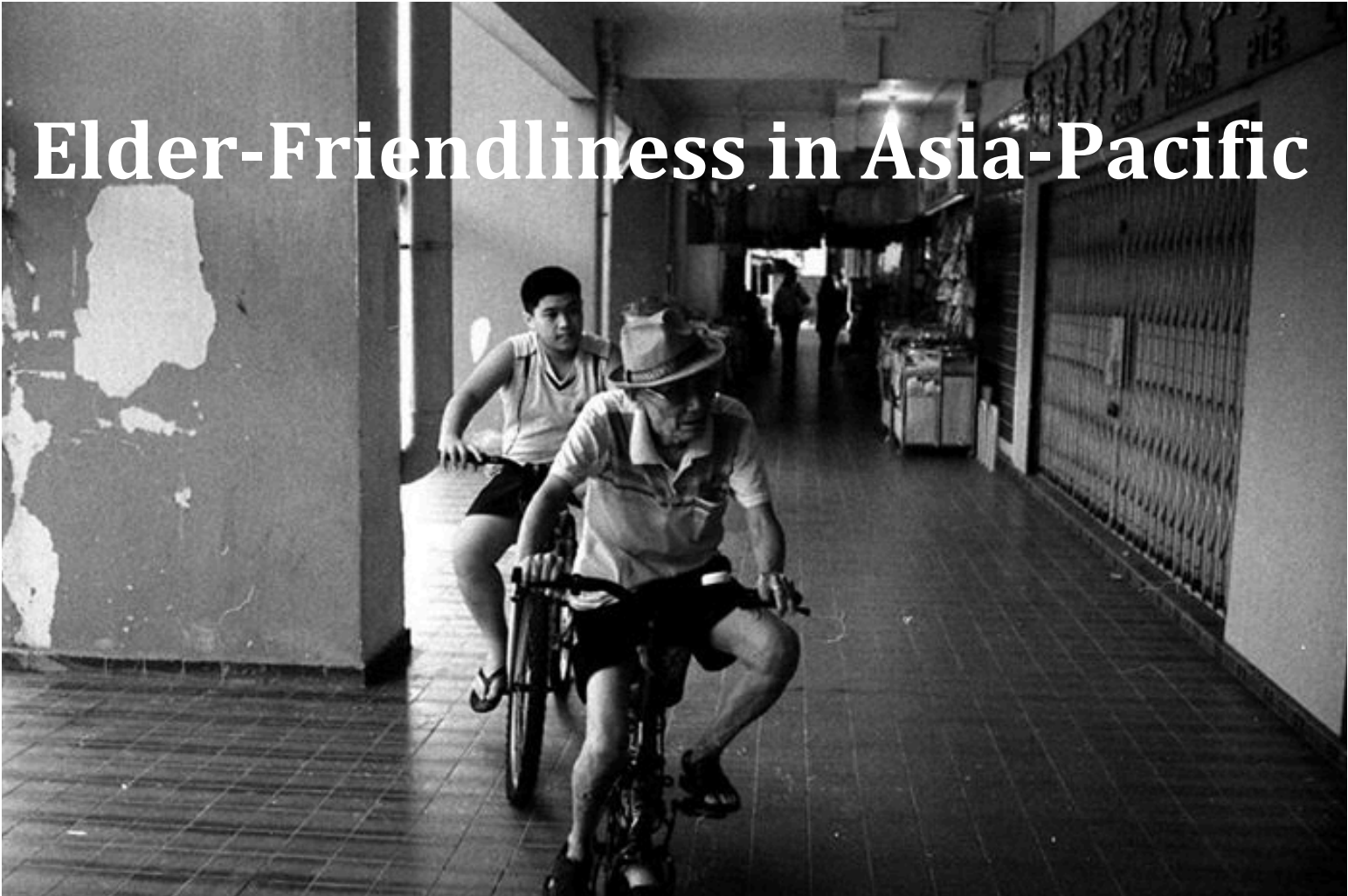


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Elder-Friendliness in Asia-Pacific



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Which country would you choose to live in when you turn 65?

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Introduction

“Which country’s elderly people are being supported the most?”

This paper, released on the International Day of Older Persons, is designed to contribute to the discussion on ageing and help governments, healthcare providers, businesses, social enterprises, and non-profit organizations across Asia-Pacific discover untapped opportunities where they can better meet the needs of elderly. We first seek to highlight key parameters for assessing the elder-friendliness of countries. Such a framework can be used to determine whether a particular country has in place an enabling ageing ecosystem that empowers its elders to live out their golden years. The paper then offers a survey of the performance of 14 countries in the Asia Pacific region, highlighting various best practices and drawing some key trends.

Scope

To assess the level of elder-friendliness of a country, we first considered the full range of activities that the elderly partake in during the course of their day, and then proceeded to look at how support can be provided to the elderly in these activities. Four support areas were explored:

- (i) **Living Environment;**
- (ii) **Employment & Social Security;**
- (iii) **Lifestyle Services;** as well as
- (iv) **Medical & Healthcare Services.**

We then evaluated country in terms of its comprehensiveness and affordability.

Methodology

Insights for this paper have been drawn from a year-long study conducted from July 2012 to September 2013, where we conducted in-depth interviews and design thinking workshops with over 50 elders, government agencies, healthcare practitioners, corporations, providers of elder care services, solution designers, foundations, academics, silver incubators, social enterprises, and academicians. We studied interesting innovations and business models that have been launched across the region, and analyzed statistics, policies, and schemes across countries.

For the purposes of comparison we mainly used quantitative statistics from reliable sources to compare across countries, as qualitative insights offer less objective comparisons. Cross-country comparisons of schemes are difficult due to a lack of standardized coverage and conditions required to be a beneficiary across countries. They have thus been classified into similar *types* that the countries were

observed to have in place. It should be noted that quantitative statistics highlight performance at the national level, and does not focus on how equitably the benefits or government expenditure are distributed. Issues such as gender or geographical equality are not discussed.

Overview of Results

We identified 14 countries in Asia Pacific and highlight Australia, New Zealand, Japan and Singapore as the countries with the most comprehensive ageing ecosystems. However, it must be noted that these countries, especially Singapore, are also among the least affordable, with a high cost of living for housing, groceries, lifestyle and medical services. Other countries continue to improve on their ageing ecosystems, and country standings are likely to change in the future. While rankings provide a comparable assessment of several parameters across countries, the authors hope that more importantly, stakeholders in all countries can use this to benchmark themselves objectively on various dimensions, and learn from each others' good practices for the benefit of all elders across Asia-Pacific.

Executive Summary

Local and global challenges arise when countries are unable to accommodate the needs of an ageing population. The elderly in this generation have higher life expectancies and are more determined to craft their own ageing experiences. Countries need to have the infrastructure to support the elderly in terms of increasing their social participation and security.

This study adopts a top-down approach to examine how countries have been providing for the elderly. Fourteen countries in the Asia Pacific region were chosen for this study. Asian countries were the focus due to the growing challenges of ageing societies in the region. Countries in the Pacific were also included to provide a more meaningful comparative discourse on elder-friendliness, by looking at countries with different social values and levels of development.

To compare elder-friendliness across countries, this paper identified four support areas: Living Environment; Employment and Social Security; Lifestyle Services; and Medical and Healthcare Services. Quantitative indicators were used as much as possible, to provide like-for-like assessment of the comprehensiveness of elder schemes.

The 14 countries were categorized into three types of ageing ecosystems,

identifying countries that provide very comprehensive, moderately comprehensive, and underdeveloped support for the elderly. Australia, Japan, and New Zealand have very comprehensive schemes and policies to support the elderly. Despite high costs of living, their government provide direct financial support to the elderly. China, Hong Kong, Korea, Malaysia, Singapore, Taiwan, and Thailand have moderately comprehensive schemes for the elderly. These countries lend less direct financial support to the elderly, but focus more on building infrastructure and elder-friendly initiatives. India, Indonesia, Philippines, and Vietnam are the most nascent in providing policies that support the elderly. These countries, however, are much more affordable to live in. Although these countries have a low dependency ratio, they show much potential for improvement in terms of the comprehensiveness of policies for the elderly.

The framework used to assess elderly-friendliness is not exhaustive but may offer a useful resource for the government, society, and private sector organizations to take a performance-based approach to objectively benchmark the policies, initiatives, and schemes they are working on, so as to identify good practices and create a more elder-friendly communities across the region.

Background and Motivation

1.1 The effects of living longer

For the first time in human history, the world is going to have more seniors than children in the population¹. This could have spontaneously been an exciting piece of news as the increase in life expectancy is evidence of a success story for public health policies and for socio-economic development. Unfortunately, the lack of timely follow through is now challenging societies to adapt and accommodate the diverse needs and wants of this rapidly ageing segment. Some countries have adapted fairly well, while others continue to be lacking in various areas.

1.2 Why is it important to live in an elder-friendly nation?

An obvious reason is because all of us will be spending a much longer time in our late adulthood, and we would want to be living our lives to the fullest. Undeniably, seniors require enabling living environments to compensate for the physical, cognitive, and socio-emotional changes associated with ageing. Families experience less stress when their seniors have the health services and community support that they need; communities benefit when seniors volunteer or stay in the workforce; the economy prospers from a thriving silver market; and

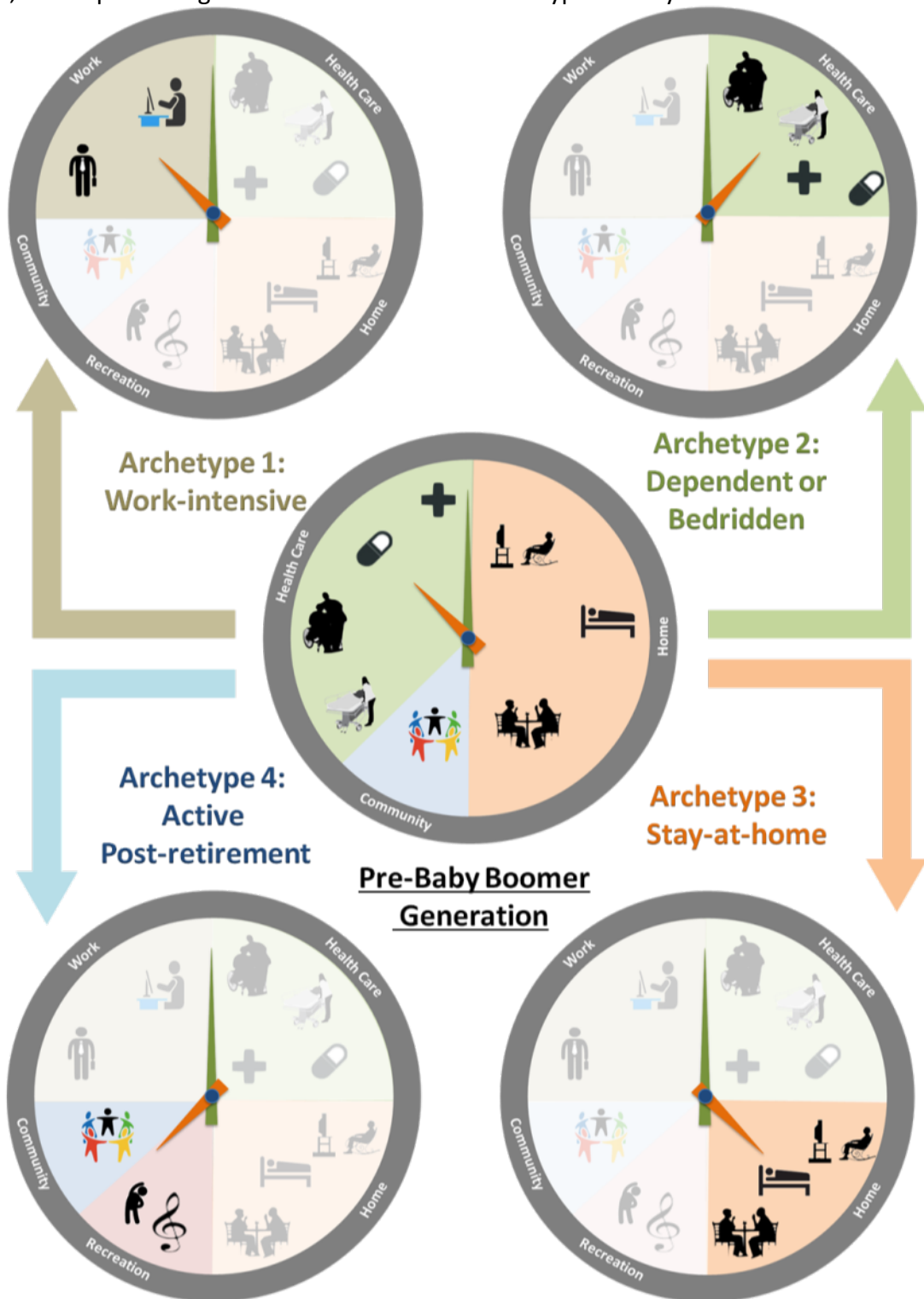
lastly the healthcare burden is alleviated by delaying the onset of health issues. For both society and individual to reap the value of these extra years of life, nations need to provide structures and services to maximize the functional capacity of older people as well as their social participation and security. Many governments recognize this and have been pumping massive amounts of resources into social security projects for the seniors, but improvements to both elder hardware and software are still nascent despite these considerable investments. Perhaps it is necessary to first consider what it means to be an elder-friendly nation.

