there are still many elderly people who are vulnerable due to the lack of preparation, both in financial and non-financial terms. The elderly experience a decrease in physical, mental, and cognitive capacities, so their functional abilities may be hindered as they age.

That said, in order to continue to contribute to the nation's development, the elderly must be healthy and active. Otherwise, the increase in the number of elderly people who are not so could burden economic growth, in our view. An increase in the number of elderly people will also lift economic and social demand. As such, the burden of ageing parents on their children is apt to increase, which may dampen the latter's savings. Meeting the needs of the elderly may also hamper the growth of the national workforce – which would increase the ratio of capital to labour, and weigh on the influx of investments.

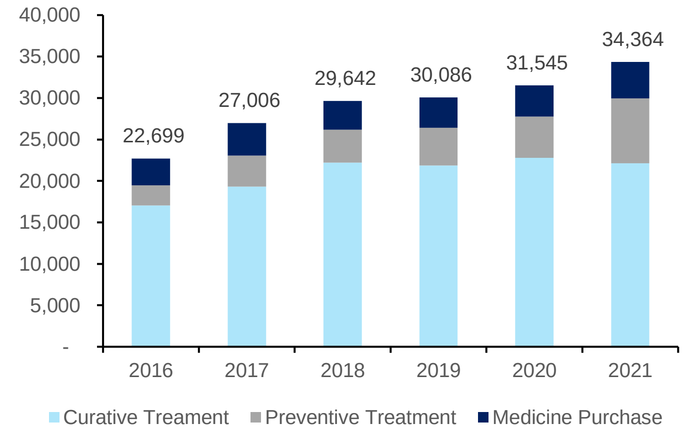
There are several factors that make the elderly vulnerable to being no longer economically productive. When this happens, it results in economic uncertainty, which in turn could lead to a total change in Indonesians' lifestyles, increasing health issues, and push up the need for caregivers and companions for the aged segment. According to WHO, the health burden of the elderly in various low- and middle-income countries comes from ailments such as heart disease, strokes, hearing loss, and visual impairments.

Health-adjusted life expectancy (HALE) is defined as the number of years a person at a certain age can expect to live in good health, taking into account death and disabilities, according to a 2022 Indonesia Statistics for the Elderly Population report. We have seen that although HALE and life expectancies tend to increase, the gap in years that the population passes in illness or disabilities remains quite high. Indonesia's healthy life expectancy in 2019 was 62.8 years, with a life expectancy of 71.34 years. There is an 8-year gap between life expectancy and a healthy life period of the population at birth – indicating that people in Indonesia will spend eight years of their lives facing illness and disabilities.

Apart from health challenges, another key poser for the elderly is financial independence. With an increasing percentage of the population within this demographic, the dependency burden of this segment on those in the productive stages of their lives will also increase. Not all have social security, pension funds or even other sources of funds that will enable them to have their needs met. Furthermore, there may not be many that have sufficient financial buffers to have a quality life. That said, we note that typically in Indonesia, the elderly tend to be economically dependent on their children or younger family members.

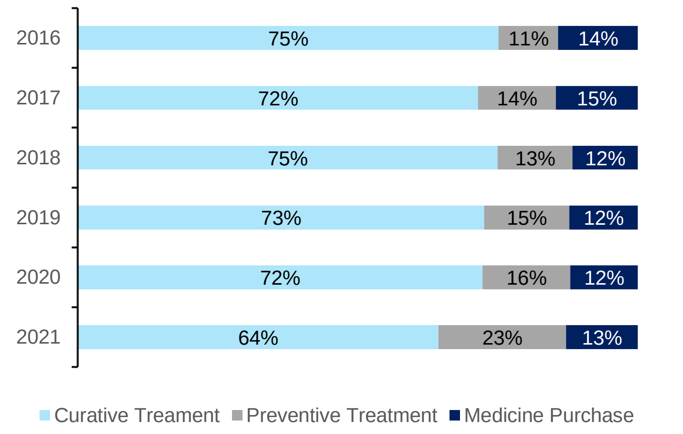
Government initiatives. All in, we saw an increase in healthcare awareness even prior to the COVID-19 pandemic, with average monthly healthcare expenditure per capita growing at a CAGR of 9-10% in 2016-2019. Expenditure on preventive treatment increase at a CAGR of 23-24% during this same period, making up c.15% of the total average monthly healthcare expenditure per capita in 2019 (2016: 11%). We note that the increase was more prevalent during the pandemic, when there was a substantial increase in average monthly healthcare expenditure per capita. We believe the increasing health awareness trend will continue.

Figure 29: Average monthly healthcare expenditure per capita (IDR)



Source: BPS

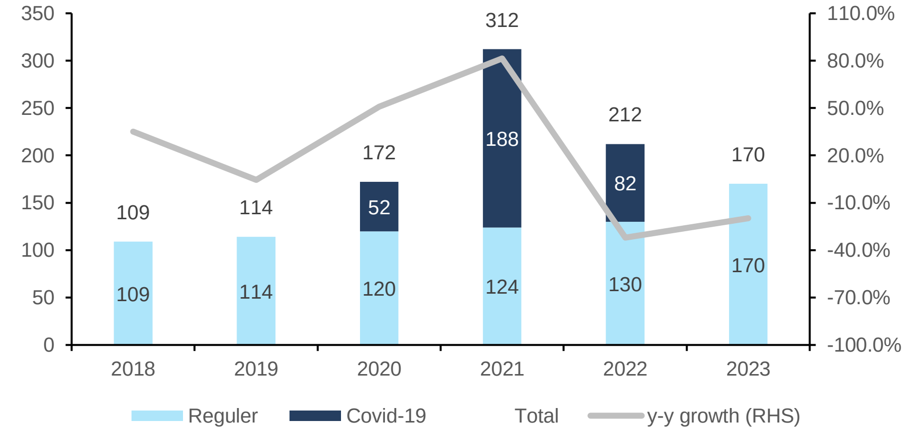
Figure 30: Breakdown of average monthly healthcare expenditure per capita



Source: BPS

Government spending continues to play an integral role in the healthcare industry. In 2023, the Indonesian Government plans to spend IDR170trn on healthcare. Although the amount is 20% lower YoY, it is still higher than the regular healthcare budget for 2022 and the period prior to the pandemic, ie 2019. Given the decreasing number of COVID-19 cases, the Ministry of Health has focused its budget allocation on improving the quality of healthcare services, ie 47.8% or c.IDR85.5trn of the total healthcare budget.

Figure 31: The Government's healthcare budget (IDRtrn)



Source: Ministry of Finance

- Although the healthcare budget has decreased by about 20.2% YoY in 2023, it is still higher than 2022's regular healthcare budget as well as the healthcare allocation prior to the pandemic in 2019

The Government focusing on the welfare of the elderly through several programmes. The constitution states that everyone has the right to convenient and special treatment, so that the country achieves equality and justice. Furthermore, laws mandate that the Government has to upkeep the health of the elderly, so that they may have healthy and productive lives. As such, it is obliged to guarantee the availability of health service facilities and assist the elderly to be able to live independently and productively, from a social and economic standpoint.

Laws on elderly welfare and a policy from the Ministry of Social Affairs are in place to help ensure that the aged segment is able to thrive and remain relevant. Government efforts to boost social welfare for the elderly include:

i. Religious and mental spiritual services;
ii. Health services;
iii. Job opportunities;
iv. Education and training services;
v. To get easier access in using public facilities, and infrastructure in terms of treatment;
vi. Providing access in legal services and assistance;
vii. Social assistance.

In the 2020-2024 National Medium-Term Development Plan or RPJMN, the Government has also developed strategies to anticipate Indonesia's entry into an ageing population status. These include a number of sustainable preparations in various aspects to create a healthy and productive elderly demographic, as well as targeting for an increase in areas that are senior citizen-friendly.

The Government is closely cooperating with regional governments to establish the same steps to ensure that the elderly can remain independent, prosperous, and live life with dignity. There are several points that have become goals for regional development related to old age:

i. Increasing social protection, income security, and individual capacity;
ii. Improving the health status and quality of life for the elderly;
iii. The development of elderly-friendly communities and environment;
iv. Strengthening the institutions implementing old age programmes;
v. Respect, protection, and fulfilment of elderly people’s rights.

We understand that the Government has conducted a number of programmes, ie cash assistance and non-cash initiatives to empower the elderly:

i. Non-cash assistance programmes:

a. Social Rehabilitation Assistance (ATENSI) and Social Rehabilitation Centres (SERASI) – providing rehabilitation centres for the elderly;

b. Home care for high-risk elderly folks, eg those who live alone, and those with moderate and severe dependence needs;

c. Social assistance initiatives for the elderly pertaining to empowerment programmes conducted by social welfare workers. The latter coordinates and assists in all social rehabilitation programmes for the elderly within a specified region(s);

d. Developing and strengthening basic services through the development of Community Health Centres or PUSKESMAS, which provide healthcare services for the elderly;

e. Improving referral services systems through increasing hospital development with integrated geriatric services;

f. Increasing community empowerment programmes through the implementation of a number of activities at Integrated Healthcare Centres or POSYANDU. The activities focus on promotive and preventive efforts as well as early detection;

g. Extending the working age for the elderly in the formal sector – for both the private and public companies – above the established retirement age. The Government has stipulated that the retirement age will be extended every three years until it reaches the maximum of 65 years vs the current 58 years.

ii. Cash assistance:

a. Social assistance for the elderly or ASLUT are cash assistances amounting to IDR2.4m pa from the Government. Some local governments have programmes that increase the assistance amount;

b. Social assistance for the elderly through social welfare institutions (LKS-LU) – a series of government activities to provide social protection for the neglected elderly in the form of providing cash assistance to meet their basic needs;

c. Social rehabilitation programmes for the elderly (PROGRES LU) are efforts that aim to help the elderly in recovery and the development of social functions;

d. Family Hope Programme (PKH) is a conditional social assistance programme for poor families, including persons with disabilities and the elderly to maintain their social welfare levels;

e. Sembako Programme – cash transfers to help unfortunate people (including elderly family members) to buy food staples;

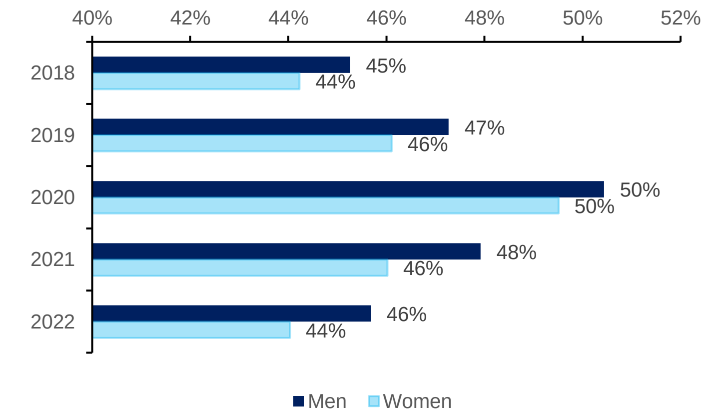
f. Prosperous Family Card (KKS) – a tool to disburse social assistance and subsidies for beneficiaries. KKS is used as an identity card for the underprivileged, including persons with disabilities and the elderly that have not received social services or assistance;

g. Loans from the Government to develop businesses.

More importantly, the Government provides a social safety net for the elderly under the National Social Health Insurance or JKN, which is coordinated by the Social Insurance Administration Organisation (BPJS). We understand that BPJS Health has become one of the key programmes under this initiative. Universal Health Coverage or UHC was also launched in 2014, with the intention of gradually providing healthcare security for the entire population.

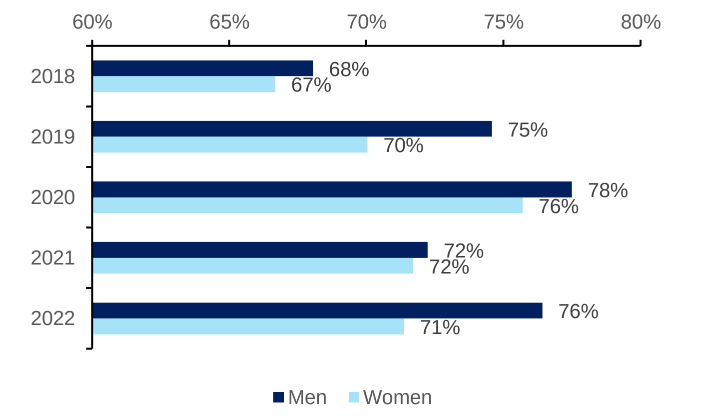
We hold the view that Indonesia's healthcare companies have benefitted from moves by the Government to monetise BPJS' improvements in the Chronic Disease Management Programme or PROLANIS. The more favourable government programmes might translate to wider medical services being included along with better frequency, ie for the laboratory companies, this new programmes might allow more tests to be included under the BPJS scheme and with more frequent testing. For example, BPJS currently allows the testing for diabetes to be done twice a year. Prodia Widyahusada (PRDA) expects the Government to lift this to four times a year.

Figure 32: Percentage of elderly people who use healthcare assistance for outpatient treatment



Source: BPS

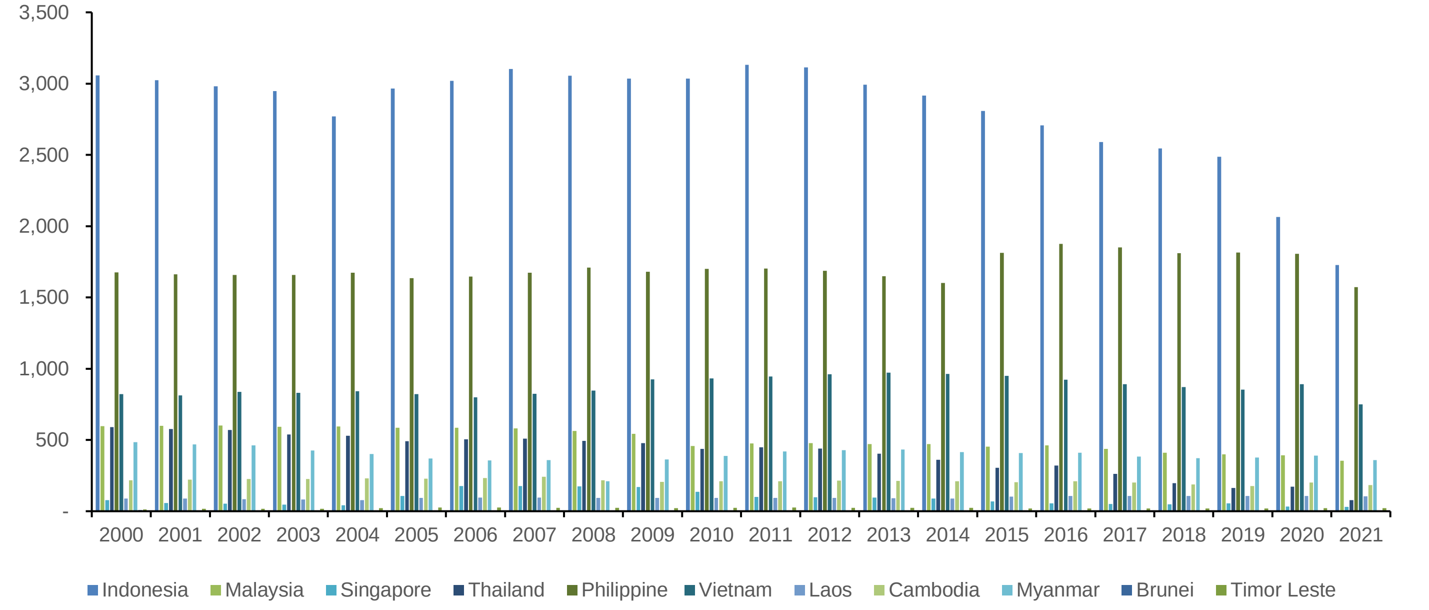
Figure 33: Percentage of elderly people who use healthcare assistance for inpatient treatment



Source: BPS

We have not seen any policies aimed at stimulating the birth rate. Instead, the Government is encouraging parents to only have two children per family to manage population growth along with improving the quality of life of each family member at this juncture. Figure 34 shows that Indonesia continues to record the highest annual increase in population within South-East Asia.

Figure 34: South-East Asian countries' population change (in '000)



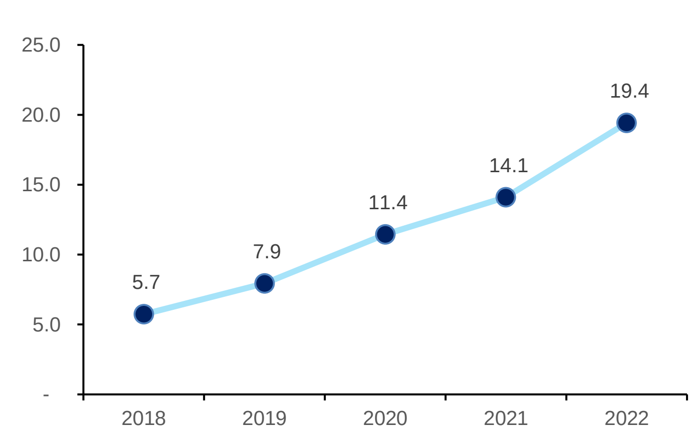
Source: UN

Investment opportunities and digitalisation initiatives

Despite facing various barriers in accessing information and communications technology, efforts by the elderly to adapt to technological advancements can serve as an impetus in supporting their needs, especially in enabling a more independent life. Moreover, this also enables them to fulfil another social need, by easing interaction with family and friends, as well as accessing essential facilities and services like healthcare and entertainment. All in, technological advancements are expected to improve the quality of life for the elderly if they are willing to adapt to such changes.

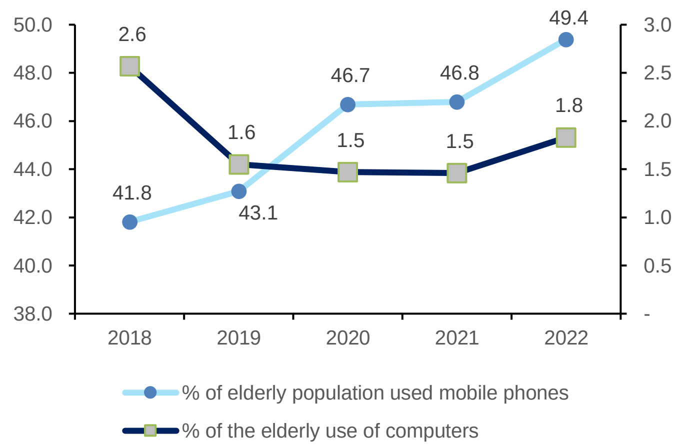
As smartphones are about the most user-friendly communication tool, their usage among the elderly has increased over the last five years. In 2022, nearly half of the elderly population used such phones. In line with the increasing use of smartphones, access to the internet by the elderly has also increased along with the rise in their usage of computers – although we think the latter metric can grow further. Nevertheless, the World Bank's Beyond Unicorns 2021 report stated that the quality of internet services in Indonesia still lagged behind that of other ASEAN countries. This lag in quality affects data transmission speeds, quality of calls, and online services access.

Figure 35: Percentage of elderly people who have accessed the internet



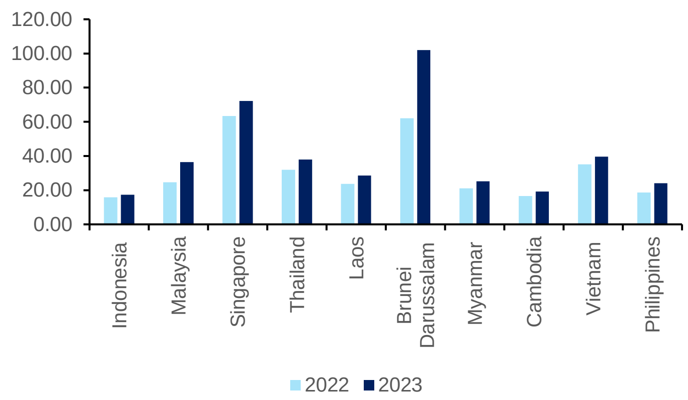
Source: BPS

Figure 36: Percentage of elderly people who use mobile phones and computers



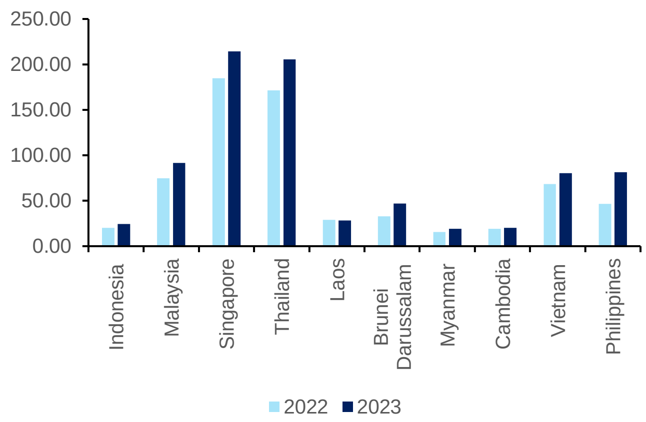
Source: BPS

Figure 37: South-East Asian countries' internet speeds (Mbps) – mobile broadband



Source: DataReportal

Figure 38: South-East Asian countries' internet speeds (Mbps) – fixed broadband



Source: DataReportal

As such, we have seen a number of efforts being put forth that can help improve the elderly's access to digitalisation. In this aspect, the tech-savvy younger generation can be of much assistance to the elderly. Generally, many elderly individuals still struggle with technology – and are often being referred to as being "tech-illiterate" – often due to their lower levels of education. We believe the younger generation can assist in teaching them how to use and access digital technologies. On the other hand, the Government also needs to make effort to enhance the quality and equal distribution of digital networks so that all regions in Indonesia can have proper access to such technology.

ESG

We believe healthcare companies inherently have a positive impact on all stakeholders in terms of improving the quality of life. They are also fully aware of the impact of their activities on the environment and are committed towards reducing their environmental impact by constantly looking at opportunities to run greener operations. Most of the healthcare companies also did well in our ESG scoring system, and are generally above the country median score. The exception is Siloam International Hospitals (SILO), for which we have governance concerns.

Nonetheless, we believe the healthcare providers are going beyond just providing dedicated sustainability reports – they are outlining specific goals to improve operations based on ESG principles. We also note that the healthcare companies under our coverage are aware of their ESG responsibilities, but have not issued clear quantitative guidance or targets at this time.

Risks

i. **Slower-than-expected purchasing power.** We believe this might reduce people's healthcare spending or lead people to opt for BPJS services, which imply lower margins for healthcare companies;

ii. **Delayed hospital expansion plans.** This might bring about an adverse impact, as limited healthcare treatments might induce the mid-to-upper income segments to seek treatment overseas. At the same time, the mid-to-low income segments might postpone their healthcare spending or seek other alternatives – eg traditional treatment – especially in Tier-2 or -3 cities;

iii. **Regulatory risks.** We think changing government regulations might impact all healthcare companies. Recent regulations on the simplification on the licensing process for foreign doctors, doctors/staff of the Indonesian diaspora, and specialists should be positive for hospital players. However, we believe this might take some time – hence, execution risks become critical. We are also concerned over the new initiative to remove mandatory healthcare budgets at national and regional levels. We will monitor the Government's commitment to healthcare spending, as well as the distribution of such spending going forward.

iv. **Global supply chain issues to increase raw material prices.** We understand that the increase in oil, skimmed milk, and sugar prices can pressure margins, especially for pharmaceutical companies – given their more limited pricing power.

Top Picks: HEAL

We maintain Medikaloka Hermina (HEAL IN, BUY, TP: IDR1,700) as our Top Pick, as it should be benefit from the full implementation of the BPJS tariff, its own continuous expansion plans, and being a beneficiary of the healthcare bill that was recently passed by Parliament. We are positive on new policy that simplifies the process to obtain licenses and permits for foreign doctors and specialists. HEAL should become the key beneficiary, in our view, as it has been targeting Tier-2 and -3 cities for opening new hospitals. The new policy should lead to a greater supply of specialists to support its expansion initiatives. Also, HEAL's initiative to increase the number of CoEs should also help enhance its revenue complexity. Its partnership with prominent companies such as Astra International (ASII IJ, BUY, TP: IDR7,750) and Quadria Capital should help to improve operations going forward.

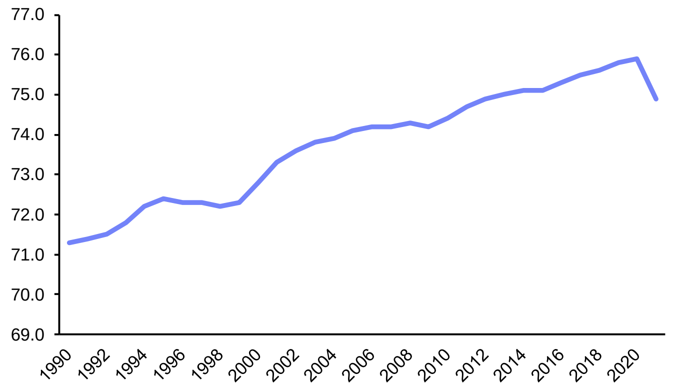
HEAL also has a strong presence in ex-Java areas on top of the Tier-2 and -3 cities in Java. It is in process of building a number of CoEs to expand its services outside the mother & child healthcare segment, in order to widen margins. We believe the building of a geriatric CoE is one of the alternatives for the future. The company should become the preferred healthcare choice for people in ex-Java areas and smaller cities, given the limited healthcare facilities in such areas. Note: In 2022, according to SUSENAS data, around 56% of the country's elderly still live in rural areas.

Malaysia – Championing The Good Old Days

Demographic profile

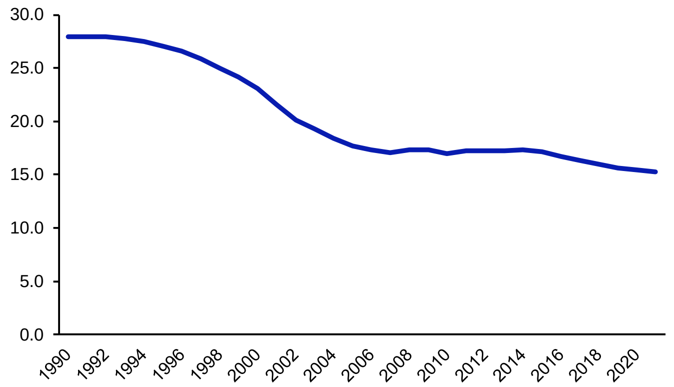
Ageing status. Malaysia's aged population growth is expected to be the second highest among the countries under our coverage (Figure 41), with a CAGR of 4.5% over 2022-2030. The percentage of aged population will balloon to 20% by 2056, according to the World Bank. The key reasons behind the rising percentage of the aged population are: The increase in life expectancy, and the declining birth rate. According to World Bank, Malaysia's baseline economic growth is expected to decline to 1.8% in 2050 from 8.7% in 2022. The rapid change in the demographic landscape is expected to raise policy challenges in areas such as employment, sustainability of pension funds, income security, healthcare, and aged care, in order to sustain its economy growth.

Figure 39: Malaysia's life expectancy trend



Source: UN, RHB

Figure 40: Malaysia's birth rate per 1,000 women



Source: UN, RHB

Figure 41: Breakdown of Malaysians by age group

	2019		2030E		
Malaysia	**person (m)**	**weightage %**	**person (m)**	**weightage %**	**CAGR**
Children (<5 years old)	2.6	8.0%	2.5	6.7%	-0.5%
Teenager (<15 years old)	5.1	15.7%	5.1	14.0%	0.0%
Working adults (25 years old)	5.6	17.1%	5.2	14.2%	-0.7%
Professional adults (26-64 years old)	17.2	52.5%	20.2	55.2%	1.5%
Seniors (>65 years old)	2.2	6.8%	3.6	9.9%	4.6%
Total	**32.8**	**100%**	**36.7**	**100%**	**1.0%**

Source: UN, RHB

Challenges from an ageing population

Challenges with an ageing society. The rapid shift towards an ageing demographic status would mean a continuation in the decline of the working population. The number of Malaysians in the 25-years-and-under and 26-64 year age groups are expected to undergo -0.7% and 1.5% CAGRs from 2019 to2030, putting the country at a risk of slowing growth. Apart from that, the shrinking working population will lead to a narrower tax base – indirectly causing government revenue collection to plunge. The potential impact from a socioeconomic context would be the tendency to delay the retirement age due to insufficient pension savings, as well as the increasing need for aged care spending. Members of the low-income segment (B40) who have left the work force could either rely on their children to or their pension benefits to survive.