1.3 Are the elderly today the same as before?

For the first time, a new breed of elders turned 65 in 2012. The 'baby boomer generation', born between 1947 and 1964, grew up in a stable post-war environment that enabled them to be wealthier, more active and healthy, better educated and more secure than previous generations. They were the first to have observed widespread global development, and have a much higher life expectancy than previous generations, and will hold on to an ambitious drive for achievement for a longer period, being more determined and empowered to craft an ageing experience of their own.

For example, the first baby boomers survey conducted in Singapore in 2009 reported trends of continuing employment and a growing silver market for the elderly in Singapore. Thus, unlike previous generations of

the elderly who tend to have invested their lives on their children, and now spend their golden years at home, expecting their children to take care of them, we see a greater variety of elder 'archetypes' today:



These profiles illustrate the expansive range of vocational, healthcare, lifestyle, and infrastructure needs that elders will increasingly start to demand. There is a need for government, society and the private sector to move beyond thinking about life events in a chronological manner



in order to transit to an elder-friendly society. We will explore the provisions, gaps, and opportunities that these dominant elderly archetypes present.

2. The Need to Benchmark

As some countries more than others have been able to adapt well and fast enough to the extra years of life that we are gaining, it would be valuable to identify the mechanisms that have enabled ageing ecosystems to thrive, and distill key trends and ideas that could be adapted across cultures. It is imperative for both public and private sector actors to start considering their roles in helping bring about elder-friendly societies.

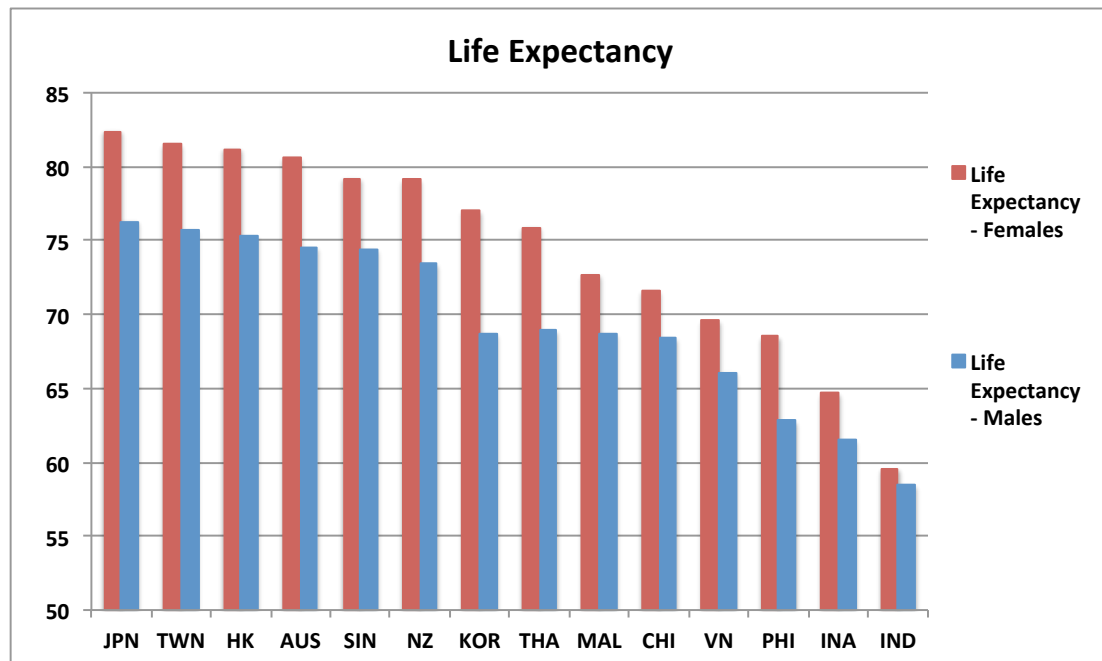
2.1 Why Asia?

Asia is the only continent that would be witnessing an almost tripling percentage of its population over 60² years of age, accounting for 63% of the world's total senior population by 2050. The Asia-Pacific Silver Economy Business Opportunities Report³ estimates this to represent a market worth US\$1.9 trillion. By 2050, in East and North-East Asia, more than one in three will be over 60 years old⁴. Most countries in the region need to grapple with this reality, even as they continue to modernize. With the rising influence of Asia in the world economy, how countries adapt to this phenomenon will have important implications for future global prosperity.

Asia Pacific is a heterogeneous region, and analyzing the Western societies in the Pacific serve to contrast the individualistic, independent, and active lifestyles of seniors to the collectivistic, family-centered cultures of oriental societies with the alternative being community-based care in aggregated facilities. Changing family structures, urban migration, and development are gradually weakening informal support systems, and different elder care solutions ranging from ageing-in-place to retirement communities have resultantly appeared in line with different cultural emphases on independence and autonomy. Indeed, countries such as Australia, New Zealand, and Japan, have recognized

earlier that the enablement of independence is key to a sustainable ageing ecosystem. They have made efforts to understand the psyche of seniors as people who desire independent living, and incorporated

these insights into the designing of the society's structures and services. Such differences across countries help to provide richer range of approaches for study.



Source: World Bank

2.1 Overview of the countries

Country and Abbreviation	Life Expectancy (Female, Males)	Proportion of population aged above 65	Aged Ratio (Dependents per 100 working-age population), 2012	Dependency Ratio (Dependents per 100 working-age population), 2030 forecast
Japan (JPN) 	82.4, 76.3	22.90%	39	52.9
New Zealand (NZ) 	79.1, 73.4	13.30%	21	33
Australia (AUS) 	80.6, 74.5	14.00%	21	31.5
Hong Kong (HK) 	81.2, 75.3	12.60%	18	43.2
South Korea (KOR) 	77.0, 68.7	11.40%	16	37.3
Taiwan (TWN) 	81.5, 75.7	10.90%	14.7	36.38
Thailand (THA) 	75.9, 68.9	9.20%	13	26.1
Singapore (SIN) 	79.2, 74.4	9.20%	13	37.5
China (CHI) 	71.6, 68.4	8.90%	12	23.9
Indonesia (INA) 	64.7, 61.5	6.10%	8	15.1
India (IND) 	59.6, 58.5	5.50%	8	12.2
Malaysia (MAL) 	72.7, 68.7	5.00%	8	15.7
Vietnam (VN) 	69.6, 66.1	5.50%	9	18.3
Philippines (PHI) 	68.5, 62.8	4.30%	6	9.1

Source: World Bank

2.3 Enabling Ageing Ecosystems

The available literature on ageing frequently makes some mention of ways to 'enable' active ageing. However, there are few general accepted definitions of what *enablement* really means. We focused on tangible aspects that maybe operationalized; domains within the control of policymakers and corporations rather than social, cultural, or historical forms of support. Based on our interviews with many elders, clinicians, designers, foundations, government agencies, and corporations, we present a multi-level set of four support areas to define a country's elder-friendliness:

1. A ***physical environment*** that is accessible with adequate housing and living arrangements.
2. ***Vocational and economic support*** that empowers the elderly to support themselves.
3. ***Recreational factors*** that add to their daily routines to ensure that they can be active and have sufficient human interaction with the community.
4. ***Healthcare options*** that are of high quality to treat and sustain the elderly as comprehensively as possible.

Methodology

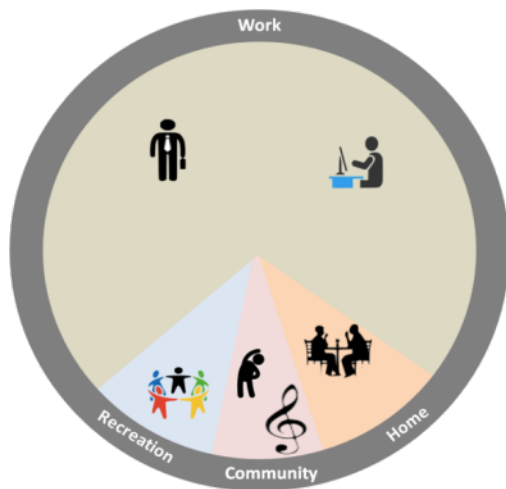


Fig. 1a: Typical Adult's Routine

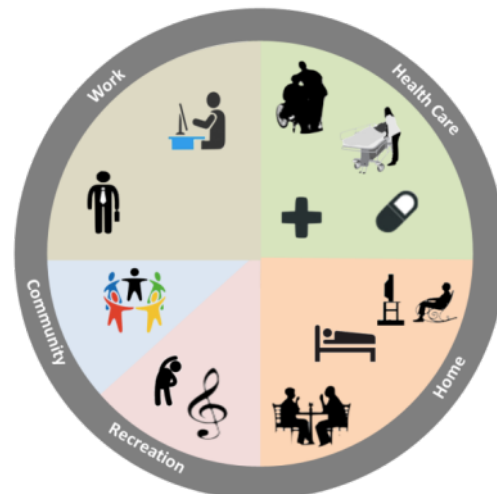


Fig. 1b: Typical Elderly's Routine

We began by considering the full range of activities that an elderly person partakes in during the course of a routine week, as shown in the figure above. These activities are fairly similar to that of a working adult, with two key differences. Firstly, the proportion of time spent on types of activities – the elderly are likely to

spend less time on work and more on receiving healthcare as they age. Secondly, unlike typical working adults, the elderly are likely to require more support in the activities that they partake in. We then scouted for international good practices in avenues and forms of support for the elderly, and identified the following:



Subsequently, we proceeded to categorize these forms of support arrived at four key support areas, which are closely linked to the main aspects of an elderly's typical routine.