Senior-friendly measures in Budget 2024. The Employees Provident Fund (EPF) lauded the recent tabling of Malaysian Budget 2024 for including the wellbeing of senior citizens. Currently, only 60% of the labour force is covered under formal retirement schemes, ie EPF and the Civil Service Pension Scheme (KWAP). The latest budget announcement highlighted the importance of prioritising the financial security and prosperity of the country's ageing population due to the low level of protection under the existing formal pension and retirement schemes.

Key highlights from Budget 2024 were: An increase in government-matching incentives under the i-Saraan programme (MYR500 per year, capped at MYR5,000 for life), expansion of the i-Sayang programme (allowing wives to transfer 2% of the employees' EPF contributions to husbands), the Government matching the contributions for the i-Suri programme for housewives (MYR300 per year, capped at MYR3,000 for life), allocation of MYR50m under the Housewives Social Security Scheme, and the restructuring of EPF accounts.

Other budget-friendly measures for the elderly:

i. MYR1bn was allocated to protect the well-being of the elderly. This includes financing assistance and distribution of funds for care institutions, centres, and activities for the elderly;

ii. Government proposals for the industrial building allowance to be given to private nursing homes for the elderly approved by the Health Ministry, with a rate of 10% of the building's construction or purchase cost, including modification cost for each assessment year. The allowance is effective from 1 Jan 2024 until 31 Dec 2026;

iii. Implementing the Madani Training Programme for improving skills of small- and medium-sized business (PMKS) entrepreneurs and vulnerable groups such as ex-convicts, the disabled, the elderly, and retirees;

iv. The policy of 1% employment opportunities for the disabled will be extended to ex-convicts and the elderly through MYFutureJobs' job-matching programme, MySTEPS. Vulnerable groups that join MySTEPS will be offered job placements on a contractual basis, with an allowance of MYR1,500 for a period of six months in various ministries, government-linked investment companies, and government-linked companies.

Investment opportunities and digitalisation initiatives

Digitalisation. The increase in digital adoption has propelled Malaysia into a country with one of the high internet penetration rates in South-East Asia. According to DataReportal, Malaysia's internet penetration rate was at 96.8% of the total population at the start of 2023 (largely on par with Singapore's 96.9%). While the concept of digitalisation is no longer alien to Malaysians, the idea of health digitalisation picked up notably during the COVID-19 pandemic. The Health Ministry reported that MySejahtera recorded 24.5m users and 17m check-ins a day in 2020 as people relied on the app to make reservations for vaccinations, report on their health status, check in physically before entering public places and other services. Undoubtedly the coverage of healthcare digitalisation extends beyond the usage of apps, with the concept of telemedicine, e-pharmacies, and online insurance services having provided avenues to better address healthcare needs of the people. In the mid-to-long term, the Government's efforts in promoting the adoption of digital healthcare will remain crucial in propelling health coverage to the nation. Key measures in safeguarding the interests of the digital users such as spreading falsified information, cybercrimes, data safety, and privacy issues are fundamental to ensure the sustainable growth of health digitalisation.

Policy action requires attention. Strategic policy decisions are crucial to ensure the wellbeing of the aged population, especially for those who intend to remain in the workforce. According to EPF data, 51.5% (or 6.67m) of its members under 55 years old had savings below MYR10,000 as of 2022 (vs 6.08m members in 2021). The decline in pension savings can be attributed to the multiple rounds of special withdrawal of EPF funds allowed during the COVID-19 pandemic. However, one should bear in mind that the consequences of lower savings could lead to a delay in retirement or the risk of a person outliving his or her assets/savings. In this section, we discuss several shortcomings and the necessary measures to address Malaysia's ageing society:

i. **Aged care services in Malaysia.** Like many other Asian societies, the elderly are traditionally looked after by their children at home. Malaysia's public healthcare system does not include social care. Aged or social care in the public sector is sporadic, and is considered by the Government as simply "welfare" under the Women, Family and Community Development Ministry (KPWKM).

   Shortcomings. Currently, Malaysia has over 90 government aged care facilities, and 350 registered and >1,000 unregistered private aged care centres. The number of aged care facilities may appear insufficient, considering the rise of the ageing population (10% of total population by 2030). Nevertheless, the high cost of aged care service (monthly charges ranging from MYR2,500-3,500) has resulted in many families opting to take care of their elderly family members on their own or rely on house helpers.

The inadequate training and certification of the home-based caregivers could eventually lead to unnecessary complications, ie injuries, to the elderly. Another consequence could be exploitation of domestic workers by the employers.

Necessary measures. Currently, Malaysia has only 39 geriatricians working in the public and private healthcare facilities. Professionalising the caregiving sector and building up the necessary talents to achieve optimal caregiver support ratio or CgSR in accordance to Malaysia's ageing population pace should help address the abovementioned issue. Apart from providing the training needed, we believe other factors such as caregiver remuneration package, and employment opportunities in the public and private sectors should be considered to ensure sustainability in implementing the policy.

ii. **Risk of a shrinking labour force.** The rising number of elderly people, coupled with a decline in the national fertility rate, could put Malaysia at risk of having to deal with a shrinking labour force. This may also lead to lower growth in productivity, a slowdown in economic growth, and a decline in tax revenues for the Government.

Shortcomings. Questions surrounding the low fertility rate continue to gain further attention from the Government following efforts taken to incentivise women to give birth as well as to assist them to re-enter the workforce. According to the Department of Statistics Malaysia or DOSM, the total fertility rate (TFR) in 2022 declined to 1.6 children for every woman aged 15-49 years, vs 1.7 in 2021. This fertility rate was the lowest in five decades, with 4.9 children per woman clocked in 1970.

Necessary measures. The Government had proposed several financial measures to promote Malaysia's TFR in the recent Budget 2024 announcement. These include: i) Extending the tax exemption on income for women who return to work, until Dec 2027; ii) raising the cap on tax exemption on childcare allowance received by employees/paid directly by employers to childcare centres, to MYR3,000 from MYR2,400. Mobilising under-utilised talent in the economy (female workforce, the unemployed, underemployed and retired) to help them realise their full potential is paramount to mitigating the impact of an ageing society.

Nevertheless, the UN has argued that various birth-promoting policies have had different rates of success in many countries. Measures such as one-time cash handouts are no longer effective, as policymakers should look beyond measures such as longer-term support that allows families to have their desired number of children and when they want them. What matters the most among parents are the day-to-day commitments in raising their children, given that the role and responsibility of women are different compared to that of the 19th century.

iii. **Extending the age of retirement.** The mandatory retirement age in Malaysia was raised to 60 from 55 in 2013. A typical Malaysian who retires at 60 years old is expected to live for another 15 years as a result of the higher life expectancy. As life expectancy is projected to increase gradually in the coming decades, Malaysia raised the mandatory retirement age for public and private workers to 60 from 55.

The current retirement age in Malaysia is lower than that of the neighbouring countries, such as the Philippines (at 65) and Singapore (at 62), South Korea (at 65) and the US (at 66). While the retirement age in Malaysia has increased to 60 since 2013, full EPF withdrawals are allowed at the age of 55 (contributions from age 55 to 60 can be withdrawn at age 60), despite the huge increase in life expectancy in the past few decades.

Shortcomings. As stated above, there could be a potential discrepancy between the expected rise in life expectancy and retirement age, considering the challenges in pension sustainability and the cost of public-funded aged care. In fact, some OECD countries have made provisions to automatically link the normal retirement age to life expectancy, reducing the political economy challenges of repeated discretionary policy changes. Some countries like Denmark, Italy, and the Netherlands even aim to increase the normal retirement age beyond 70 years (France signed a petition to raise its pension year to 64 from 62 this year). The key objectives for increasing the retirement age is to encourage longer working lives, and to increase the financial sustainability of pension systems.

Necessary measures. Besides increasing the minimum retirement age gradually, some countries have implemented policies to raise the employment prospects of older workers.

For instance, Singapore has put in place the Retirement and Re-employment Act which requires employers to offer opportunities for eligible employees who turn 62 to continue working in the company until they turn 67. If the company is unable to provide a reemployment opportunity for the worker, it will be required to offer the worker an employment assistance payment equivalent of up to 3.5 months of his or her salary, subject to a minimum of SGD6,250 and a maximum of SGD14,750. While there have been discussions to raise the retirement age to 65 from 60 in Malaysia, the potential implication in terms of economic and societal aspects should be weighed in.

For instance, older workers may face age discrimination in the workplace, making it difficult for them to find or keep employment. Some employers may also have concerns about the higher cost of employing older workers, such as healthcare and pension benefits which may lead to employers choosing to hire younger workers, who are perceived to be less expensive to employ. On the flip side, there are several advantages and benefits in raising the mandatory retirement age, starting with selected critical sectors requiring high-level skills. Given the skill shortage in certain sectors, ie healthcare (surgeons, specialist doctors), specialist lawyers and etc, this approach has to be needs-driven. While highly skilled workers are less likely to face the problem of inadequate retirement savings, lower-income workers in designated sectors (such as F&B and manufacturing) would benefit from opportunity in being able to earn further income due to the increase of this limit.

iv. **Income security post-retirement**. According to a survey conducted by EPF in 2020, the average retirement savings for EPF members aged 54-59 was MYR240,800. This was a stark contrast against the “bare minimum” standard of MYR0.9m to MYR1m (after factoring inflation and medical bills) based on an interview between with EPF chief strategy officer Nurhisham Hussein and TheStar.

Shortcomings. EPF members grew 3.3% YoY to 15.7m in 2022 (vs 2% YoY growth in 2021). However, the percentage of active members over the total labour force remains relatively low in comparison to the level of old-age social protection coverage globally. Besides the inadequate pension coverage, the majority of EPF members is expected to have inadequate income for their consumption needs during their retirement, as 52% of members under 55 years only had savings of under MYR10,000 as of 2022. Further to that, the concept of income security of is often related to the adequacy of a retiree’s savings to sustain his/her life after employment. At this stage, only civil service workers (covered by KWAP) seem to fare better in terms of adequacy vs the majority of private sector workers. This is because almost all public sector workers will receive pensions upon retirement plus free medical coverage in public hospitals. Only 50% of private sector workers have a pension scheme, but they pay for their health insurance or healthcare expenses.

EPF retirees tend to use up the bulk of their savings within a few years of retiring from employment. The lack of financial discipline and knowledge has often led to inadequacy of savings being more severe for the low-wage earners. This is further exacerbated by the slower growth rate of salaries in recent years, translating to widening disparities in average savings between young and middle-aged workers.

Necessary measures. Malaysians will have to work longer in the future, to ensure financial adequacy in old age. To keep the elderly remaining relevant in the future workforce (preferably with less physically demanding occupations), policies that enhance opportunities for training and lifelong learning are needed to foster their employability.

On top of that, measures that can increase the proportion of workers actively contributing to EPF and ensure that retirement savings could be sustained for longer should be introduced. To increase coverage, the Government may make it mandatory for the registration of all workers as a condition for the granting of business licenses and/or to be qualified for government contracts. Positively, EPF continues to explore avenues to widen its coverage towards the informal sector or with no formal income to save for their retirement with the EPF. Through i-Saraan, the EPF has broadened its member base by registering 291,743 participants in 2022 (+191% YoY). Under this programme, eligible members who make voluntary contributions will receive a matching government contribution of 15%, subject to a maximum amount. On 7 Sep 2021, EPF and Grab Malaysia signed a memorandum of understanding to encourage Grab’s community of drivers and delivery partners to save for their retirement via EPF’s i-Saraan programme.

Figure 42: MoU Between EPF and GRAB under the i-Saraan programme

No.	Category of qualified independent partners	Incentives offered by Grab
1.	Driver and delivery partners below age 55 who contribute to EPF via i-Saraan	Additional contribution of 5%, up to maximum MYR80 annually
2.	Driver and delivery partners aged 55 years and above who contribute to EPF via self-contribution	Additional contribution of 10%, up to a maximum of MYR120 annually
3.	Driver and delivery partners classified as persons with disabilities (PWD) across all age groups, who contribute to the EPF via i-Saraan or self-contribution	Additional contribution of 10%, up to a maximum of MYR120 annually

Source: EPF, RHB

ESG

Malaysia-listed healthcare players have comprehensive ESG disclosures made annually. Three out of four companies under our coverage (namely KPJ, IHH and Duopharma) have a separate ESG disclosure in their sustainability reports (vs previous brief elaborations in their annual reports). These sustainability reports document their respective ESG practices, targets and goals for the years to come. This practice points to the company's commitment towards transparency reporting, responsibility in uplifting the environmental and social aspect of their businesses, as well as their long-term plans to stay abreast and relevant with the latest ESG standards. Most of the healthcare companies under our coverage have ESG scores that are in line or higher than the country median, except for Duopharma, whose score falls slightly short of the figure – given its stubbornly high Scope 1 and 2 greenhouse gas emissions.

Risks

i. Higher-than-expected operating costs. We see risks arising from the surge in utility costs (as a result of higher fuel cost) and staff wages (especially for nurses, due to scarcity) – which may crimp margins.

ii. Slower-than-expected hospital expansion plans. This may cap the growth of healthcare service providers, if the increase in the number of beds cannot keep up with the pace of the surge in patient volume.

iii. Weakening MYR/USD rate. A softer MYR will have a more apparent impact on the generic drugmakers under our coverage, as the majority of their production costs (active pharmaceutical ingredients) are denominated in USD terms.

iv. Regulatory risks. The MoH wants to regulate medicine prices in the private healthcare sector, by using an external reference pricing mechanism to cap wholesale prices and subsequently set a ceiling for the retail prices of prescription drugs in private hospitals, clinics, and pharmacies, based on regressive mark-ups from the wholesale ceiling price. External reference pricing is determined by comparisons of drug prices in Commonwealth countries, other countries in the region, or those with similar income levels as Malaysia. Should the policy being implemented, we expect healthcare service providers and generic drugmakers to be adversely impact by the policy. Nevertheless, we do not see further updates from the abovementioned policy following former Health Minister Khairy Jamaluddin's remarks on direct federal control of drug prices as a "last resort" on Jul 2022.