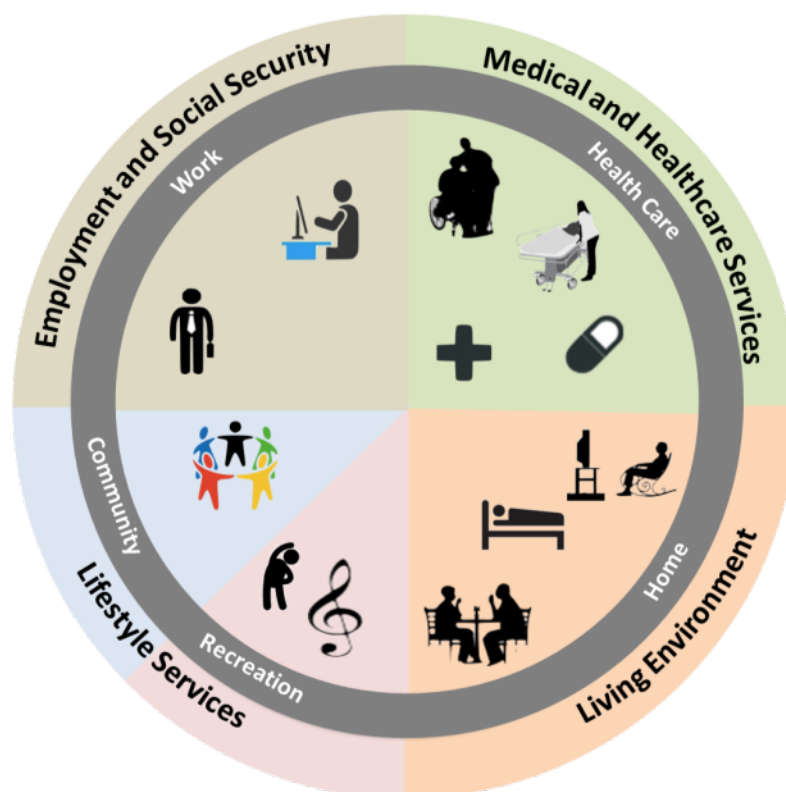
Living Environment encompasses housing, transport, and other areas such as housing estate areas, markets and shopping malls and is where the elderly spend a large proportion of their time.

Employment & Social Security covers a key concern of the elderly as to whether they are able to support themselves financially as they approach or enter retirement. These two support areas address the core of a typical healthy elderly person's concerns.

Lifestyle Services, the third support area, can be thought of as how much 'value-add' can be provided to the lives of the elderly. This could range from emotional support to recreation and wellness, as shown in the left portion of the figure below.

Finally, **Medical & Healthcare services** refer to the 'fallback' support that the elderly require once they become dependent or bedridden.

It is important to note these four areas are not necessarily mutually exclusive and may overlap and interact as well. This white paper does not aim to capture all the synergies between the support areas, but keeping this point in mind may help readers better understand how seniors see, do, and feel about things.



Four Support Areas



A. LIVING ENVIRONMENT

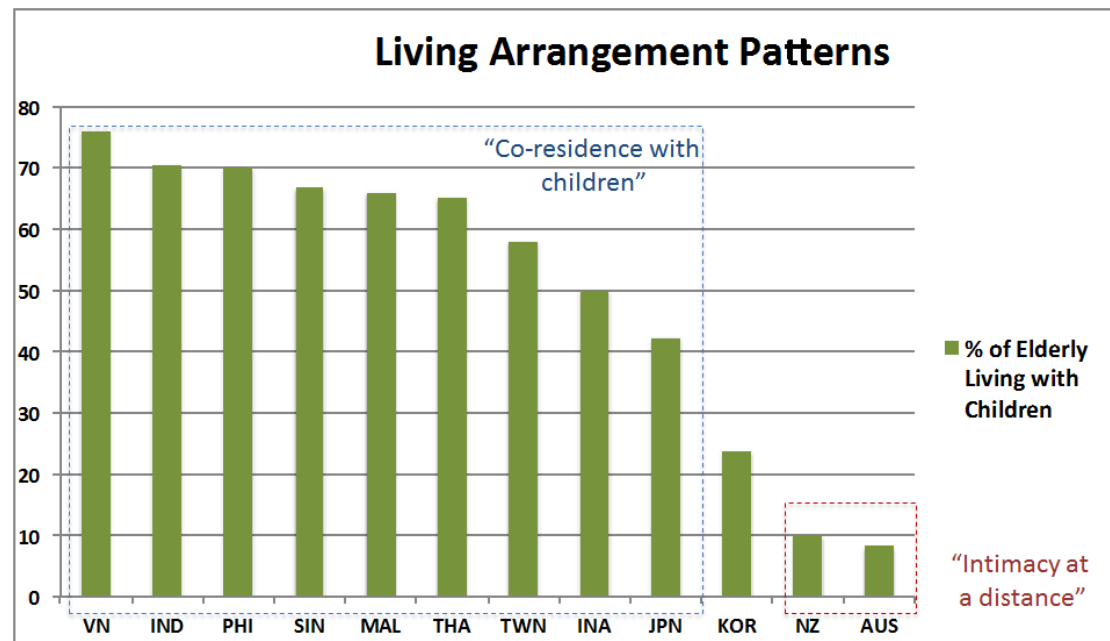
“The simplest things we take for granted in our everyday lives, such as crossing the road, can become a woe for our seniors; hence making sure our neighborhoods and spaces provide the support for them to live independently, safely, and happily goes a long way to enrich their lives and eventually our own too.”

From one’s actual accommodation, from who they stay with, to the design of surrounding amenities, a key concern of elders would be the quality of their living conditions in old age. Housing & Living Arrangements are among the most important considerations for the elderly because most of them would start to spend a longer time in their homes and nearby

areas; hence there is a need to combine high quality accommodation with a comfortable, secure, and conducive infrastructure for them to maintain their daily routines. This dimension encompasses **housing, outdoor spaces, buildings and transportation**. Indicators within this dimension are as follows:

- Living Arrangements that range from involving predominantly co-residence with children and their families, to being predominantly one of separate residence
- Policy support that help the elderly finance their housing and transportation needs
- Policy support that promote elder-friendly design in homes, neighborhoods, buildings, other community spaces, and the transportation system
- Schemes that facilitate the independent living and moving around of seniors
- Technology and infrastructure that provide accessibility to senior citizens (E.g. help with direction finding) enabling them to carry out their daily routines independently

A1. Living Arrangements



Source: Eden Strategy Institute survey and analysis

*Data not available for China and Hong Kong

The figure above shows the wide range of living arrangements across the 14 countries. There has traditionally been a dichotomy between a Western “intimacy at a distance” preference for separate residence between the elderly and their children, and an Asian preference towards co-residence with children, especially the eldest children’s family. This is supported in the data by the low ‘living with children’ rates in Australia and New Zealand (known to be Western societies), as well as the high rates in countries such as India, Malaysia and Vietnam. However, urbanization, industrialization and a change in the elderly’s preferences have led to many countries bucking the trend of the traditional dichotomy. For example, South Korea’s living arrangement

patterns are closer to those of Australia and New Zealand than of Vietnam, and because over time their citizens have become wealthier and adopted different preferences. In China, many of the elderly are separated from living with their children as the latter have to go elsewhere to seek jobs. Nevertheless, a significant number of those living alone have children living in the same village or county and thus still maintain access to support from their children. Still, a significant number of countries have a strongly ‘co-residence’ living arrangement pattern. It is useful to keep this overall pattern in mind when considering the subsequent policy support towards privately-owned housing, as compared to retirement and nursing homes. Support for retirement homes would

be particularly pertinent for New Zealand and Australia, whereas those towards housing design would be

more relevant for countries like India, Vietnam, and the Philippines.

A2. Housing and Building Design



Policy Support for Elderly-friendly Design

Legislation / ...promote elder-friendly facilities in homes

Schemes to...

Japan 	<ul style="list-style-type: none"> - Act on Securement of Stable Supply of Elderly Persons' Housing - Act on Buildings Accessible and Usable by the Elderly and Physically Handicapped
New Zealand 	Retirement Villages Act 2003
Australia 	<ul style="list-style-type: none"> - Retirement Villages Act - Residential Parks Act - Livable Housing Design guideline
Taiwan 	Law for Promotion of Private Participation in Infrastructure Projects
Thailand 	2003 Act on Older Persons (facilities and safety in buildings, places, vehicles or other public services)
Singapore 	<ul style="list-style-type: none"> - Building and Construction Authority's Universal Design Principles - Project LIFE (Lift Improvement & Facilities Enhancement for Elderly) - Project EASE (Enhancement for Active Seniors)
China 	<ul style="list-style-type: none"> - Design Codes for Accessibility of Urban Roads and Buildings - Design Codes for Accessibility of Railway Stations and Junctions
India 	National Policy on Senior Citizens, 2011
Malaysia 	Older Persons and Barrier Free Environment policy (in initial stages of implementation)

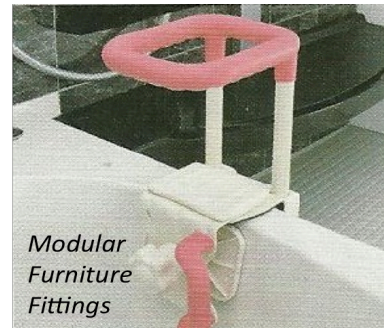
Vietnam	Provisions on accessible communities
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Philippines	National Shelter Program
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The first step to making living areas conducive to the elderly is empathizing with them as they walk through day-to-day activities. In so doing, designs that seamlessly blend with the existing fittings and enable the elderly to remain independent can be incorporated without making the facilities look clinical. For instance, wheel-chair bound find it difficult to operate “Push” and “Pull” doors, and sliding doors are more suitable in this case.



Other elder-friendly features include support rails especially in alleys and bathrooms. Modular furniture fittings are convenient as they can be attached anywhere to provide adequate support as the elderly move around.



Most countries have passed legislation to promote and encourage the installation of elder-friendly facilities in existing houses and those under construction. This has provided entrepreneurs and manufactures with an impetus to provide for facilities that are more compatible to the aged. For instance, Japanese companies are commonly known for producing innovative and ergonomic designs for house-hold fittings and furniture.

However, many countries have only just begun innovating for the “Silver Market”. Even though the governments have been playing their part in rolling out new schemes to develop elder villages that are specially built keeping the aging population in mind, the enforcement of the schemes is not clear. Apart from a few specific cases such as the Building Maintenance Grant Scheme for Elderly Owners in Hong Kong or the Livable Housing Design guidelines in Australia, there have been few significant comprehensive and tangible policy supports for elder-friendly housing and building design. With a broad general preference in the region of ‘ageing-in-place’¹ – where the elderly would rather live in

their own houses than in a retirement facility – it is a concern that comprehensive, age-friendly housing design policies remain unaddressed in many countries in Asia-Pacific.

¹ “Ageing-in-place” refers to growing old in the home, community and environment that one is familiar with, with minimal change or disruption to one’s lives and activities. This is to promote social integration where the needs of seniors can be met within the community, rather than to segregate them as a distinct and separate group of the population. Source: Committee on Ageing Issues: Report on the Ageing Population (MCYS Singapore, 2006)

A3. Retirement and Nursing Homes



There have been a considerable number of retirement and elder-care homes building up in almost all 14 countries. An encouraging sign is that the private sector, non-government organizations (NGOs), and community initiatives are responsible for the management of many of these homes. For instance, these organizations oversee 55.8% of all aged homes in Indonesia. This reflects the high

interest in this support area beyond the public service. While the rise in the number of old age facilities is an encouraging sign, upon taking a closer look, many old-age and Nursing homes emanate a rather depressing vibe. This can be attributed to hospital-like wards, dimly lit rooms, and dull colors among other design issues.



Physiotherapy session at a nursing home



High-end physiotherapy room for the elderly



Elderly waiting for a physiotherapy session at a nursing home



Toileting aid

It is no surprise that the elderly living here appear jaded as they await their end.

The facilities that stand-out are those that have incorporated features that make the elderly feel at home. Installing brighter lights, larger windows, and the use of brighter colors are low-cost ways of changing the ambience to a more vibrant one. More practical considerations include

technology or mechanical aids that make the tasks that are otherwise onerous for the caregivers – bathing and toileting – more feasible. The price of these aids depends on the sophistication of the technology involved. Japan has been able to leverage on home-grown elder-friendly technology to revamp its old-age homes into more comfortable living environments for the elderly.



Dull common area in a nursing home



Vibrant common area in a nursing home



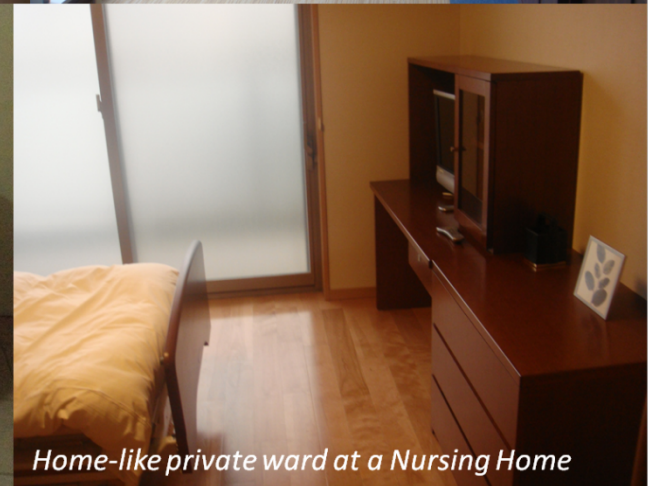
Cramped up walking alley at a Nursing Home



Spacious and brightly lit corridors with side-rails at a Nursing Home



Hospital-like private ward at a Nursing Home











Home-like private ward at a Nursing Home

A4. Public Transport and Accessibility

Policy Support



Policies and Schemes for a Barrier-free public transport environment

Japan 	Transportation Accessibility Improvement Law, 2000	Fixed-rate bus fares for elderly aged above 70
New Zealand 		SuperGold Card (discounts and concessions to New Zealanders aged 65 years or over, such as free parking between 8am to 12pm)
Australia 	Disability Plan in Transport for NSW	- Mobility Allowance (Subsidy for those unable to use public transport) - Seniors Card
Hong Kong 		Public Transport Fare Concession Scheme for the Elderly (to encourage them to participate more in community activities)
Singapore 	- Car Park Label Scheme (CPLS) - Successful Ageing Strategic Thrust: Provide a barrier-free built environment and public transport system	- Public transport concession card - Senior's Mobility Fund (to assist the elderly in getting basic mobility devices to achieve independence in the community)
China 		Free rides on public buses and free admission to local events in some cities
India 	Age friendly, barrier-free access will be created in buses and bus stations, railways and railway stations, airports and bus transportation	Train and air travel concessions (National Policy of Senior Citizens, 2011)
Malaysia 		Concession rates of 50% of domestic fares to older persons (Malaysian Railway, Malaysian Airlines System)

The majority of countries in the Asia-Pacific region have generous policies in place for public transport in terms of concession rates, with countries such as China having one bus operator offering free rides on public buses for the elderly, and Malaysia offering 50% concession rates on the railway system. However, there appears to be

a lack of focus towards creating a barrier-free public transport environment. Japan's Law for Promoting Easily Accessible Public Transportation Infrastructure serves as a good role model of a detailed plan towards such an environment with many tangible targets.

CASE STUDY: Law for Promoting Easily Accessible Public Transportation in Japan

Background. This piece of legislation was enacted in November 2000 with the intention of improving transport accessibility for the elderly and the disabled.

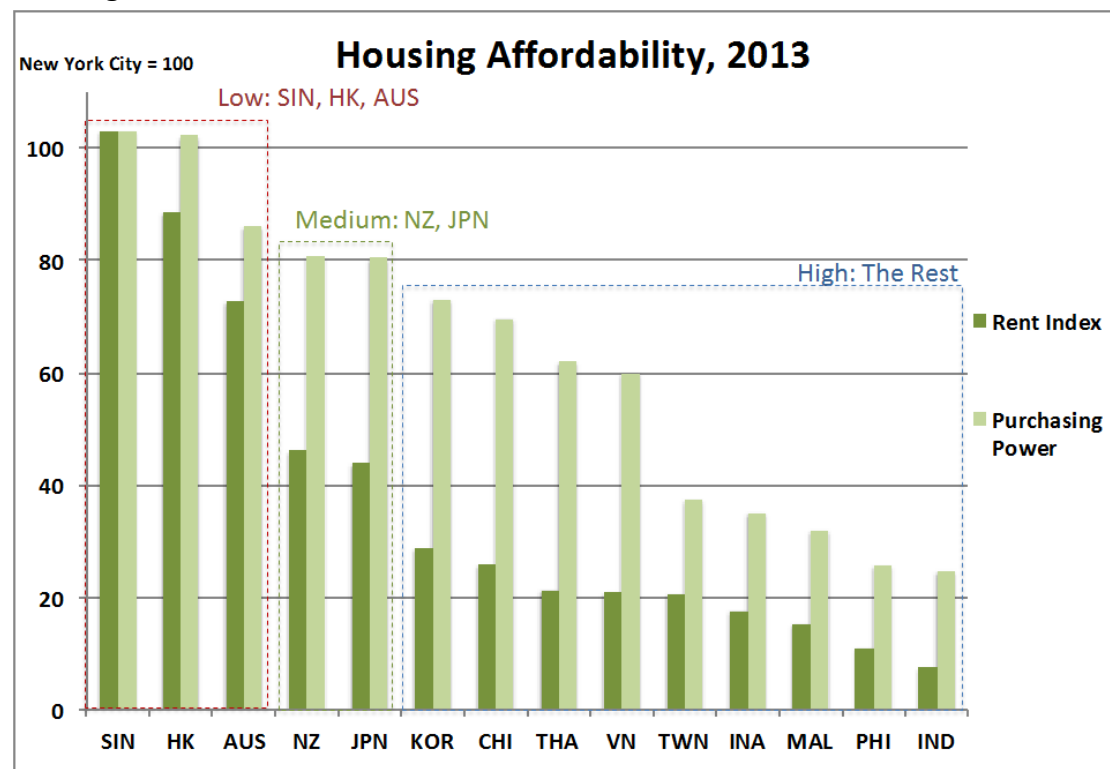
Barrier-Free Design. This design concept encompasses three main requirements: Eliminating differences in levels, installing tactile tile blocks to guide the visually impaired and installing toilets for the physically handicapped.

Targets. By 2010, to implement barrier-free design in terminals (railway stations, bus terminals, ferry terminals and airport passenger terminals) that are used by 5,000 people or more on average per day, as well as on 30% of railway trains, 50% of passenger ships, 40% of airplanes, and 60,000 buses.

A5. Affordability



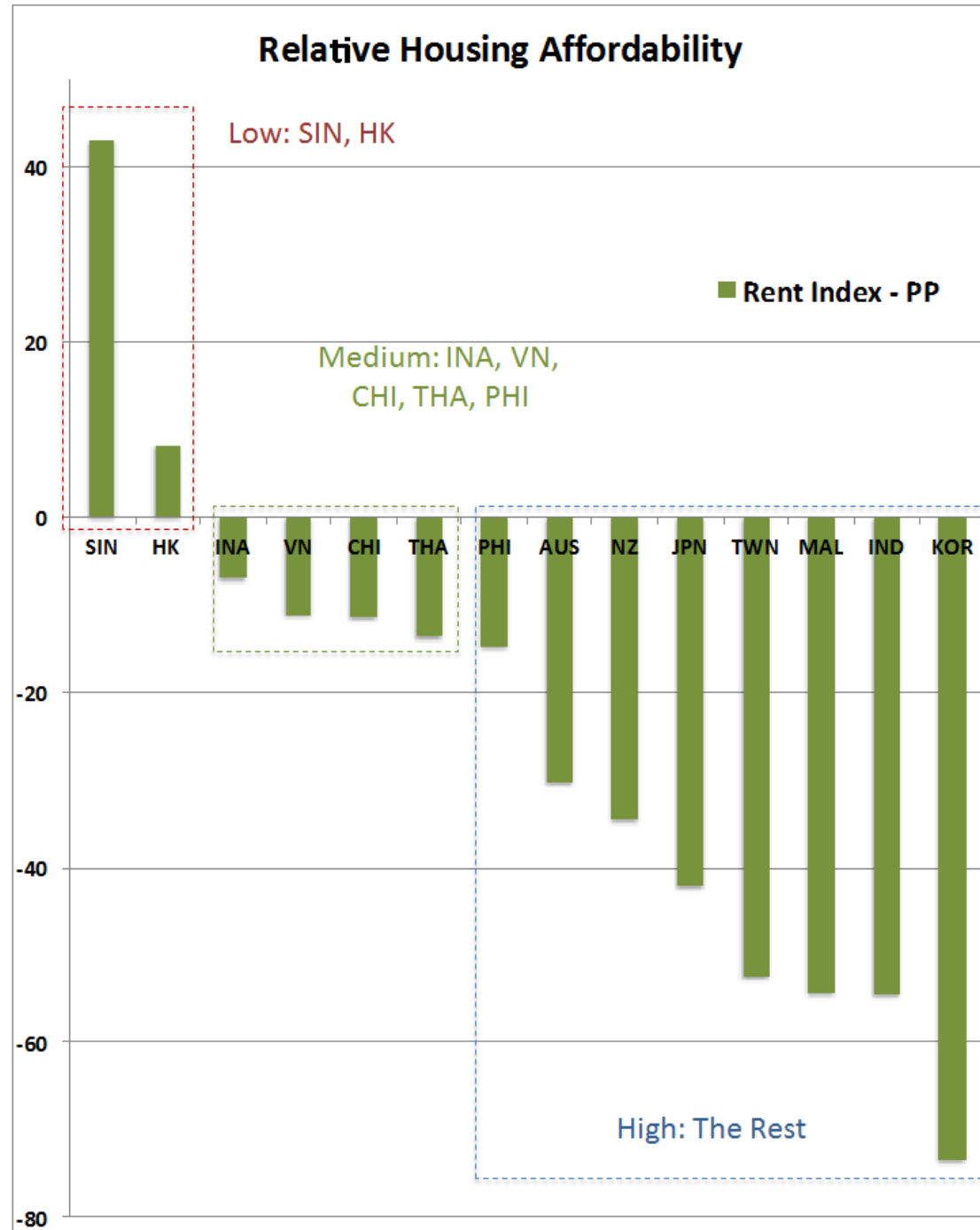
Housing



Source: Numbeo Indices, Eden Strategy Institute Analysis

Based on the rental price index shown in the figure above, rental prices in 11 of the 14 countries are very affordable, being less than 46.06 on an index relative to rental prices in New

York City (fixed at 100). However, prices in Australia (72.72), Hong Kong (88.57) and Singapore (103.04) are significantly higher.