Featured stock ideas

KPJ Healthcare (KPJ MK, BUY, TP: MYR1.46)

KPJ is a home-grown private healthcare service provider that currently has 31 hospitals and four senior living and assisted living care centres (SALCC) in countries such as Malaysia, Thailand and Bangladesh. Its SALCCs are situated in urban and semi-suburban areas such as Kuala Lumpur, Sibu and Kuantan, enabling the group to cater to the underserved and high population of elderly folk in suburban areas. On top of that, KPJ Sibu Geriatric Health & Nursing Centre and KPJ Tawakkal Health Centre are situated less than 1km to KPJ's specialist centres, enabling the hospitals to provide immediate medical attention to senior residents within a short driving distance.

Meanwhile, despite not having quick access to the KPJ's network of hospitals, KPJ Kuantan Care & Wellness Centre offers outpatient services such as multidisciplinary rehabilitation and haemodialysis. We are upbeat on KPJ SALCC's strategic presence in Malaysia, as the company has a mid-to-long term focus on introducing robotic and artificial intelligence-driven technology to enhance treatment for senior residents. On top of that, KPJ is also working to strengthen its referral programme with public hospitals to drive organic growth.

LKL International (LKLI MK, NR)

LKL International (LKL) is principally involved in manufacturing medical/healthcare beds, medical peripheral items and accessories, as well as trading medical furniture, medical devices, personal protective equipment (PPE), medical paraphernalia and accessories.

Financial highlights. On Apr 2022, LKL announced the change in its financial year end from 30 Sep to 31 Dec. As a result, its latest FY22 annual audited financial statements would span from 1 Oct 2021 to 31 Dec 2022, totalling 15 months. Its monthly average revenue in FY22 was MYR3.7m (after excluding a one-off MYR45.5m sale of COVID-19 test kits and MYR2.5m in relation to the sale of disposable gloves) vs the pre-pandemic FY19 average of MYR3.1m. Last November, the group decided not to renew its sales and distribution agreement with AT Systematization following the expiry of the contract, to reduce the operating loss from the trading division.

Valuation. LKL is currently trading at 0.4x P/BV based on FY22 book value, which is slightly above its 2-year historical mean of 0.3x.

Singapore – Aiming To Age Well

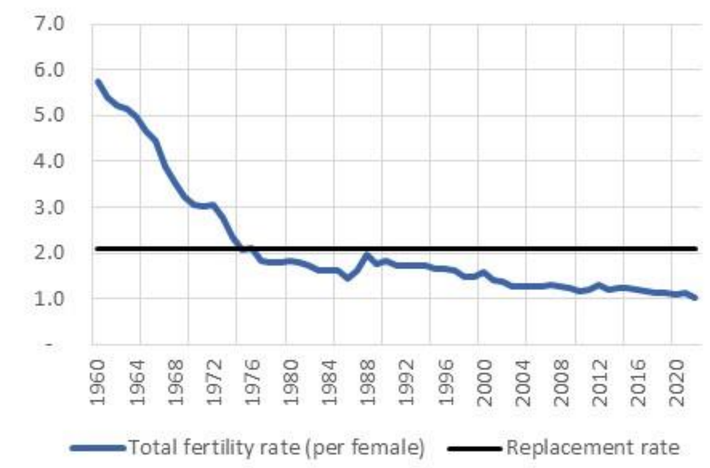
From rapid growth to a structural decline in native population growth

The population growth in Singapore has long been fuelled by immigration. However, the island nation has seen rapid changes in its demographics over the years. The Singapore Government implemented population planning policies to both slow and boost the growth rate of Singapore's population over the years. The Singapore Family Planning and Population Board (SFPPB), established in 1966, aggressively promoted family planning after facing post-war food and housing shortages. The SFPPB promoted small families and established the "Stop at Two" programme, which encouraged and benefitted families with two children. The programme was successful in lowering the growth of Singapore's resident population and could also be attributed to its subsequent decline. 1975 (TFR of 2.07) was the first time the TFR fell below the replacement rate of 2.10.

This was the time that the Government started changing its policies to promote population growth. The first was the introduction of the "Graduate Mothers' Scheme" in 1983. The scheme attempted to get educated women, especially university graduates, to marry and bear children. The SFPPB was closed in 1985, with the MoH taking over its role as well as staff. The Singapore Family Planning and Population Board (Repeal) Bill was passed in May 1986. This policies to promote population growth continued and the initial policies were followed up with the "Have Three or More (if you can afford it)" campaign in 1987, which offered cash and public administration incentives to have children.

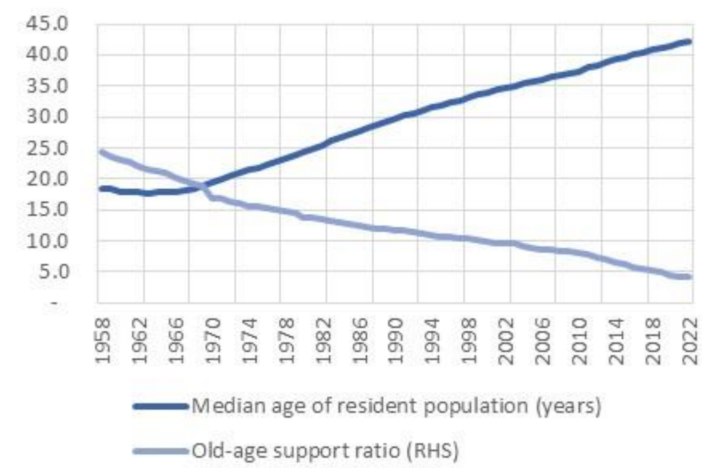
In 2001, the Government started its "Baby Bonus" scheme, to improve the country's fertility rate by providing cash incentives. This was done with the hope of reducing the financial burden of raising children and, thereby, encouraging parents to have more children. The scheme consists of two component: i) a cash gift, which is paid out at the birth of a child, and ii) a Child Development Account (CDA) which has a monetary grant and a savings matching scheme. The scheme has been continuously enhanced since its inception and, in its latest form, also includes: i) A parenthood tax rebate, ii) paid maternity leave per child that can be shared by the father, iii) paid paternity leave per child, and iv) paid child care leave per year per parent.

Figure 43: Singapore's total fertility and replacement rate



Note: Data prior to 1980 pertains to the total population
Note 2: Data from 1980 onwards pertains to the resident population (ie Singapore citizens and permanent residents)
Source: Singapore Department of Statistics

Figure 44: Singapore's median age of the resident population and old-age support ratio

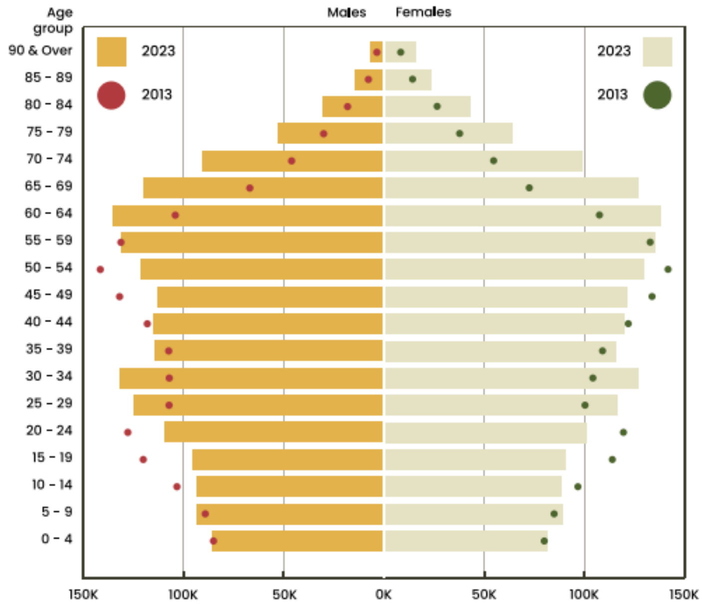


Note: Data are as at end-June
Note 2: Old-age support ratio refers to residents aged 15-64 years per resident aged 65 years & over (number)
Note 3: Data prior to 1980 (except 1970) pertain to total population
Note 4: Data for 1970 and from 1980 onwards pertain to Singapore residents (citizens and permanent residents)
Source: Singapore Department of Statistics

Singapore's TFR have increased slightly in 2021 to 1.12 from 1.10 in 2020, a year when people stayed home during COVID-19 and had more children. However, despite all the government efforts, the birth rate has not yet been restored to the replacement level. The fertility trends have shown women are also choosing to have children later in life, or not at all. Data from the Singapore Department of Statistics shows that women between the ages of 25 and 29 are now less likely to give birth than women between 35 to 39 years old. Singapore today has one of the lowest fertility rates in the world. Singapore's TFR was 1.04 children born per woman in 2022, a sub-replacement fertility rate (Figure 43).

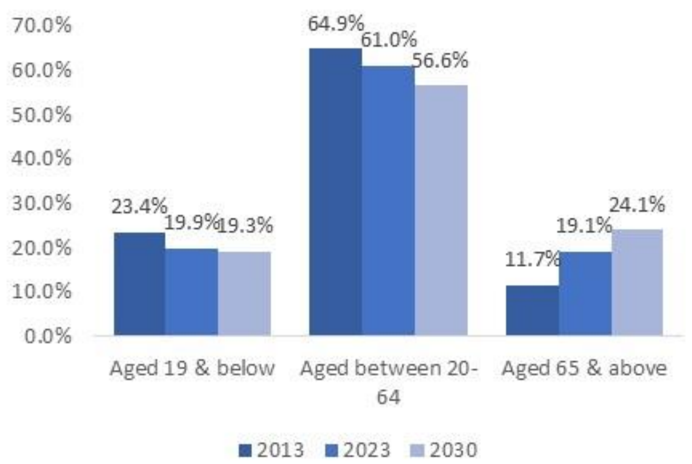
This brings us to the key problem that Singapore is facing in terms of demographics – an ageing population. About 16.7% of Singaporean residents were 65 or older in 2022, up from 9% in 2010 and 7.2% in 2000. The numbers get worse when we look only at the citizen population. About 19.1% of Singaporean citizens are 65 or older in 2023, up from 10.1% in 2010 and 7.5% in 2000 (Figure 45). It is estimated that, by 2030, one in four people will be aged over 65 years.

Figure 45: Singapore's citizen population by broad age groups, as at Jun 2023



Source: Singapore Department of Statistics

Figure 46: Estimated percentage of Singapore's resident population across various age groups by 2030



Note: The 2030 numbers illustrate the possible change in the population that could occur if certain demographic assumptions prevail over the stated period
Source: Singapore Department of Statistics

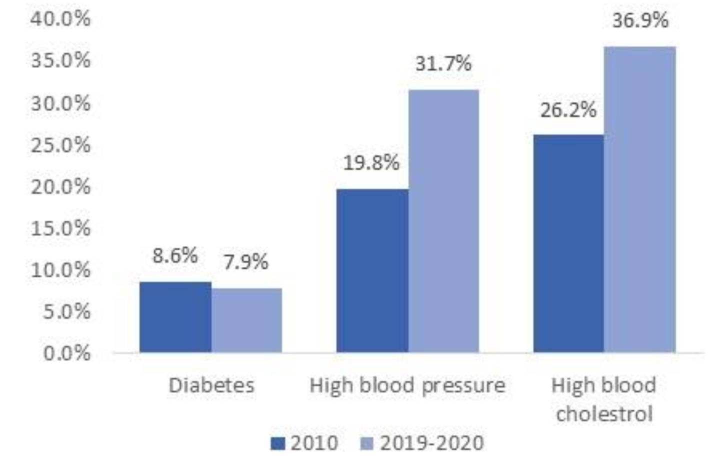
Challenges from an ageing population

While Singapore has made a successful recovery from the COVID-19 pandemic, the ageing population is still a more difficult – and long-term – health issue for the nation. It is challenging to remain unconcerned about the unavoidable effects that this will have on the economy and society, given Singapore's declining fertility rates and slowing population growth. The country's rapidly ageing population has been termed the "Silver Tsunami" and has been compared to a "demographic time bomb" because of the potential consequences, particularly for those that could affect the healthcare system.

Rise of chronic diseases. While it might not be quite obvious now, an ageing population will inevitably result in an increase in the burden of diseases on Singapore's healthcare system. The higher prevalence of chronic illnesses among the senior population is partly to blame for this. To make matters worse, chronic ailments are becoming more common among Singaporeans. According to the National Population Health Survey 2021, the overall prevalence of chronic diseases in adult citizens has increased since 2007 – in particular, high blood pressure and cholesterol levels. Although there has been a large increase in the crude prevalence of diabetes since 2007, the trend seems to have levelled off in recent years. This may be the result of the numerous efforts made by the Government to lower sugar intake (Figure 47).

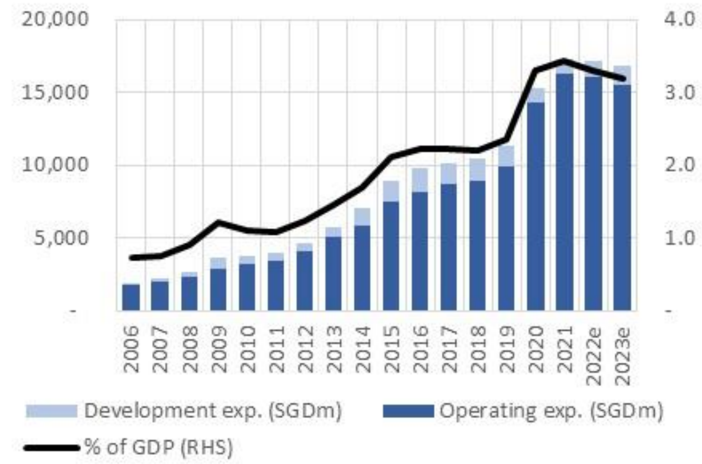
Higher healthcare expenses. The main determinants of many chronic illnesses are lifestyle decisions – particularly inactivity and poor eating habits. We might anticipate a higher disease burden, more severe healthcare needs, and elevated healthcare costs if present lifestyle risk factors persist or get worse. The Government estimates that healthcare spending will amount to roughly SGD27bn by 2030, having already increased it to SGD17.3bn in 2021 from SGD1.9bn in 2006. If the country maintains a comparable pace of revenue growth over the next 10 years, this is anticipated to represent more than a fifth of the Government's operating revenue (Figure 48).