Source: Numbeo Indices, Eden Strategy Institute Analysis

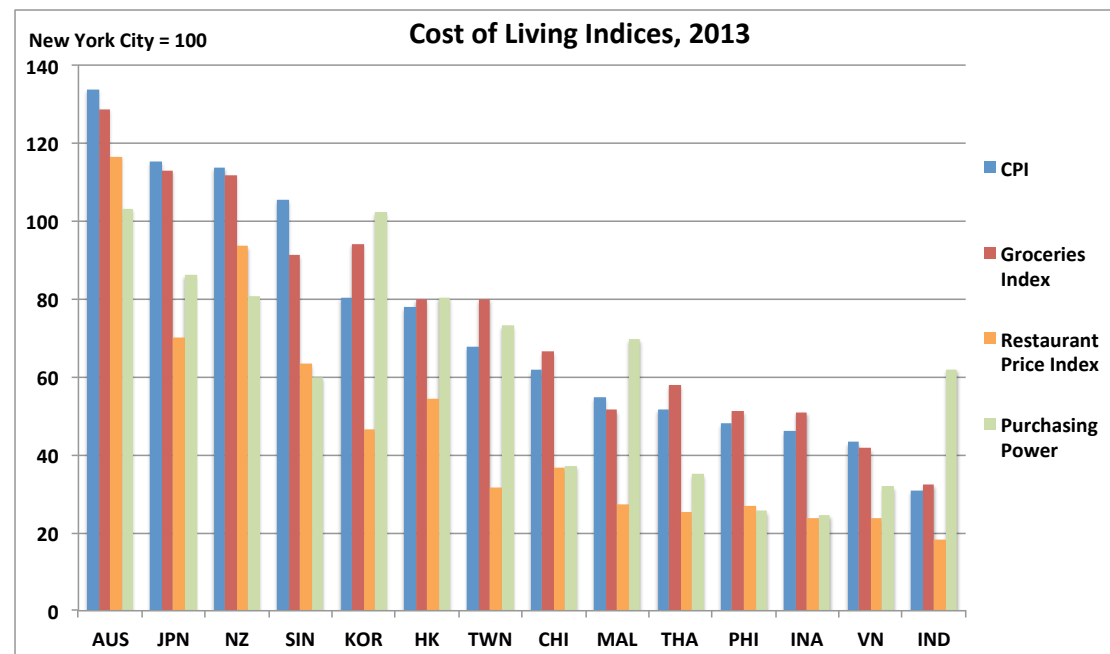
In particular, in Hong Kong and Singapore, rental price index is higher than purchasing power index, showing that housing is very expensive relative to income earned in these two countries. However, rental costs may be mitigated by the high levels of housing ownership in such countries.

Also, these countries have schemes to help the less well-off, such as the National Older Persons Housing Strategy and Rental Affordability Scheme in Australia, and the Priority Public Rental Housing Scheme in Hong Kong.

Housing Affordability Schemes

New Zealand 	<ul style="list-style-type: none"> - Equity release service providers (e.g. Independent financial and legal advisors to help with reverse mortgage, renting out part of home, subdividing one's property, downsizing to a cheaper house, selling one's home to their family while retaining the right to live in it)
Australia 	<ul style="list-style-type: none"> - Telephone Allowance (helps with the costs of maintaining a telephone and home internet service)
Hong Kong 	<ul style="list-style-type: none"> - Priority Public Rental Housing Schemes
Singapore 	<ul style="list-style-type: none"> - Lease Buyback Scheme (LBS) - Approved Subletting Scheme
China 	<ul style="list-style-type: none"> - Widowed elderly received free housing rental - Coupon system for all residents aged above 80, where the coupons subsidize the purchase of daily necessities or services including haircutting and hiring a part-time domestic helper

Food, Goods and Services

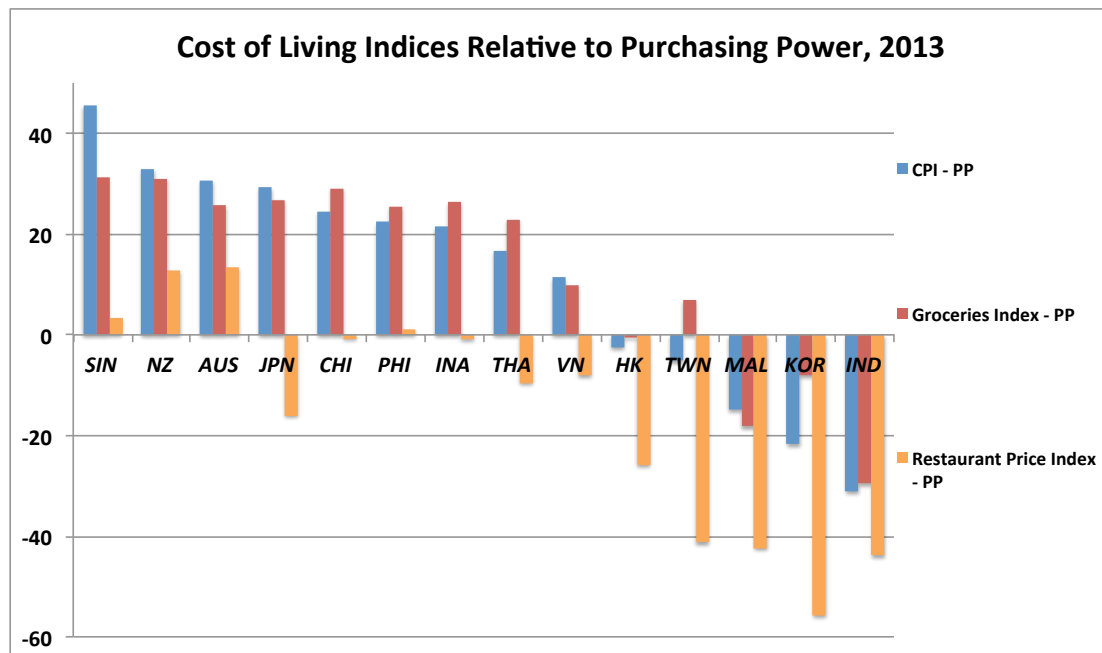


Source: Numbeo Indices, Eden Strategy Institute Analysis

The figure above shows three indices comparable among the 14 countries, alongside purchasing power. CPI is a broad index, being weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. The groceries and restaurant price indices are included as specific

indicators of more relevant aspects of an elderly's daily routine.

For most countries, CPI and Groceries Index do not differ significantly. In contrast to housing affordability, goods and services are the most expensive in Japan, New Zealand and Australia, with Singapore close behind.



Source: Numbeo Indices, Eden Strategy Institute Analysis

The figure above enables us to see trends in the cost of living in real terms more clearly. By subtracting Purchasing Power from the three indices, we see positive values indicating that an index is more expensive relative to New York City after taking purchasing power into account; negative values reflect the opposite. Interesting observations can be seen from the chart. Firstly, in real terms, India, Malaysia and Korea are countries with the most affordable goods and services. Secondly, despite appearing to have fairly affordable

groceries and services in absolute or nominal terms, China, Indonesia and the Philippines are actually not too far off from Japan, New Zealand and Australia in real terms. Finally, there are wide differences between restaurant prices across countries, as well as among countries relative to the cost of groceries and services. While the elderly may not always frequent restaurants, the groceries and restaurant price index serves as a good gauge of meal costs, which forms a key component of an elderly's daily living expenses.

B. EMPLOYMENT AND SOCIAL SECURITY



“With a constant rise in cost of living, it is vital that our seniors do not become impoverished at this stage of their lives.”

Financial wellbeing serves as the basis of resources for other essential elder needs, such as affording and maintaining a decent residence, paying for quality healthcare, and enjoying self-actualization activities such as classes and travelling. Even as studies often see new-age seniors as a lucrative “silver market”, such descriptions simply reflect the potential for them to be dynamic consumers who yield a strong spending power; steps still have to be taken to realize this opportunity. In the Global Financial Stability Report 2012 by the International Monetary

Fund (IMF), countries have been warned of the “longevity risk”, a major study finding that budget planners have been underestimating longevity by three years on average. This mistake was said to potentially cost the global economy tens of trillions more dollars in pension costs alone⁵. In fact, only about 30% of the older population in Asia-Pacific is said to have some form of pension⁶. The financial wellbeing of our elder populations has never been more intimately-linked to that of national economies. This support area encompasses pension and wealth management, insurance, and employment. We used the following quantifiers:

- Policies and schemes that ensure lifelong financial planning, management and general financial security of the elderly
- Policy support to prevent employment discrimination on the basis of age
- Schemes that facilitate the

employment of seniors directly (e.g. employment agencies for seniors, skills training agencies) or indirectly by offering training or skills upgrading among other flexible and innovative employment opportunities

B1. Employment

The 14 countries have a variety of legislations and schemes in place to support the elderly in being employed up till retirement age, with some countries having additional schemes to promote employment beyond retirement age through offering training opportunities. We identified four types of schemes common among the 14 countries.

Government / Public schemes offering training or employment opportunities for the Elderly

The majority of countries were found to have government schemes offering such schemes. In particular, *Businesses by the Elderly*, a jobs and businesses program for the elderly started by a local seniors club in Korea had achieved a record 3.1 million self-employed workers aged over 50 in October 2011.

Government / Public schemes offering training or employment opportunities for the Elderly	
Japan 	<ul style="list-style-type: none"> - Silver Human Resources Centers - Silver-haired Talent Centers
New Zealand 	<ul style="list-style-type: none"> - Grey Skills Employment - Mature Employment Service - Employers Forum on Age
Australia 	<ul style="list-style-type: none"> - Australian Apprenticeships Centres - Mature Age Employment agencies or portals (eg. Olderworkers.com.au, Adage.com.au, Seniorsearch.com.au) - Don't Overlook Mature Experience (DOME) employment and training organisation
Hong Kong 	<ul style="list-style-type: none"> - Silver-hair Industry Development and Elderly Employment - Program STAR - Senior Talent Acquisition & Retention
South Korea 	<ul style="list-style-type: none"> - Korea Labor Force Development Institute for the Aged - Businesses by the elderly (a record 3.1 million workers aged over 50 years old in October 2011) - Retirement and Re-employment legislation - Workfare Training Support (WTS) Scheme
Singapore 	<ul style="list-style-type: none"> - Tripartite Implementation Workgroup (TIWG) - Silver Care Employment @North West - Centre For Seniors - Silver Spring (Senior Employment Agency)
India 	<ul style="list-style-type: none"> - Directorate of Employment
Philippines 	<ul style="list-style-type: none"> - Training programs designed and implemented by Department of Labor and Employment (DOLE), the Technology and Livelihood Resource Center (TLRC) and the Department of Trade and Industry (DTI)

Laws prohibiting employment discrimination on basis of age

These laws are meant to help the elderly seek employment and those already working to stay in employment. However, some countries like Hong Kong do not have such laws in place; while there have reportedly been problems of poor enforcement in Taiwan.

Employment Grants and Subsidies

Many training grants by the government are offered to elderly people to attend training courses to upgrade themselves. On the other

hand, subsidies are given to employers who have a good record of employing elderly people and adopting elder-friendly practices such as extending the retirement age for their staff.

Elderly-specific Employment Schemes by Corporations and Social Enterprises

Mainly in Japan and as well in Hong Kong and South Korea, we see many examples of corporations and social enterprises implementing creative re-employment schemes or customizing jobs that allow flexible working hours, to suit the needs of the elderly as they age.