Figure 47: Age-standardised prevalence of chronic diseases in Singapore



Source: National Population Health Surveys

Figure 48: Singapore's government health expenditure



Source: Singapore Department Of Statistics

Rising dependency ratio. Going forward, we believe there will be fewer working people to support and care for the elderly who may no longer be engaged in the workforce as a result of the population's ageing and declining birth rates. From a ratio of 7.4 in 2012 (ie around 7.4 working people for every senior person) to about 4.1 today, this is predicted to shrink further to 2.7 in 2030 – the old-age support ratio of the resident population has been steadily declining (Figure 44). Less children will be available to care for their ageing parents as a result, and more elders will wind up living alone. As individuals live longer, the cost of healthcare and long-term care for the elderly will increase, adding to the strain for those in the working-age demographic. Singapore's Ministry of Health (MoH) stated that, by 2030, around 100,000 seniors will need assistance with at least one activity of daily living and approximately 83,000 seniors will live alone.

Tight labour force, dependence on immigration, and possibly lower tax revenue. Singapore's economy runs the risk of losing its vitality and competitiveness as its entire labour pool shrinks. It will be necessary to carefully regulate the influx of migrants to counteract population reduction and general ageing – a politically fraught issue that has already sparked societal unrest, particularly when combined with the difficulties of an ageing population and declining workforce, which could harm tax collection and make the situation worse.

Government initiatives to address the challenges of an ageing population

As per the National Population and Talent Division or NPTD, Singapore's sustainable population objectives comprise three key pillars: i) Building a strong and cohesive society (with Singaporeans at the heart of the nation); ii) supporting a dynamic and vibrant economy to provide good jobs and opportunities for all Singaporeans; and iii) providing a high-quality living environment and home for all Singaporeans.

This not new. The Government has been looking at ageing issues since 1982. Below is a timeline of various key milestones in Singapore's journey to address the challenges related to its ageing population:

i. **A more holistic approach through long-term action plans.** The Government is adopting a holistic approach towards addressing the challenges that would arise from the country's rapidly ageing society. The focus goes beyond just managing the healthcare impact.

Keeping this in mind, the first key policy document was released in 2015 with the announcement "2015 Action Plan For Successful Ageing", which was a SGD3bn action plan to prepare Singapore for rapid population ageing in the next decade. A summary of the key initiatives identified in this action plan are mentioned in Figure 49. The 2015 action plan was refreshed and followed up with the 2023 Action Plan For Successful Ageing. On 30 Jan, the Ministerial Committee on Ageing or MCA launched the 2023 action plan to address the evolving needs and aspirations of current and future seniors. This refreshed action plan is centred on three key themes of care, contribution, and connectedness. The summary of key initiatives and targets under this refreshed plan are included in Figure 50.

Figure 49: Key initiatives under the 2015 Action Plan For Successful Ageing

Lifelong employability: The re-employment age to be raised from 65 to 67 by 2017.	**Health and wellness:** A National Seniors' Health Programme that will reach over 400,000 older adults and a new workplace health programme that will target 120,000 mature workers aged 40 and above.
Aged care: Between 2015 and 2020, MoH planned to: i) More than double the number of community hospital beds; ii) increase nursing home capacity by more than 70%; and iii) increase home and community care places by 50% and 100%.	**Transport:** The Land Transport Authority planned to: i) Implement 35 Silver Zones by 2020 ii) double the number of Green Man Plus traffic lights to 1,000 by end-2018; iii) install lifts at an additional 41 pedestrian overhead bridges by 2018; and iv) replace all buses with wheelchair-accessible ones by 2020.
Active ageing and assisted living: MoH planned another 40 day centres for seniors by 2020. About a quarter of these centres were to be large active ageing hubs in housing developments, providing active ageing and assisted living services to seniors.	**Research:** The National Research Foundation planned to set aside up to SGD200m for a National Innovation Challenge on Active and Confident Ageing to catalyse research related to ageing.
Senior learning: A National Silver Academy will provide some 30,000 learning places for seniors to pursue their interests.	**Senior volunteerism:** To recruit an additional 50,000 senior volunteers.
Community befriending: The plan was to expand home visitation programmes in at least 50 neighbourhoods to keep social isolation and poor health at bay among vulnerable seniors.	**Inter-generational harmony:** Plans to co-locate eldercare and childcare facilities in some 10 new Housing & Development Board housing developments.

Source: 2015 Action Plan for Successful Ageing, RHB

Figure 50: Singapore plans to achieve the following within the next five years under the 2023 Action Plan for Successful Ageing

Active ageing and leading healthy, happy lives: Increase the number of active ageing centres to 220 by 2025. Reach 550,000 participants over the next five years under the "Live Well, Age Well' programme, which offers a suite of active ageing activities	**Dementia management:** Scale up the Healthy Ageing Promotion Programme For You or HAPPY nationwide to support seniors to maintain their physical and cognitive health. Increase the number of Community Resource Engagement and Support Teams (CRESTs) from 61 to 73 and triple CREST-Post Diagnostic Support teams to six by Mar 2025
Senior-friendly transport: Implement 50 Silver Zones by 2025. Retrofit lifts at 100 pedestrian overhead bridges near places with high number of senior pedestrians by 2025	**Parks and gardens:** Working towards setting up 25 therapeutic gardens across parks island-wide by 2027
Family support: Equip more than 2,500 seniors with grand-parenting skills via the Positive Parenting Programme or Triple P by 2027	**Volunteering and learning:** Promote senior volunteerism at 750 corporations to encourage more seniors to volunteer in the next five years. Reach more than 70,000 senior learners in the next five years
End-of-life and pre-planning care: Reduce hospital deaths from 61% to 51% in the next five years. Register lasting power of attorney for more than 240,000 Singaporeans aged 50 and above by end 2025	

Source: 2023 Action Plan for Successful Ageing, RHB

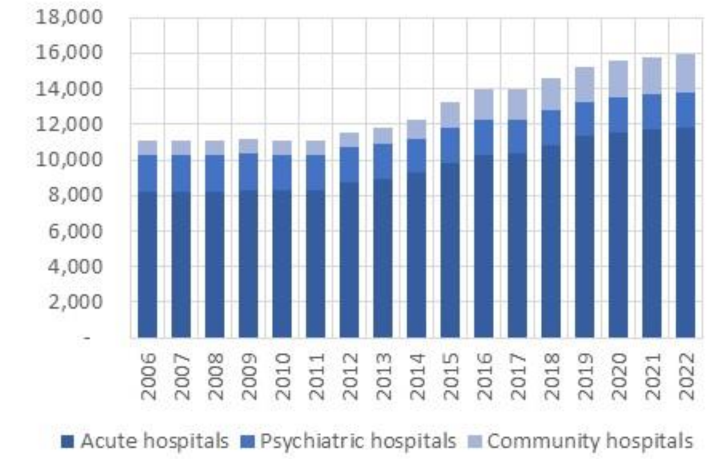
ii. **Addressing the healthcare challenge by focussing on preventive healthcare.** The launch of "Healthier SG" represents a major change in Singapore's healthcare system. Under this initiative, healthcare service providers will put emphasis on preventive care, while the Government puts installs systems, procedures, and incentives to encourage this change. With the help offered, people will be able to take control of their health, adopt healthier lifestyles, develop dependable relationships with their family doctors, and take an active role in managing their chronic conditions. This initiative is expected to reduce the country's disease burden for the long term and put Singapore's healthcare system on a more sustainable footing – whether it is in terms of manpower or financial resources needed to run them. Long-term need for more costly curative, rehabilitative, and chronic care can be controlled by concentrating on promotive and preventive measures – not only in older persons but also in younger adults.

In his 2022 speech to Parliament, Health Minister Ong Ye Kung noted that, to get the preventive care strategy – ie Healthier SG – off the ground and running, the country will spend more than SGD1bn over the next 3-4 years in set-up costs, eg new IT systems and support to get general practitioner (GP) clinics ready for the scheme. It will also spend an estimated SGD400m a year on recurrent costs, such as annual health screenings for residents and yearly service fee for the GPs.

Ong also noted that Singapore spent about 6% of its healthcare budget on preventive care annually, such as to fund Health Promotion Board or HPB. With Healthier SG in the coming few years, Singapore will, and it wants to, grow this – perhaps to double the share of total healthcare spending going forward.

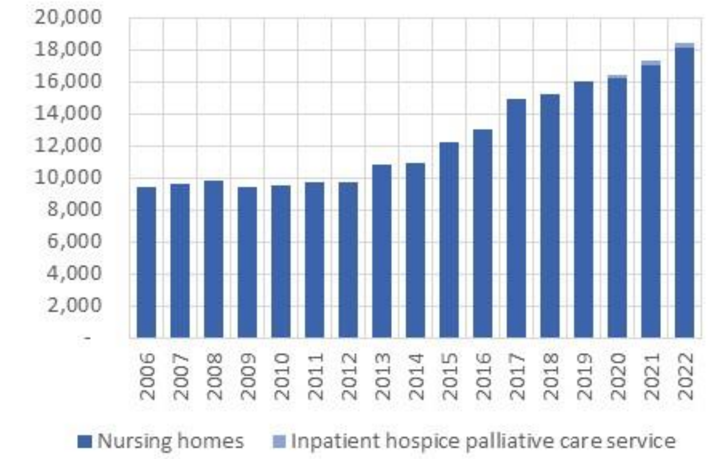
iii. **Expanding healthcare infrastructure.** To guarantee that everyone, especially the elderly, has access to high-quality yet affordable care, the Government is making significant investments in the construction of new healthcare infrastructure and renovation of existing ones – this includes hospitals, community hospitals, and senior care facilities. In order to accommodate the desire of Singapore's senior population to age in place, the Government is also extending the variety of social and long-term care services in the community. For instance, additional active ageing facilities may be built to offer a larger selection of activities to keep the nation's elderly seniors active and healthy.

Figure 51: Singapore's number of beds in inpatient facilities (hospitals)



Source: Singapore Department Of Statistics

Figure 52: Singapore's number of beds in inpatient facilities (others)



Source: Singapore Department Of Statistics

iv. **Government-supported assisted living.** There are two integrated care communities that offer senior-friendly services and amenities close to homes: a) Kampung Admiralty and b) Integrated Dementia (home-based) Assisted Living (IDeAL@115). By 2027, The Heart of Yew Tee Integrated Development will have been finished. In 2017, Singapore's first "retirement *kampung*", Kampung Admiralty, opened its doors to its first residents. The integrated retirement community development connects Housing and Development Board (HDB) blocks to a wide range of social and healthcare facilities meant for seniors. The site's HDB blocks houses a medical centre, hawker centre, rooftop vegetable and community gardens, and an active ageing hub.

In its latest efforts to integrate assisted living in Singapore, the Government launched its first assisted living public housing in Bukit Batok for seniors aged 65 and above who wish to live on their own and yet enjoy some care, support, and communal activities. The Community Care Apartments (CCAs) are an assisted-living public housing concepts jointly launched by the MoH, Ministry of National Development, and HDB. It integrates senior-friendly housing with care services that enable the elderly to age independently with peace-of-mind within a community. This new flat type comes with a mandatory service package to support seniors to age in place. Services under the package include a 24-hour emergency monitoring and response service, basic health checks, simple home fixes, and activities at communal spaces within the development. All residents will have to subscribe and pay for the basic service package, which starts at SGD22,000 for a 15-year lease. Other services, such as housekeeping, laundry, meal delivery and shared caregiving, can be added at extra costs. These flats cannot be resold or rented out. Owners who no longer need the flat can return it to HDB, which will refund them the value of the remaining lease on the flat. Seniors with more pressing care needs, such as those requiring permanent assistance with daily living activities, will get priority for these CCAs.

Harmony Village @ Bukit Batok is the first CCA launched in Feb 2021 and is expected to receive its Temporary Occupation Permit (TOP) in 2Q24. It comprises 169 units in a housing block that is integrated with a hawker centre, community garden, fitness station, and senior activity centre. The CCA is well-connected to eateries, shopping malls, public transport networks, healthcare facilities, and other amenities. Residents requiring day care amenities, such as rehabilitative services, will be able to access Vanguard Senior Care Centre (located at Bukit Batok Care Home) within a 5-minute walking distance.

Queensway Canopy is the next upcoming CCA and consists of 245 units within an integrated housing block. It was launched in Nov 2022 and is expected receive its TOP in 3Q28. Located at Queen's Crescent, this CCA is situated within the Health District @ Queenstown – Singapore's first health district – which leverages on innovative technology solutions to enhance residents' well-being through better-built designs and community-driven programmes. Senior-centred facilities within the vicinity include an active ageing centre (Care), Alexandra Hospital, Queenstown Polyclinic, Nursing Home @Alexandra Campus, a community centre, and food centres.

Figure 53: Harmony Village @ Bukit Batok

Source: Housing Development Board

Figure 54: Queensway Canopy

Source: Housing Development Board

Addressing the retirement adequacy challenge

Adjusting the retirement age. The first action the Government has taken is to address concerns over retirement adequacy by raising the retirement and re-employment ages in line with demographic shifts. The statutory retirement and re-employment ages were raised by the Ministry of Manpower or MoM by one year to 63 and 68 years old as of 1 Jul 2022. This will rise further by 2030 for retirement and re-employment to 65 and 70 years old. The Government will also provide support through Senior Employment Credit, where companies that employ workers aged 55 and above will receive an offset of up to 8% of an employee's monthly wage.

Central Provident Fund (CPF) adjustments. Singapore has been revising the Central CPF programme on a regular basis. Singapore implemented the CPF Lifelong Income for the Elderly (CPF LIFE) in 2009 to offer members the security of a monthly income for life. The Government announced adjustments in 2023 to increase the CPF monthly salary maximum for all members and senior worker contribution rates (details can be accessed on the CPF website). The upward adjustment to CPF contribution rates will also lead to a corresponding increase in the monthly CPF LIFE payouts and could provide enhanced retirement support, in our view, particularly if senior workers plan to continue working after the retirement age. The Government also offers programmes like Silver Support, which gives cash payments to seniors that earned little to nothing throughout their working years, as a complement to the CPF.

The Silver Support scheme. For older Singaporeans who had modest salaries throughout their working years – and now have less in retirement – the Silver Support Scheme offers supplementary assistance. In order to qualify for Silver Support, citizens must meet certain requirements (see here). All Singaporeans aged 65 years or older are automatically evaluated to determine their eligibility for Silver Support payments. From Jan 2021, eligible seniors would receive Silver Support payouts according to: i) The type of HDB flat they live in; and ii) their household monthly income per person. The Silver Support payout supplements the monthly cash assistance provided by the ComCare scheme (discussed below).

ComCare Long-Term Assistance (LTA). The scheme provides LTA to those permanently unable to work due to old age, illnesses, or disabilities, and have inadequate family support or savings to rely on for their daily needs. Following people are eligible for ComCare LTA: i) Singapore citizens and permanent residents; ii) those unable to work because of old age, illnesses or disabilities;, iii) elderly persons who receive a small monthly payout from sources such as CPF Retirement Sum/CPF LIFE; and iv) elderly persons whose children are in the low-income segment themselves, ie monthly household income per capita of SGD800 and below. The key benefits for ComCare LTA are: i) Monthly cash assistance for living expenses, ii) assistance with medical expenses at public healthcare institutions, and iii) free or highly subsidised access to social support services. ComCare LTA assistance rates according to household size, details of which are provided here.

Pioneer Generation Package (2014). The Government introduced the Pioneer Generation Package (PGP) – a SGD9bn package – in 2014 with the goal of assisting pioneering Singaporeans in achieving retirement sufficiency. PGP is a set of healthcare and social support programmes created to express appreciation to pioneer Singaporeans for their services to the island republic during the country's formative years. A Singaporean who was born on or before 31 Dec 1949 and who earned citizenship before 31 Dec 1986 is referred to as a "Pioneer" in this package. PGP benefits include MediSave top-ups, outpatient care subsidies, additional participation incentives for CareShield Life, special MediShield Life premium subsidies, and disability assistance. You can access more details here.

Merdeka Generation Package (2018). The Merdeka Generation Package (MGP), a SGD8bn package unveiled by the Government during the 2018 National Day Rally, is intended to help Singaporeans born in the 1950s that are actively ageing. MGP is designed to lower the medical costs of this generation as they get older. One must have been born in Singapore in the 1950s to qualify for the MGP. Those who missed out on the PGP who were born in 1949 or earlier – and acquired Singaporean citizenship by 1996 – will also be eligible for this package. The list of the benefits from this package include a one-time Passion Silver Card top-up, MediSave top-ups, outpatient care subsidies, additional participation incentives for CareShield Life, and additional MediShield Life premium subsidies. Details can be accessed here.

Unlocking the value from houses. The Silver Housing Bonus (SHB) and Lease Buyback Scheme (LBS) programmes allow senior homeowners to access the value of their properties. To encourage qualified households to downsize, SHB offers incentives, eg a cash incentive of up to SGD30,000 if they move into a 3-room or smaller HDB unit, utilise the selling proceeds to top off their CPF Retirement Account or RA, and enrol in the CPF LIFE everlasting annuity plan. The LBS, which functions similarly to a reverse mortgage, enables seniors 65 years and over to sell their remaining leases to HDB while continuing to reside in their properties. The home owner will get a lifetime payment from the earnings, which will go to their CPF RA and CPF LIFE accounts. The LBS, which was first introduced in 2009 for people residing in 3-room or smaller flats, was later expanded to cover tenants of all HDB flat types in recognition that the LBS holds the key to assisting more Singaporeans unlock the value of their houses in their old age.

List of all other assistance schemes and healthcare subsidies. There are many more schemes that the Government operates in addition to the annual support offered during the yearly budget announcement. Some of these are: i) Seniors' Mobility and Enabling Fund (which provides subsidies to seniors for mobility and assistive devices or home healthcare items), and ii) Enhancement for Active Seniors or EASE. The latter is a subsidy for citizen households with at least one senior who meets the age criterion and needs help to install grab bars, slip-resistant treatment, and ramps. Details of all physical and mental healthcare support – as well as all financial support – that is available for the elderly can be found at the Support Go Where website. A list of all healthcare schemes and subsidies can also be accessed at the MoH webpage.

Investment opportunities created by Singapore's ageing population

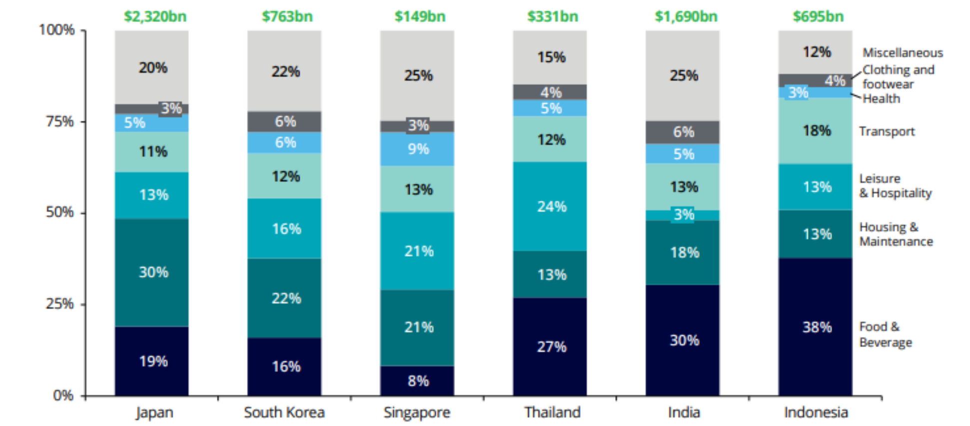
We believe the megatrend of population ageing inevitably creates investment opportunities in the fields of healthcare, senior care, cosmetics, travel, leisure, and long-term financial planning. There are also prospects for the creation of brand new goods and services that seek to enhance the standard of living for both older people and younger people making plans for their later years.

According to the Ageing Asia Alliance, Singapore was ranked as the country with the biggest silver economy potential in terms of the capacity of the ageing population to spend or be supported by their children. In the Asia-Pacific region, the silver economy market is projected to be worth USD4.6trn (SGD6.2trn) by 2025, catering to 600m seniors above the age of 60.

These seniors will be more educated, affluent and tech-savvy than their parents' generation. They are likely to use smartphones to access the internet for information, shop online, or connect with others on social media. Businesses who could court these "silver spenders" with innovative solutions to match their lifestyle aspirations and healthcare goals will see strong growth potential.

Deloitte Monitor, in its report *The Silver Avalanche: Are you prepared?*, noted that there will be large differences in the way a silver consumer spends across the top six sectors (Figure 55). For Singapore's silver consumers, the largest spending would go towards housing and maintenance (21%), as well as leisure & hospitality (21%). Compared to other economies, Singapore's silver consumers would spend the most on healthcare (9%) and the least on F&B (8%.)

Figure 55: The silver economy spend share by sector in 2030



Source: The Silver Avalanche: Are you prepared? By Monitor Deloitte

Telemedicine and health technology. COVID-19 spurred the adoption of digital services among seniors, which lent a boost to telemedicine. For the convenience and comfort of older patients, medical appointments are moving online rather than visiting the clinic. Medication is instead sent to patients, thereby saving them a trip to the pharmacy – the national standard is to ensure that the delivery is done safely. The use of mobile apps, wearable technology, and smart gadgets powered by the IoT is sought to create better healthcare options for the elderly. Therefore, there is room for businesses to create smart healthcare solutions that can help them live longer and better lives. These solutions could address issues such as disease management and monitoring, fall detection and medication compliance.

Alliance Healthcare (AHG SP, NR), is expanding its offerings beyond traditional brick-and-mortar clinics to include digital health services. Its telemedicine platform provides services related to remote treatment, health screening, managing chronic diseases, and teleconsulting with clinicians. The business purchased the digital health platform Jaga-Me in 2019 to offer patients home-based, on-demand mobile care, expanding their options for eldercare.

HDB Smart Enabled Home. The HDB Smart Enabled Home Initiative seeks to enhance daily life in HDB residences through "Smart Living" as part of Singapore's Smart Nation Vision. In a smart-enabled home, residents can easily install commercial smart home gadgets and programmes, such the Elderly Monitoring System. The Elderly Monitoring System gives families more assurance over the health and security of senior family members, particularly if they are living alone at home.

Through the use of motion sensors, the system learns the routines of seniors and notifies caregivers when assistance is required or when unusual patterns of behaviour are noticed.

Privately managed assisted living. More senior citizens want to age independently and respectably. There is a demand for innovative assisted living ideas that offer facilities connected with the community and enhanced nursing home models that move away from an institutionalised style of eldercare.

There are private assisted living service providers in Singapore. For example, the St Bernadette Lifestyle Village at Bukit Timah, a rented landed facility, houses eight seniors who live in their own private *en suite* rooms. The group also has two similar amenities at Adam Road and Sembawang, both also housing eight seniors each. Renters pay about SGD4,600-5,800 each month, depending on location and room type and are looked after by trained caregivers rostered around the clock.

Red Crowns Senior Living (Red Crowns) is another local care provider that started offering assisted living services in April 2021. Its operating model involves renting HDB flats and condominiums for use as assisted living facilities, and the company is currently serving 130 elderly clients in 33 homes across Singapore. Red Crowns charges SGD2,900-6,300 per month for assisted living, depending on location and caregiving service. The fees charged by Red Crowns and St Bernadette include meals. They also provide social activities for the residents.

Assisted-living facilities have been implemented into nursing homes including Jade Circle by Lien Foundation, Lentor Residence, Apex Harmony Lodge, and Allium Care Suites.

Plans are afoot for other privately run assisted living facilities. On 20 Jun 2023, the Urban Redevelopment Authority (URA) and MoH announced that the tender for a Parry Avenue site intended for a private assisted living facility was awarded to Pre 20, a subsidiary of developer Perennial Holdings and one of three tenderers. The development will comprise 200 assisted living apartment units, a nursing home with 100 beds, a wellness clubhouse and a geriatric care centre. Its residents have the option of renting 1- or 2-bedroom units ranging from 366sq ft to 666sq ft for a minimum of three months, and the development will come with private lifts and access to balconies, sky terraces and lush green communal areas. It hopes to start operating in 2026 or 2027.

In order to ride the silver wave, Econ Healthcare, a seasoned player in the local nursing home market, is also growing its brand internationally. It is the largest private nursing home operator by revenue in Singapore and Malaysia. With assistance from Enterprise SG's Scale-up SG programme, Econ Healthcare has opened two nursing homes in China to address the need for high-quality senior care services in the country. First REIT, which primarily operates hospitals in Indonesia, has built a strong portfolio of nursing home assets in Japan and Singapore. It currently operates 14 nursing homes in Japan with 1,655 rooms and three nursing homes in Singapore with 732 rooms.

Elderly nutrition. Seniors' demands can be better met by food products that have been altered in terms of flavour, texture, nutrition, and simplicity of preparation. A Singaporean start-up called SilverConnect specialises in producing moulded pureed food for persons who have trouble swallowing. In addition to staples like ready-to-eat pureed fish, veggies, and chicken, its trademarked GentleFoods menu offers regional treats such pureed pineapple tarts and *ang ku kueh*. The company aims to cater to older people, stroke and cancer patients who have problems swallowing, and other people who enjoy consuming blended food that nevertheless looks and tastes like the things in their natural state.

Other investment ideas. Beyond the biomedical and healthcare aspects of extended longevity, travel and leisure activities are also important for the well-being of older adults. A recent survey conducted by the American Association of Retired Persons showed that as many as 85% of adults in the United States aged above 50 years rank travel and vacation as the top priority for their discretionary spending. According to statistics from Cruise Lines International Association (CLIA), the largest trade association in the cruise industry, the sector has begun to see a rebound in the number of passengers worldwide. As per the CLIA's 2023 State of the Cruise Industry Report, cruise tourism is expected to reach 106% of 2019 levels this year, with 31.5m passengers sailing. The industry should see further engagement – especially among older consumers. After all, more than half of all cruise passengers are above the age of 45. The 65-plus age cohort represents a third of the total, due to the appeal and convenience of visiting multiple countries in a single holiday, along with all-inclusive food, drinks and accommodation.

ESG initiatives

In Singapore, the majority of the acute hospitals is managed by the Government or related institutions. The prominent private healthcare service providers are IHH (Malaysia), Raffles Medical (RFMD), the Thomson Medical Group (TMG), and the Fullerton Healthcare Group (FHG). IHH is covered by our Malaysian analysts, so the discussion in this section will focus more on RFMD, the only healthcare stock under our active coverage in Singapore. Similar to most healthcare service providers, regulatory compliance and patient safety are among the highest priorities for RFMD. The group also considers employee welfare, access to healthcare, economic performance, and the customer experience as important priorities.

Raffles Hospital Singapore received the Green Mark certification in 2019 from the Building & Construction Authority (BCA). Its Raffles Specialist Centre was officially verified as a Platinum Green Mark building by the BCA in Dec 2020. RFMD has been working on improving its water and electricity consumption. As part of efforts to reduce its environmental footprint, Raffles Hospital has commissioned a food waste digester in 2Q21 to reduce the amount of food waste disposed of. Raffles Hospital Singapore has been JCI-accredited since 2008, and it has various committees to review clinical quality to promote patient safety.

In our internal ESG assessment, we rate RFMD at 3.1 out of 4.0, which is one notch higher than the median ESG score for SGX-listed stocks under our coverage.

Key risks to our views on the sector

The following are some of the key risks that we expect for Singapore's healthcare sector, in light of addressing the concerns of a rapidly ageing society: i) Weakening incremental investments in the healthcare sector amidst slowing economic growth in the near term; ii) higher-than-estimated rise in healthcare costs, especially manpower costs, which continue to depend on the country's immigration policies; iii) delays in the completion of ongoing projects, for example, the development of public and private assisted living facilities; and iv) rising healthcare costs and declining sources of income, making affordability a major concern for the rapidly ageing citizen population.