Corporates, SEs and their elderly-specific employment schemes

Japan



- Toyota Motor Corporation: A 'half-time' system where those above 60 will be re-employed to work only in the morning or afternoon, or every other day, and will not be asked to carry out anything more physically demanding than light duties
- Komatsu rehires 90% of its retirees with a 40% salary cut
- Saitama Gold Theatre only hires the elderly as its administrative staff

Hong Kong



- GingKo House restaurants and citywide catering services by Everbright Groups, a not-for-profit social enterprise

South Korea



- Soap plant in Goyang, Gyeonggi Province making hand-made that contains only natural ingredients

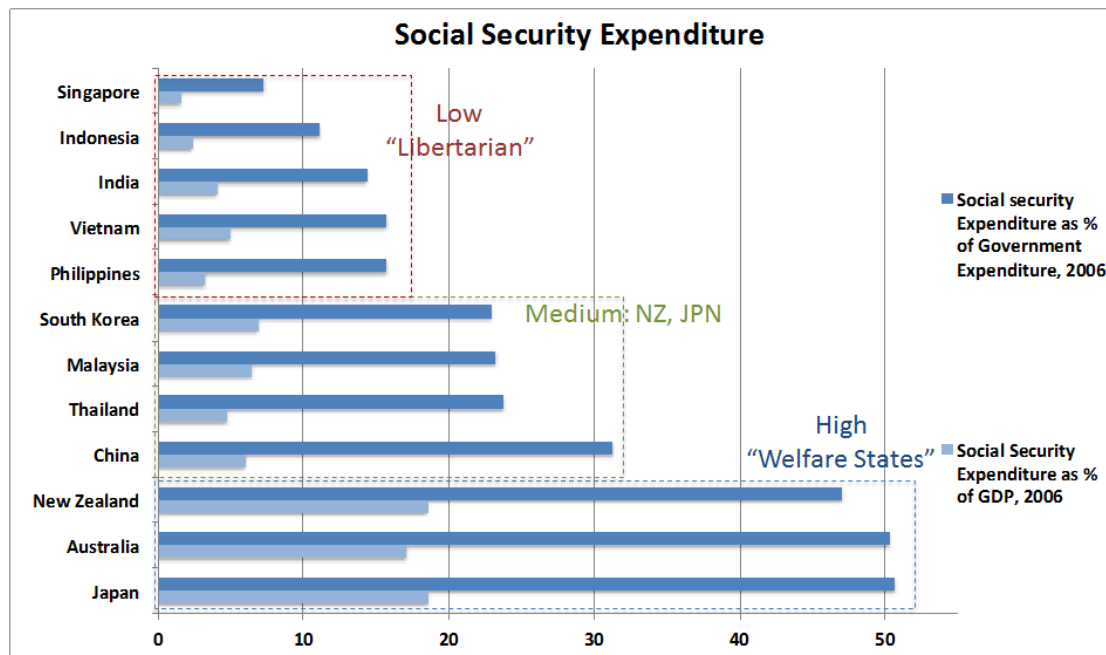
CASE STUDY: Gingko House Restaurants in Hong Kong

Description. Gingko House is a group of Hong Kong restaurants popular not only for decent food, but also for great service provided by a staff of old folks. It mainly serves French cuisine, and is a non-profit organization which adopts "business create social benefits" as its aim. It only employs elderly people aged above 60 years old to manage its daily operations. On the other hand, Gingko House aims to provide five-star cuisine and five-star services to their

B2. Social Security

Social Security takes on differing definitions across countries, ranging from a narrow conception referring to a specific social insurance program for the retired and disabled, to a broader concept that provides multi-agency assistance measures that guarantee access to sufficient resources. While social security applies to an entire population, it is especially relevant as a form of support to the elderly for two main reasons. Firstly, the elderly are the age group that has the highest proportion unemployment and / or

disability, and are the most likely to qualify for means-tested benefits. Secondly, pensions and long-term care (LTC) insurance are components that form a significant portion of most countries' social security expenditure and the elderly are the large majority of their beneficiaries. Thus, despite being defined differently across countries, social security still serves as a good gauge of governments' support towards the elderly.



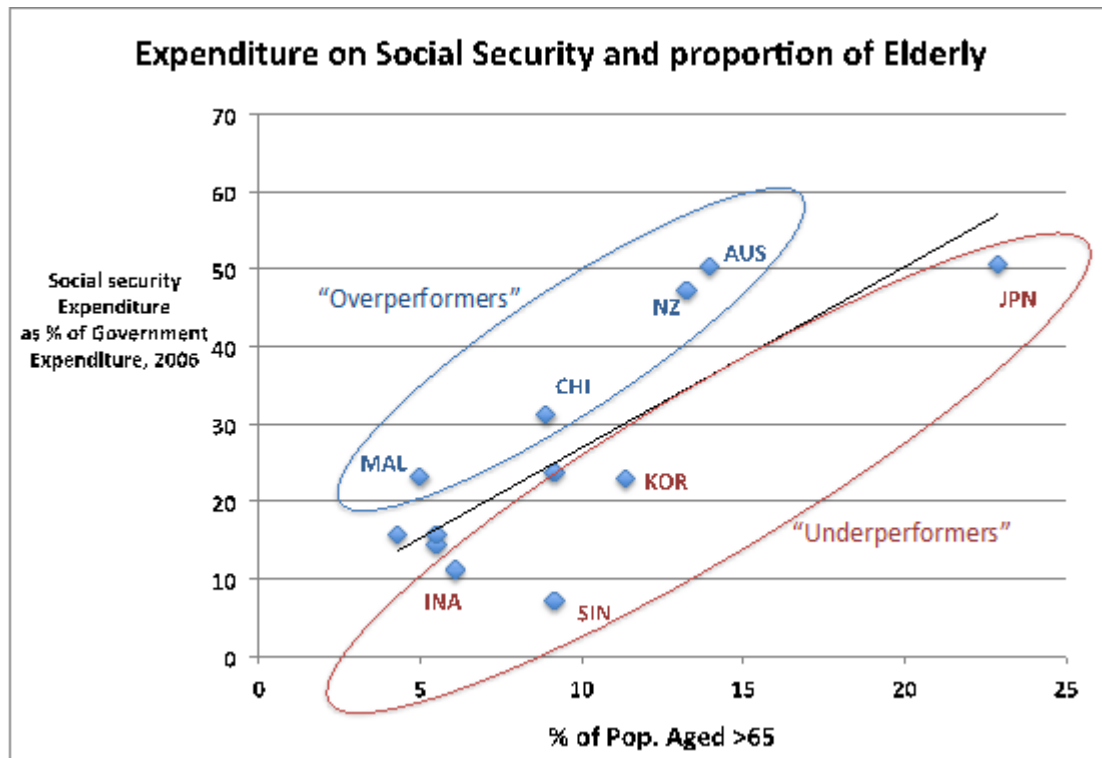
Source: ILO Databases; IMF 2009; Eden Strategy Institute analysis

**Data for Hong Kong and Taiwan not available*

Government Expenditure on Social Security

The figure above enables us to compare countries' government expenditure on social security as a percentage of GDP and of government expenditure. While the former is a more widely used indicator for comparison, the latter appears to be more representative of a government's support since annual GDP is affected by many factors beyond the control of a government whereas expenditure is planned by the government itself every year. The figure shows Australia, New Zealand and Japan as the clear leaders based on this measurement, with over 45% of government expenditure being on social security, with China, Malaysia, Thailand and South Korea in the next tier being above 20%.

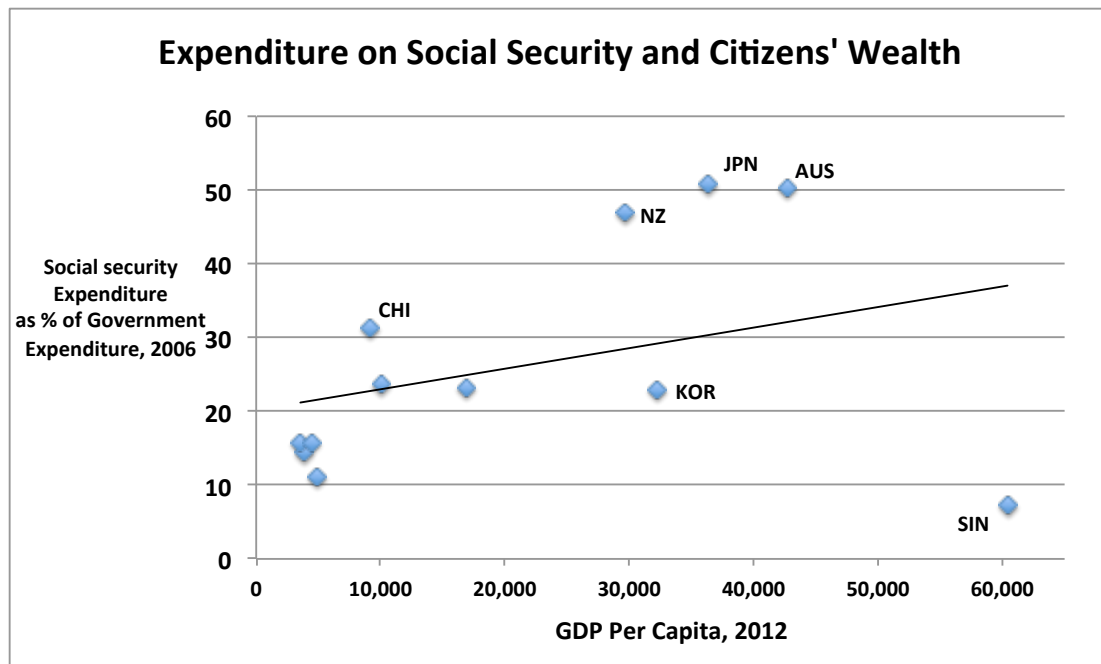
Nevertheless, directly comparing government expenditure on social security could mask inherent characteristics about countries that account for the differences. For instance, this expenditure might be higher because of a higher percentage of elder population or because of higher levels of wealth in the country. To control for the first possibility, we used percentage of the population aged above 65 as a common indicator of the percentage of elderly in the population. To control for the second factor, we used GDP per capita as a measure of the wealth of a typical citizen.



Sources: ILO Databases, IMF (2009) and Indexmundi

From the Figure above, regression against percentage of population aged above 65 years old showed a clear positive linear correlation, observable from the line of best fit, as predicted by the hypothesis. Based on the figure above, countries above the trend line (Australia, New Zealand, China and Malaysia) have contributed a

percentage of government expenditure on social security relative to the proportion of elderly in their population that is above the average. In contrast, Korea, Indonesia, Japan and Singapore's percentage of government expenditure on social security is below average.



Sources: ILO Databases, IMF (2009) and World Bank

However, the other figure shows a weak positive correlation between percentage of government expenditure on social security and GDP per capita. This shows that the differences in expenditure levels are not because of relative wealth levels among the countries.

Schemes

In terms of schemes, all 14 countries were found to have tangible schemes that support the elderly financially in this specific period of their lives. It must be noted that cross-country comparisons of such schemes is difficult due to a lack of standardized coverage and conditions required to be beneficiary across countries. Hence, we present two typical scheme

typologies that the countries were observed to have in place.

Retirement Fund / Pensions

Citizens have access to a monthly or annual sum of money from the government upon reaching a certain age, with the amount differing in some countries based on circumstances faced by the elderly.

Savings Scheme

Individuals and/or employers contribute a percentage of the individuals' income towards a retirement savings account that they can access upon reaching retirement age or other specific circumstances, and with added benefits from the government.

CASE STUDY: Central Provident Fund (CPF) in Singapore

Background. The CPF was started on 1 July 1955 by the British colonial authority in Singapore as a compulsory savings scheme so as to allow workers to save for their retirement, 10 years after the end of the Japanese Occupation when people were struggling to make ends meet. Today, it is administered by the CPF Board, a statutory board under Singapore's Ministry of Manpower.

Overview. The CPF is a social security savings scheme jointly supported by employees, employers, and the Singapore Government. CPF members are employees who are Singaporean Citizens and permanent residents, and self-employed people who opt in. The CPF Board protects and preserve the value of the savings, providing fair market returns at minimal risk while opening avenues for members to seek higher returns on their own after carefully considering the risk involved. The guiding principle is prudence. The government helps by exempting CPF earnings from tax and guaranteeing payment of CPF savings.