Stock ideas for Singapore

Raffles Medical (RFMD SP, NEUTRAL, TP: SGD1.15). Raffles Medical Group (RMG) is a leading integrated private healthcare provider in Asia. It runs medical facilities across Singapore, China, Japan, Vietnam and Cambodia. It is the only private medical service provider in Singapore that owns and operates a fully integrated healthcare organisation comprising a tertiary hospital, a network of family medicine and dental clinics, insurance service provider, Japanese and traditional Chinese medicine clinics, and a consumer healthcare division. It also offers emergency services, health screening and health checks, travel health services, vaccinations and workplace health consultancy. Raffles Hospital provides specialist and tertiary care services in Singapore and in China (where it has a presence in Chongqing, Beijing and Shanghai). In Singapore, Raffles Medical operates one of the transitional care facilities (TCFs) for the Singapore Government. The TCFs serve a special purpose: They admit medically stable patients from public hospitals while they wait for their transfers to long-term care facilities, or for their discharge plans to be finalised. It is therefore a very important step-down care facility, to free up acute beds in hospitals.

ComfortDelGro (CD SP, BUY, TP: SGD1.46). ComfortDelGro is one of the largest land transport companies in the world, with a strong business presence in public transport and taxi operations around the world. ComfortDelGro MedCare, a wholly-owned subsidiary of ComfortDelGro, provides specialised transportation services to those with mobility issues, including wheelchair users, persons with disabilities (PWDs) and senior citizens, as well as groups from healthcare or daycare centres, medical institutions and social service agencies. It launched a non-emergency medical transport service in Singapore with an initial fleet of 10 wheelchair-accessible minibuses back in 2021. In 2018, ComfortDelGro acquired Australia-based National Patient Transport, which operates non-emergency patient transportation across Victoria, New South Wales and Western Australia. In Jan 2022, ComfortDelGro MedCare acquired a 90% stake in Singapore-based wheelchair transport service provider Ming Chuan Transportation for SGD8.5m. The acquisition comprised Ming Chuan's entire fleet of 76 vehicles, as well as its 86 employees and drivers. Post completion of the acquisition, ComfortDelGro MedCare now has have a total fleet of 92 vehicles, cementing its position as the largest wheelchair transport service provider in Singapore.

Econ Healthcare (ECON SP, NR). Econ Healthcare, a seasoned player in the local nursing home market, is also growing its brand internationally. It is the largest private nursing home operator by revenue in Singapore and Malaysia. With assistance from EnterpriseSG's Scale-up SG programme, Econ Healthcare has opened two nursing homes in China to address the need for high-quality senior care services in the country.

First REIT (FIRT SP, NR). First REIT, which primarily owns hospital and related assets in Indonesia, has built a strong portfolio of nursing home assets in Japan and in Singapore. It currently operates 14 nursing homes in Japan with 1,655 rooms and three nursing homes in Singapore with 732 rooms.

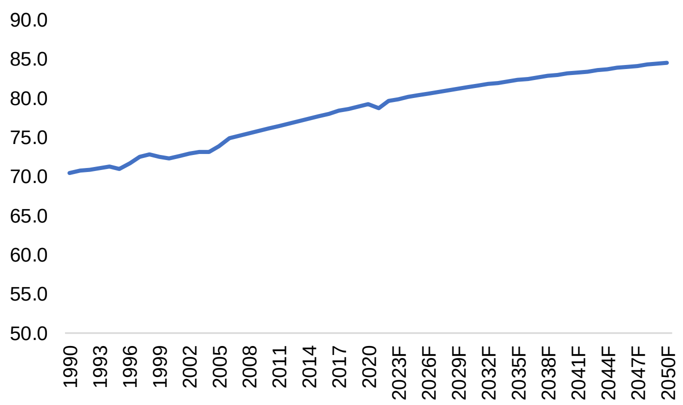
Parkway Life REIT (PREIT SP, NR). Parkway Life REIT is one of Asia's largest listed healthcare REITs. As at 30 June, its total portfolio size stands at 61 properties totalling approximately SGD2.20bn. The REIT has a portfolio of 57 high quality nursing homes locates across 17 Japanese prefectures. These assets, valued at SGD759m (as of end-Dec 2022), account for 34% of Parkway Life REIT's total portfolio value and 37% of its 1H23 revenue.

Thailand – Opportunities Lie Ahead

Demographic profile

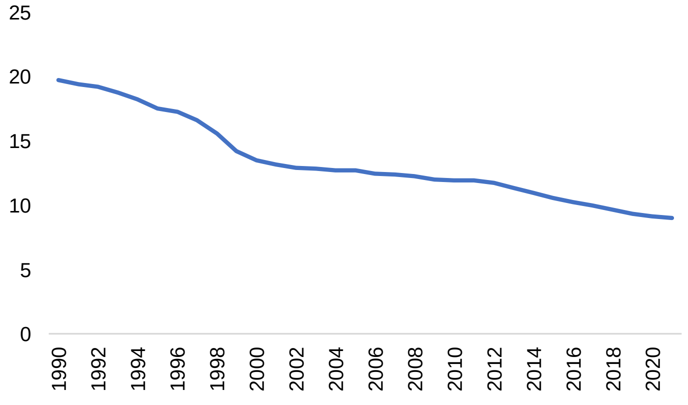
Ageing status. Thailand's aged population is expected to expand at a CAGR of 4.4% from 2020 to 2030. The portion of the elderly to the total population is also expected to grow from 14% in 2020 to 21% by 2030 and 32% by 2050, according to the UN. A higher life expectancy rate and slower birth rate are the key reasons behind this.

Figure 56: Life expectancy rate trend in Thailand



Source: UN, RHB

Figure 57: Thailand's birth rate per 1,000 women



Source: UN, RHB

Figure 58: Thailand's population by age group

	2020		2030E		
Thailand	**person (m)**	**weightage %**	**person (m)**	**weightage %**	**CAGR**
Children (<5 years old)	3.4	4.8%	3.0	4.1%	-1.5%
Teenager (<15 years old)	8.0	11.2%	6.6	9.1%	-2.0%
Working adults (25 years old)	9.1	12.7%	8.1	11.2%	-1.2%
Professional adults (26-64 years old)	41.0	57.4%	39.1	54.3%	-0.5%
Seniors (>65 years old)	9.9	13.9%	15.3	21.3%	4.4%
Total	**71.5**	**100%**	**72.1**	**100%**	**0.1%**

Source: UN, RHB

Challenges from an ageing population

Challenges associated with an ageing society. 2021 was the first year ever in which deaths (0.56m) exceeded births (0.54m), based on Thailand's Interior Ministry data, while 2023 would be the first time that the number of retirees (60-64 years old) is larger than those entering the workforce (20-24 years old). It would be a challenge for the Thai Government to carry out policies that look after the elderly in various aspects (ie public health, quality of living, etc) and keep the economy growing.

Effect on the Thai consumer sector. The ageing society may bring challenges as well as opportunities for Thai consumer companies to capture such a megatrend. This may turn out to be an earnings growth driver over the longer term. As Thailand is a food hub, manufacturers may introduce items designed for the elderly such as healthy food, medical food and food supplements – for both the domestic and overseas markets. Retailers may need to carry out products and services to facilitate them – for example, Home Product Center (HMPRO TB, BUY, TP: THB18.20) offers home products for elderly care, as well as room designing services (such as bedroom and bathroom) for senior living. As seniors may still engage in out-of-home activities, we have seen major Thai retail mall developers providing facilities and making enhancements to their shopping centres to attract the elderly. For instance, Central Pattana (CPN TB, BUY, TP: THB85) transformed its typical shopping centres according to a "Centre of Life" concept. This is so that the mall becomes not just a place for buying items, but a spot where people converge to socialise, exercise, indulge in hobbies, search for inspiration, or get some relaxation and recreation with their families and families – which makes malls a place that caters to all generations.

Government initiatives and investment opportunities

Thailand's healthcare expenditure is expected to turn to growth in FY24. In terms of budget allocation, the Government's public health expenditure is expected to chart a 10-year CAGR of 2.0%, from THB220bn in its fiscal year of 2012 to THB311bn in fiscal year of 2022 (note that fiscal years end in September) – equivalent to 9-11% of the country's total fiscal budget each year. The allocation peaked at THB344bn in 2021 to help the Government grapple with the effect of the COVID-19 pandemic, before gradually declining over 2022-2023F. Still, we expect healthcare spending to turn into growth in the upcoming fiscal year 2024, based on the Public Health Ministry's drafted budget of THB154bn (-1% YoY) and the drafted budget for the National Health Security Office (NHSO) totaling THB210bn (+4% YoY). Thailand's overall healthcare expenditure was THB696bn, and accounted for 4.4% of GDP in 2020. According to Fitch Solutions, the number was estimated to reach THB993bn (+7.4% CAGR) in 2025, and will represent 5.6% of the kingdom's GDP by 2030.

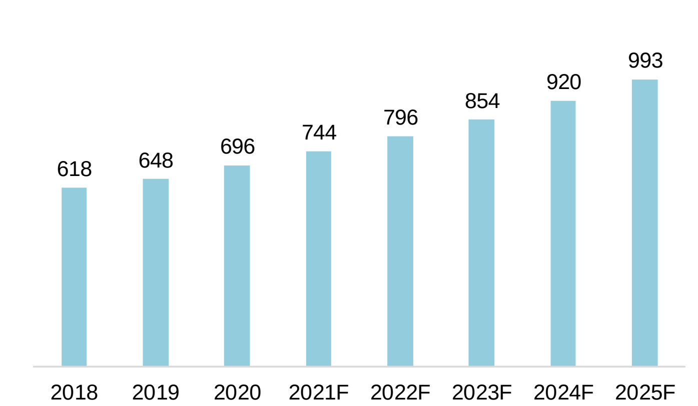
Government policies for senior citizens. More than 40 years ago, Thailand kicked off the 1st National Plan on The Elderly or NPE (1982-2001). It continued this, and embarked on the 2^{nd} NPE in 2002-2022. Objectives of the plan include: i) To enhance the wellbeing of the elderly, so that they can continue to be assets to society, with emphasis on personal dignity and individual independence and living autonomously in reliable security; ii) raise social consciousness on the respect for and recognition of the elderly population's contribution to society, whereby their valuable experience shall be promoted as long as possible; iii) raise all people's awareness on the necessity to be prepared for an ageing process that factors in a good quality of life; iv) encourage people, family, community, locals as well as the public and private sectors to realise and take part in activities that also include the elderly; v) formulate a framework and guidelines for best practices in relation to dealing with the elderly.

To achieve those objectives, the Government outlined five areas to focus on: i) Reading the public to handle aspects of quality ageing; ii) promoting the development of elderly lifestyles; iii) ensuring social safeguards for the elderly; iv) developing a national comprehensive system for undertaking programmes for the elderly, as well as developing the human capital to manage such initiatives; and v) processing, upgrading and disseminating knowledge on the elderly and the national monitoring of the implementation of the NPE.

The Thai Government has approved the 3rd NPE (2023-2037), which was developed in 2021. Key purposes of this plan are: i) Increase the value and dignity of the elderly by encouraging and assisting them in maximising their potential; ii) promote a high quality of life for them in all aspects (including economic, social, health, environment, access to technology, and utilisation of technology and innovation); iii) to support a proactive ageing society and raising awareness on this.

The Government has also prepared welfare measures to cope with an ageing society over the long run. These largely include corporate tax incentives related to employing senior citizens, developing residential complexes dedicated to the elderly, introducing reverse mortgages, and the drafted establishment of the National Pension Fund. There has also been an attempt to extend the legal retirement age for private sector employees from 55 years to 60 years.

Figure 59: Thailand's healthcare expenditure trend (THBbn)



Source: Fitch Solutions (2021a)

Figure 60: NHSO's Universal Coverage card (left) and Social Security member card (right)

Source: Nation Group

Public and private welfare schemes for retirees. These include state welfare programmes such as the Social Security Fund (SSF) and the National Health Security Office (NHSO). Many private companies are also encouraging their employees to become a member of provident funds.

i. The SSF – this is for formal and informal workers, and excludes government officials. Employees must contribute 5% of their salary to the fund, but this amount must not exceed THB750/month. Those who are not formally employed (ie freelancers) can contribute up to THB300/month, while the Government also supports up to THB150/month to them. For healthcare benefits, formal workers can receive medical treatment free of charge at participating public and private hospitals, while informal workers can receive healthcare services via NHSO's universal coverage programme. The SSF member, upon retirement, may receive a monthly pension or lump sum payment depending on conditions met. The lump sum payment is based on the contributed amount plus a return specified by the fund. The monthly pension for formal workers will be equivalent to 20% of a member's average monthly salary during the last 60 months or less than THB15,000 per month, while informal workers may get a lifetime pension of THB600 per month.

ii. NHSO. Individuals without public healthcare benefits from the SSF or the Government Pension Fund may receive medical treatment from any public hospitals through the THB30 universal healthcare programme.

iii. Government support given to all elderly residents of Thailand. These include a THB600-1,000 monthly pension for persons above 60 years, and other benefits such as the Older Persons' Fund that provides credit for the elderly, care facilities for the disadvantaged older people, public transportation subsidies, and introducing more social assistance measures.

The residential projects would elevate the quality of life for senior citizens, with appropriate equipment used and with qualified medical professionals keeping a close eye on them. The Ministry of Social Development and Human Security was assigned to develop the 30-year leasehold senior complex projects in four provinces – Chonburi, Nakhon Nayok, Chiangrai, and Chiangmai. The National Housing Authority may also build senior citizen shelters going forward. Specialised financial institutions such as the Government Savings Bank and the Government Housing Bank may provide pre- and post-finance support for these projects.

Reverse mortgages offer a financial solution for retirees and the elderly, allowing them to tap into the wealth accumulated in their homes. These unique loans provide a source of steady income, enabling individuals to cover living expenses and maintain their independence. In Thailand, there are currently two specialised financial institutions including the Government Savings Bank and the Government Housing Bank providing the reverse mortgages to the public.