Healthcare. Three schemes—Medisave, MediShield and MediShield Plus—help CPF members and their dependants pay for hospitalization expenses.

Home Ownership. Two schemes—the Public Housing Scheme and Residential Properties Scheme—assist members in purchasing homes by being able to use a portion of their fund savings.

Family Protection. CPF members are allowed and encouraged to use their savings to attend to the needs of their immediate families. The CPF offers two insurance schemes to give members and their families' financial protection against the unexpected. This is in addition to the member's own CPF savings.

Achievements. The scheme has made home ownership a widespread phenomenon in Singapore, with nine out of ten families owning the homes they live in. This has in turn enhanced the rate of households' wealth accumulation – during the buoyant property market for a large part of the 1980s and 1990s, members have been able to trade their government-built flats for better housing. CPF contributions have helped to promote savings especially in the early years and CPF balances invested in government securities provided an important source of funds for government projects, such as the HDB housing program.

Information Support Initiatives

On top of government expenditure and social security schemes, information support initiatives are important in ensuring that the elderly

are aware of the latest policy revisions and the various schemes that they stand to qualify for. Moreover, trustworthy advice from disinterested parties regarding financial

management and investment is a very useful form of support for the elderly.

Liaison Centers

These not-for-profit centers have staff that can be approached for general information.

Examples: Office for Senior Citizens Affairs (OSCA) in Philippines, Commonwealth Carelink Centres in Australia

Online Guides or Apps



These guides often include financial calculators and a glossary of technical financial terms.

Examples: ACFI (Aged Care Funding Instrument) Calculator in Australia, Eldernet nationwide database directory in New Zealand,

Awareness Initiatives

Examples: SMARTbelanja@LPPKN in the Philippines.

Research and studies

Examples: The Elderly Financial Management research project by the University of Hong Kong and CADENZA.

C. LIFESTYLE SERVICES



“As mid to late adulthood tends to be the time where one starts to take stock, plan ahead, reskill, and reconnect with others, it becomes extremely important for seniors to have a sense of opportunity as they enter this phase of life.”

The importance of psychological wellbeing to seniors is first illustrated by its bidirectional relationship with one's physical health: Illness and chronic diseases could reduce the sense of psychological wellbeing, while having a strong and optimistic spirit could play a key role in spurring recovery. This optimism can be affected by how they perceive themselves as well as how other members of the society perceive the older generation. This support area encompasses recreation and fitness, respect and social inclusion, and social participation. Indicators used to quantify this dimension are as follows:

- Policy support that promote engaged lifestyles, lifelong learning, and the taking of ownership in planning for ageing
- Policy support that promote social integration of seniors and inter-generational cohesion
- Business investments that offer suitable self-actualization, recreational, and socialization activities to seniors
- Technology and infrastructure that promote a sense of positive wellbeing in seniors and help them stay connected with people and with current issues (Percentage of seniors accessing the Internet)
- Perceptiveness: Presence of initiatives that prevent direct and/ or indirect elder abuse and discrimination; Percentage of elderly in community participation; Presence of initiatives that provide for caregiver's welfare

C1. Recreation and Fitness



As the baby-boomers are gradually entering the 65 years and older age bracket, there is a rising demand to stay healthy among the new-age elderly. These seniors are healthier, more educated, and wealthier, all of which are supporting premises for more health conscious elderly.

Traditionally recreational and fitness activities were a means to address chronic health conditions such as diabetes or high cholesterol. However, with the changing mindset of the

elderly, service providers in the West are creating solutions to make healthy lifestyle a way of life. In the same vein, there have been gyms that have equipment and programs specially catering to the elderly. Governments are also pushing to make health facilities for the elderly more widely available, to prolong their healthy years and reduce longer-term healthcare expenditures.

Among the Asia-Pacific countries, the government of Australia focuses intimately on physical exercise and recreation to promote active ageing. Local councils disseminate information on leisure activities available especially for the seniors. The Singapore government has also taken measures to widen its network of community centres that conduct wellness activities for the elderly. However, the missing link in most countries is the involvement of private sector as a provider of health and recreation activities for the elderly.

Initiatives to Promote Learning of Technology

New

Zealand



SeniorNet: Learning center for older adult computer users

South Korea



- Pilot program of weekly seminars to teach older consumers how to use smartphones for everyday living, sponsored by SK Telecom
- Cyber Family, Internet Navigator, and the 1080 Family Online Game Festival
- "Promoting Active Ageing through Technology Training in Korea" by IGI Global
- Digital @geing by wellageing.com

Singapore



- Silver Infocomm PC Incentive Scheme by the Infocomm Development Authority (IDA)
- Mobile-based Assistance system for the Elderly (MAE)
- StarHub Golden Gurus elder ICT mentoring program

India



- Technology Interventions for Elderly (TIE)
- oldagesolutions.org (a portal exclusively designed for technology interventions in issues concerning elderly care, organized by All India Institute of Medical Science)

This will be important for bridging the demand gaps which might be difficult for the public sector to address single-handedly.

C2. Respect, Social inclusion and participation

Research has shown that one is more prone to depression and loneliness if he suddenly loses his purpose in life. For many elderly, retirement is an abrupt break from a mentally and physically-active lifestyle, and often perpetuates to purposelessness. During their healthier years of life, it is important to engage the elderly in activities that are suitable to their age but at the same time allow them to

actively participate in the society. Self-actualization services that involve volunteering or job opportunities for the elderly can help in actively engaging the aging population.

We identified six common types of schemes and initiatives prevalent among the countries that are specifically targeted towards the elderly with the intention of fostering respect towards them from the entire community, and to encourage social inclusion and participation.

Initiatives to promote learning of technology

The advent of technology since the

CASE STUDY: Double Ninth Festival in China, Hong Kong, Taiwan, Vietnam and Japan

Background. This traditional Chinese holiday (Chung Yeung Festival in Hong Kong, Japanese: Chōyō (重陽), Vietnamese: Tết Trùng Cửu) is observed on the ninth day of the ninth month of the Chinese calendar, and originated before AD 25. Also, as double ninth was pronounced the same as the Chinese word to signify "forever", the Chinese ancestors considered it an auspicious day to celebration.

Traditional Activities. Chinese also visit the graves of their ancestors to pay their respects in the form of various rituals such as burning incense sticks. In Hong Kong, whole extended families head to ancestral graves to clean them and repaint inscriptions, and to lay out food offerings such as roast suckling pig and fruit, which are then eaten (after the spirits have consumed the spiritual element of the food).

China. In 1989, the Chinese government decided to call the festival day "Seniors' Day" as well. Since then, most government units, organizations and streets communities organize an autumn trip each year for those who have retired from their posts. At the waterside or on the mountains, the seniors find themselves merged into nature, and it is a norm that younger generations will bring elder ones to suburban areas or send gifts to them on this day.

turn of the millennium, coupled with the fact that the elderly did not have access to present-day technologies and did not require it in their work, mean that the elderly are often excluded from many platforms for social participation. Hence, initiatives to promote learning of technology help by enabling the elderly to gain access to these social platforms. From our survey of the 14 countries, New Zealand, South Korea, Singapore and

China has incorporated such a themed day into the long-existing Double Ninth Festival.

Elder Abuse

Elder abuse refers to acts of commission or omission that occur within a relationship where there is an

India appear to be the countries that excel in such initiatives.

Elderly-Themed Days / Events

Elderly-themed days celebrate and promote respect to the elderly, while the hosting of forums and symposiums on ageing-related issues help to raise awareness and include society in the tackling of these issues. In particular, with filial piety being a key virtue in Chinese culture, the government in expectation of trust, which causes harm or distress to an older person. It has increasingly become an issue of concern, with the International Network for Prevention of Elder Abuse (INPEA) designating June 15 as World Elder Abuse Awareness Day (WEAAD) in 2006. As such, many countries have put in place pieces of legislation that

Legislation / Schemes on elder abuse

Japan 	- Elder Abuse Prevention Law
New Zealand 	- The 3PR Act
Hong Kong 	- Publicity Leaflets on 'Protecting Elders Against Abuse' by the Social Welfare Department - 'Procedural Guidelines for Handling Elder Abuse Cases'
South Korea 	- Mandatory reporting of elder abuse - Korean Information Network for the Prevention of Elder Abuse, by wellageing.com
Thailand 	- Domestic Violence Victims Protection Act of 2007
Indonesia 	- Law No. 13/98 on Older Person Welfare/Ageing, National Commission for Older Persons (Komisi Nasional Lanjut Usia)
India 	- Integrated scheme of the Ministry of Social Justice and Empowerment - Senior Citizens Act 2007
Vietnam 	- Articles from The Civil Law (penalties for public and familial violent acts towards elderly) - Law on Prevention and Suppression of Domestic Violence (2008)

specifically concern elder abuse or have recognized it as a form of domestic violence.

Elder-friendly products and services

These products and services range from age-friendly phones, gazettes and magazines, and online portals specifically catered for the elderly to enable them to remain included in society through keeping up to date with the latest news and being able to communicate conveniently.

Lifelong learning is the concept of a voluntary and self-motivated pursuit of knowledge beyond one's formal education years for the primary purpose of personal development and enrichment rather than seeking employment. For the elderly, participating in lifelong learning enhances their social inclusion because it helps them in being active citizens. Among the 14 countries, there have been many

Lifelong Learning







institutions and education providers that have programs specifically for the elderly to take part in lifelong learning.

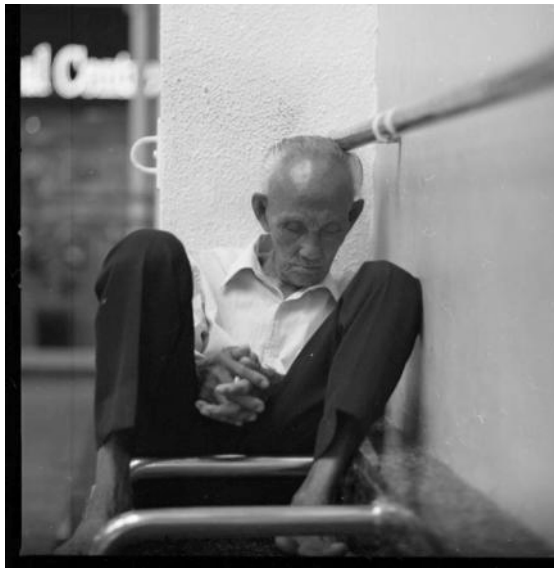
Research Institutes

Research institutes concentrating on issues related to ageing have developed with many forming within local universities, which they rely on for resources.