Figure 61: A senior living complex project in the Bangkok outskirts developed by state-owned Dhanarak Asset Development and Ramathibodi Medical School

Source: Healthserv.net

Figure 62: Jin Wellbeing County – a senior living complex in northern Bangkok developed by Thonburi Healthcare Group (THG TB, NR)

Source: Company data

Employing the elderly. Since 2016, the Government has allowed corporate tax deductions on the cost of hiring staff over the age of 60 years, at a salary of up to THB15,000 a month. Senior citizens are also to comprise less than 10% of an entity's total number of employees. Furthermore, such workers must have never been a director or a shareholder of the company and its affiliates. The corporate tax deduction concession is equals 200% of the costs.

Corporate investment incentives. Thailand's Board of Investment (BOI) offers a number of tax incentives and non-tax incentives to support elderly-related products and services. The following activities are eligible for 3-8 year corporate tax exemptions: i) Manufacturing businesses, including that related to medical devices or parts, parts for electronic controls, and measurement instruments for medical/scientific devices, ii) food and drugs, including medical food, food supplements, active pharmaceutical ingredients, targeted medicines as well as conventional and traditional medicines. In addition, companies involved in fields like the manufacture of embedded software, high value-added software and digital services such as medical technology also enjoy the same level of incentive. In the service industry, investors of hospitals, specialty medical centres, transportation services for patients, doctors or medical equipment can receive 3-5 years of tax exemption. Along with these supportive tax incentives, the BOI also offers non-tax incentives such as the permission to own land, 100% foreign-owned companies, visas, work permits, etc.

For Thailand's new coalition Cabinet, its leader – Pheu Thai Party – has had a broad scope of policies to support the elderly people, covering areas like public health, agriculture, the economy, and human rights.

The THB30 universal healthcare coverage scheme will be upgraded. This includes the integration of identification cards with medical records in the countrywide public hospital network to reduce paperwork, implementing an online queuing system, making available telemedicine services, the development of more palliative care centres and building more medical centres to cover all 50 districts of the Bangkok Metropolitan area. The party also aims to enable each household to earn at least THB20,000 per month, by providing them with the education to enhance their earning capabilities.

A debt moratorium will be offered to local farmers for three years, with efforts to be made to enhance the earnings of each agricultural household, from an average THB10,000/*rai* pa to THB30,000/*rai* pa through the state's programmes, to improve productivity and lower production costs.

Figure 63: Leading Thai corporations have kickstarted retiree employment programmes

Source: Home Product Center

Figure 64: Siriraj-SCG Elderly Living Knowledge Centre provides information and innovation for senior care

Source: Prachachat Online

ESG

Major listed Thai hospitals have been implementing sustainability management to cope with the anticipated rise in health issues ahead. These players are mostly engaged with the environmental and social pillars, with hazardous waste and personnel seen as the most important issues. Personnel has become a vital resource, as medical professionals require specialised and intensive technical skills to ensure the safety of patients and provide them assurance – a top priority in this business. Also, good corporate governance may prove important in supporting an organisation's operations, its sustainability, and capability in protecting all stakeholders from time to time.

Of the related healthcare companies under our coverage, Bangkok Dusit Medical Services has the highest ESG score. The other healthcare providers have ESG scores that are close to the country median.

Risks

i. **Challenging economic conditions.** Economic uncertainty may affect patients' decision-making on accessing private hospitals for cures, while operators may also see rising competition (ie improving services among public hospitals, and treatment packages at promotional prices offered by other players) and higher costs (ie medicine, personnel, and utilities) which could undermine their toplines and profit margins.

ii. **Decline in the inflow of medical tourists.** While Thailand aims to become a medical tourism hub, uncertainties (ie pandemics, natural disasters, and political unrest) may affect travelling plans, and lead to fluctuations in the number of foreign visitor arrivals to the kingdom. This may lead to a smaller number of international patients and lower revenue intensity among the Thai healthcare operators.

iii. **Regulatory risks.** Amendments in the government's public health policies (ie financial subsidies for the NHSO's Universal Coverage and the Social Security schemes) may benefit the majority of the Thai public. Still, it may be challenging for Thai private hospitals participating in state programmes to compete with public hospitals and manage their own profitability.

Featured stock ideas

Bangkok Dusit Medical Services (BDMS TB, BUY, TP: THB35.25)

BDMS runs the biggest nationwide network of private hospitals and faciltiies in Thailand. Its network actually includes 56 campuses in Thailand and two in Cambodia. The group provides healthcare services to both local and international patients which accounted for 72% and 28% of revenue in 1H23. To cope with the ageing society, BDMS has focused on its strategic Centre of Excellence (CoE), geriatric services, and Silver Wellness & Residences projects.

The company manages CoEs in 14 campuses throughout Thailand, and these focus on five key areas – heart, cancer, brain, bone, and trauma. We note that these areas are highly related to elderly ailments. For trauma, falls accounted as much as 40% of common causes of injuries. CoEs accounted for a hefty 60% and 63% of BDMS' revenue and EBITDA in 1H23. CoE revenue grew by c.40% over 2017-2022, vs the c.20% growth in the number of beds in the CoEs. This revenue growth was supported by: i) Strong patient volume and higher patient intensity, ii) growth of the ageing population, iii) uptrend in fly-in patients, and iv) referred patients within and outside BDMS' network. The EBITDA margin of its CoE business was also at an impressive 26% in 1H23, above that of non-CoE treatment due to higher intensity cases. We believe the ageing society may be one of key catalysts to the CoEs' earnings growth going forward. Apart from its flagship Bangkok Hospital, we believe that BDMS may continue to develop its existing 14 CoEs to cover services in all the five key area before expanding CoEs to other campuses.

For geriatric services, BDMS provides the highest level of healthcare to older adults, including having a Longevity Centre, Rehabilitation Centre, and Chiva Transitional Care Hospital. Chiva Transitional Care Hospital is BDMS' short-term care facility for medically complex patients transitioning from the hospital to the home. These patients still need continuous care by rehabilitation specialists after recovering from surgery or acute illness. An interdisciplinary team works together to meet the patients' goal of becoming stronger, more functional and returning home quickly.

Located in the prime Bangkok area next to Lumpini Park, BDMS Silver Wellness & Residence is a THB23.5bn mixed-use project targeting customers aged 50 years and above, health-conscious consumers, and those (both Thais and foreigners) aiming to adopt a healthier lifestyle.. The total area of this facility is c.170,000 sqm, and houses a hotel, serviced apartments, clinics and retail space. This is a 30-year leasehold project with a contract that will be renewable for another 30 years. This building complex may support the company in becoming a leader in preventive medicine, longevity and anti-ageing in Asia. BDMS is also seeking business partners in ie hotel and residential property development. As this is a long-term project, it will take 6.5 years for construction to be completed, before earnings can be booked from 2029F onwards.

We expect 2H23 net profit to improve HoH, on the continued return of Thai and foreign patients to its hospitals. On foreign patients, BDMS may see growing numbers from the Middle East and China – the latter should provide additional support for earnings growth, aside from the solid income already coming from hospital billings for China expatriates. 3Q23 earnings may grow YoY and QoQ from the high season for medical treatments, mitigated by depreciation expenses on a new campus – Bangkok Hospital Pluak Daeng, which opened in June – although this should only have a minor effect on 2H23 costs.

We expect BDMS' resilient core profit to expand by 6% YoY to THB13.31bn in 2023, then by a further 7% pa over FY24-25. FY23 profit growth would be based on an organic 6% YoY revenue growth, its Thai and foreign patient revenue mix of 28:72, stable bed occupancy rates, and a decent EBITDA margin of c.24%. BDMS remains our current Top Pick for the Thai healthcare services.

Other key beneficiaries – Thailand

Other companies set to benefit from the ageing trend are as follows:

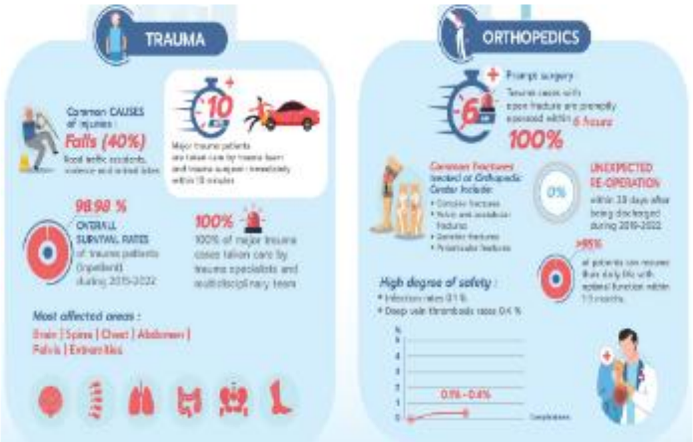
i. Bangkok Chain Hospital (BCH TB, BUY, TP: THB23.50). In early Sep 2023, it signed a memorandum of understanding with JAS Asset (J TB, NR), to provide medical services of its flagship World Medical Centre Hospital to the latter's Senera Senior Wellness Bang Bua Thong project. The collaboration may allow BCH to earn service income, which still accounts for a minimal portion of its topline. This move, however, may enable BCH to penetrate the elderly care market further.

ii. Mega Lifesciences (MEGA TB, BUY, TP: THB55.50) should bank on this global megatrend. Along with the increase in health consciousness, the rise in the number of senior citizens will boost the demand for pharmaceutical products and food supplements. The company has c.170 new products under development and these will be launched from 2023 onwards. MEGA has completed building its new production facility in Indonesia – we think this may turn profitable and chalk c.USD30m in revenue by 2028-2029. A new plant in Thailand will also begin operating in 2024, and support its production capacity there for up to 15 years. Also, it is studying options to spend c.USD20m in internal cash to set up a manufacturing site in Vietnam in the next three years, as the latter is one of South-East Asia's leading markets. All these facilities may help strengthen MEGA's long-term earnings growth.

iii. Thonburi Healthcare Group (THG TB, NR) developed Jin Wellbeing County in the northern Bangkok area in 2018, as Thailand's first comprehensive residential complex with superior healthcare service and lifestyle facilities for retirees and their families. Of a total of 494 residential units, the project's ownership transfer progress was c.50% in 1Q23. THG also operates Thonburi Health Village, a 24-hour medical and nursing care centre for seniors, convalescent patients, bedridden patients, and chronic patients with non-communicable diseases.

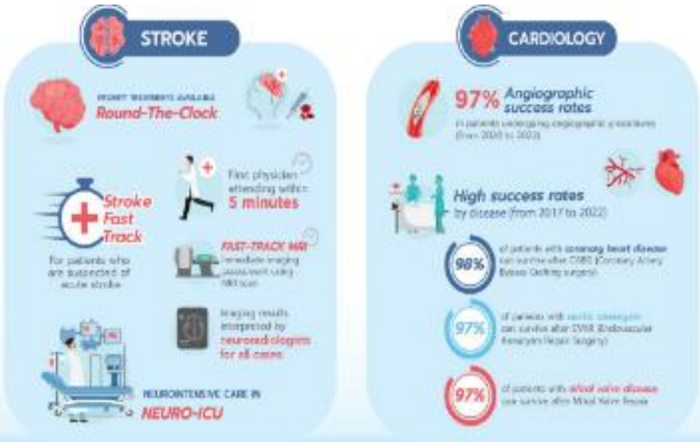
We also believe that the growing aged population may lead to a rise in personal grooming and eventually drive the demand for medical aesthetic treatments. According to Grand View Research, Thailand's aesthetic medicine market totalled USD1.64bn in 2022 and is projected to grow at a CAGR of 9.7% from 2022 to 2030. There is a handful of listed Thai healthcare companies focusing on aesthetics services, including The Klinique Medical Clinic (KLINIQ TB, NR) and Master Style (MASTER TB, NR).

Figure 65: BDMS CoEs' five key areas – Part I



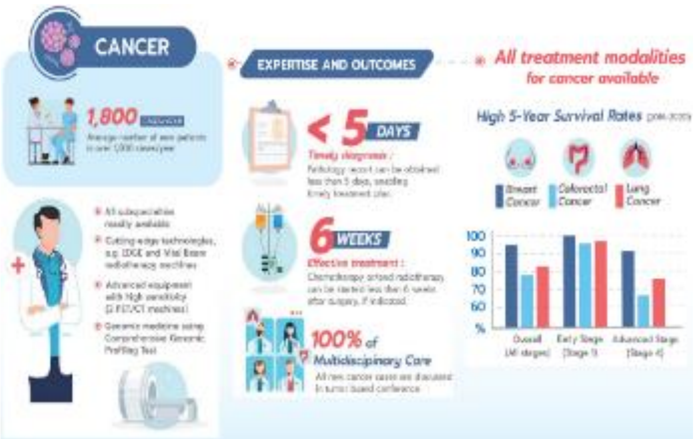
Source: Company data

Figure 66: BDMS CoEs' five key areas – Part II



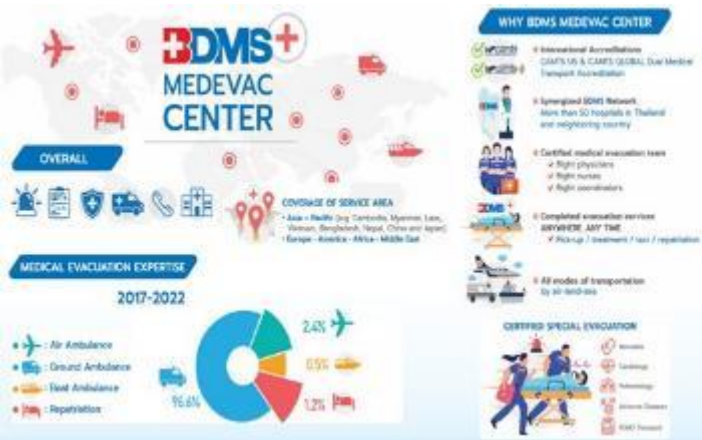
Source: Company data

Figure 67: BDMS CoEs' five key areas – Part III



Source: Company data

Figure 68: BDMS' medical evacuation services – by air, land, and sea



Source: Company data

Figure 69: BDMS' Silver Wellness & Residence project in downtown Bangkok

Source: Company data

Figure 70: BDMS Silver Wellness & Residence project – concept and service offerings

Source: Company data

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