Research Institutes on the elderly and ageing-related issues

Japan 	<ul style="list-style-type: none"> - Centre for Studies on Ageing Societies in Tohoku University - Smart Ageing International Research Centre (SAIRC) at Tohoku University) - Consulting firms for ageing and older markets (eg. Murata Associates)
South Korea 	<ul style="list-style-type: none"> - Research Institute of Science for the Better Living of the Elderly (RISBLE)
Singapore 	<ul style="list-style-type: none"> - NUS Virtual Institute for the Study of Ageing (VISA) - NUS-Tsao Foundation Ageing Research Initiative
Malaysia 	<ul style="list-style-type: none"> - Centre for Mature Consumer Studies - Research study by University Malaya that involved older persons in the development phase of mobile phones

D. MEDICAL AND HEALTHCARE SERVICES

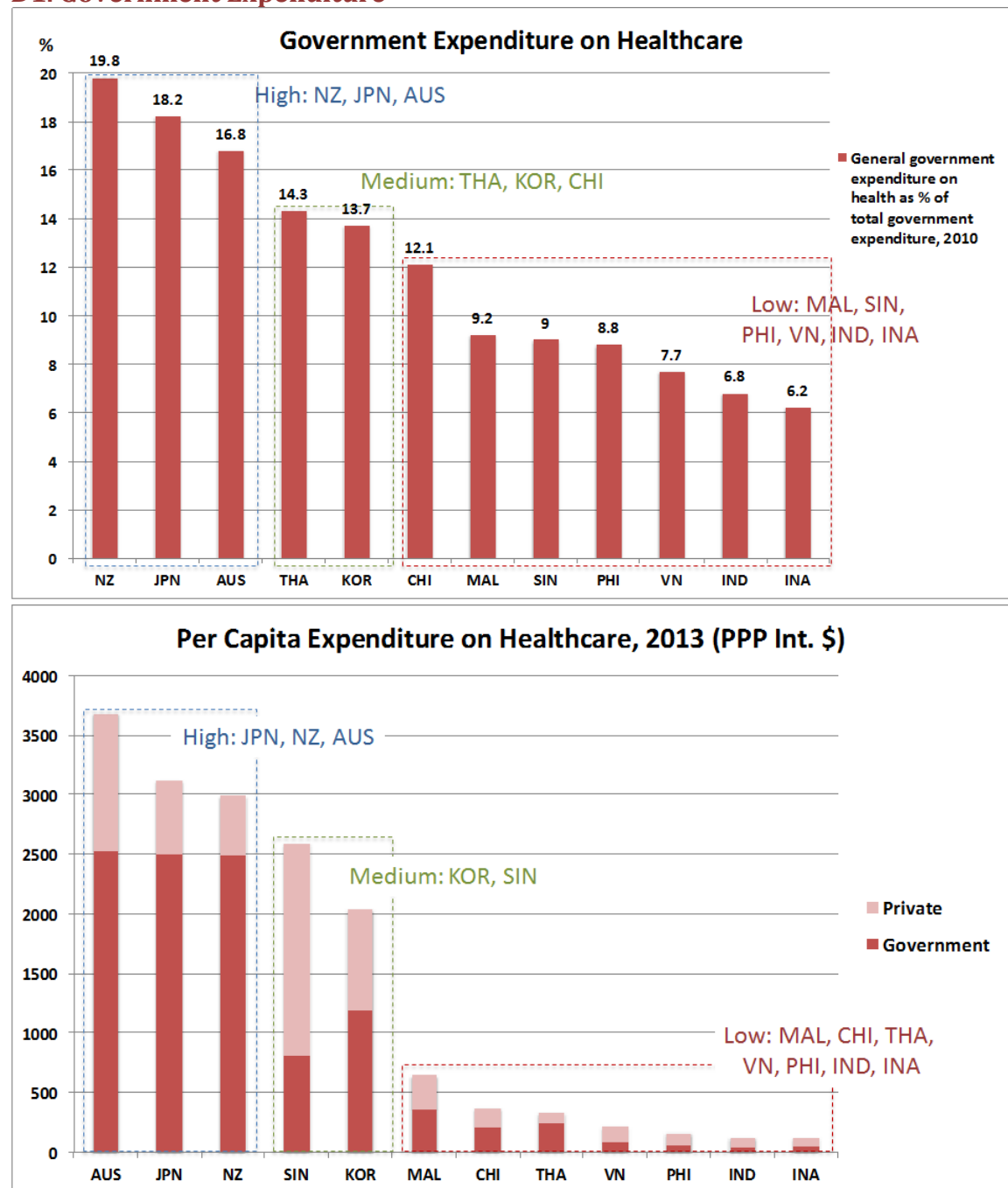


“Even as we expect the new-age seniors to be much fitter, we know the extra years of life will not always be disability-free.”

For most elderly people, ageing is associated with a decline in functional ability, such as poorer vision and hearing difficulties. Not only are there direct impacts on the seniors’ physical health, these conditions also reduce one’s ability to manage daily activities independently. Early detection of one’s physical decline followed by appropriate therapy has shown to dramatically improve the quality of life. Leading elder-friendly countries feature:

- Technology and infrastructure that facilitate treatment and rehabilitation for seniors
- Personal devices that remind seniors of health checkups, to help them navigate their way safely to healthcare institutions
- Policy support that ensure affordable healthcare for seniors with varying health conditions, particularly in the area of support for home medical care and respite care for elder caregivers

D1. Government Expenditure



Source: World Health Statistics 2013, WHO, Eden Strategy Institute Analysis

*Data for Taiwan and Hong Kong not available

Two indicators were used to quantify government expenditure as outlined in the two charts above. For both, country performances have been classified into three categories: High, Medium and Low. The countries that make up the categories for both

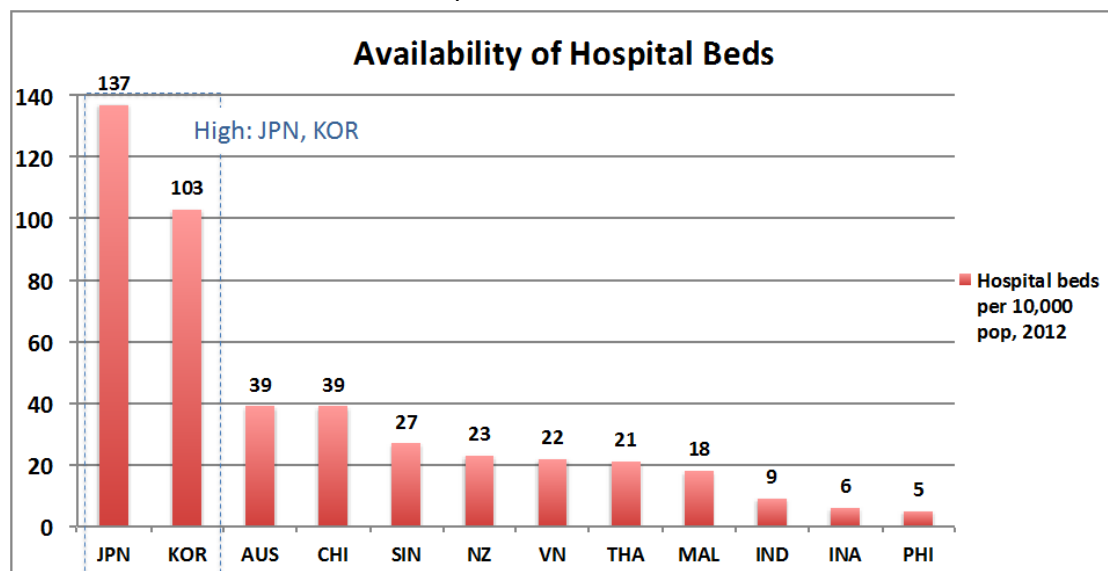
indicators are largely similar, with the only difference being that Thailand, China and Singapore are in the 'Medium' classification for one indicator and in the 'Low' classification for the other. For Singapore, this is likely to be due to a uniquely low per

capita expenditure by the government, compared to the private sector. With purchasing power differences taken into account, these two indicators provide convincing evidence that on an aggregate level, We used Hospital Beds per 10,000 people as a measure of availability. The statistics tell a different story to that established by the government expenditure indicator earlier. Japan and Korea have significantly higher availability of hospital beds than the other countries. Nevertheless, hospital

the elderly are supported most in Japan, Australia and New Zealand among the 14 countries.

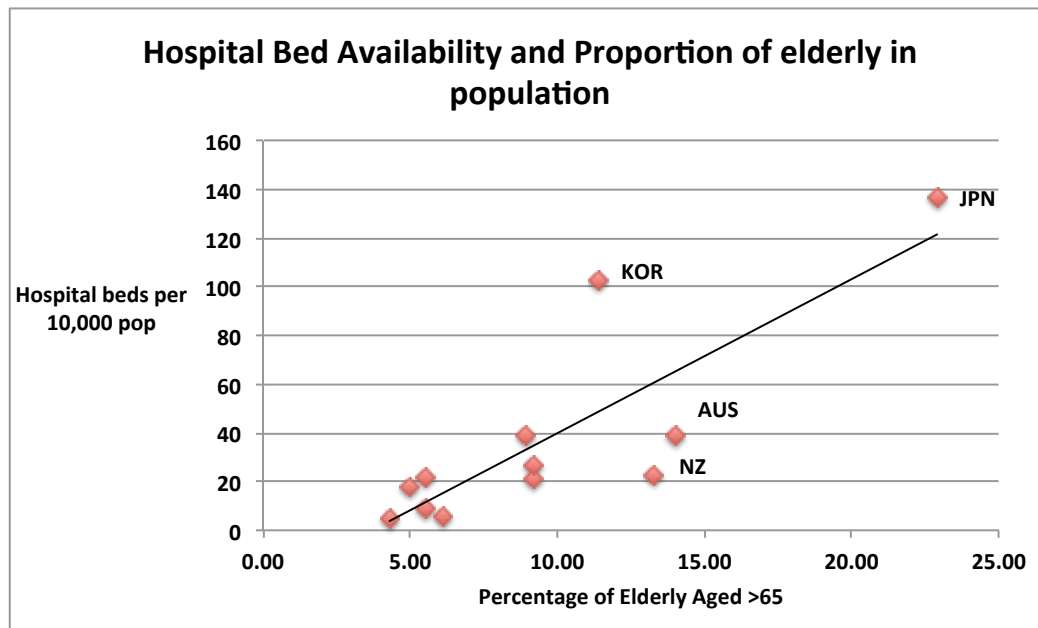
D2. Availability

beds may not be fully reflective of the situation in these countries, with our research also finding that many countries have elderly health centers and nursing homes that are good substitutes for some types of hospital treatment.



Source: WHO's World Health Statistics 2013, Eden Strategy Institute Analysis

**Data for Taiwan and Hong Kong not available*

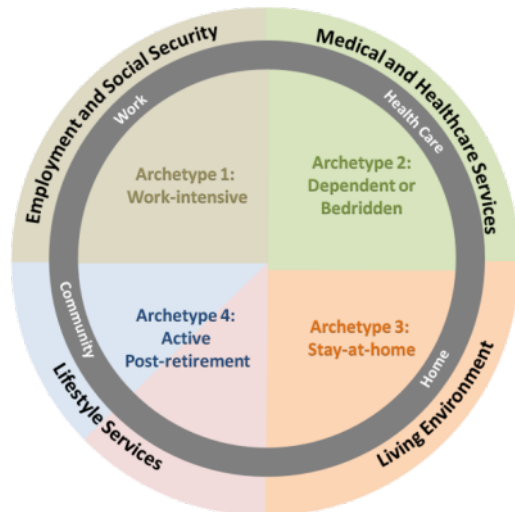


Source: Eden Strategy Institute Analysis

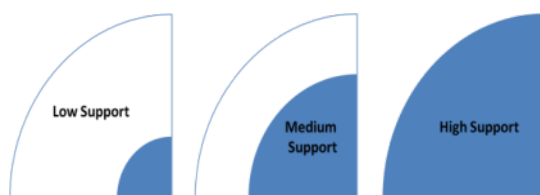
The figure above is a sign of how equipped countries are relative to each other in providing hospital care services for the elderly. While Japan has the highest availability of hospital beds, it also has the highest percentage of the elderly, who are likely to utilize hospital beds more. Korea has the healthiest availability of hospital beds relative so its percentage of the elderly, while New

Zealand and Australia undersupply hospital beds relative to the other countries. The majority of countries have a low availability of hospital beds. If the pattern is similar for healthcare and medical services in general, this is a cause for concern as population profiles for countries in Asia will have a significantly higher proportion of the elderly over time.

State of Ageing Ecosystems in Asia-Pacific Countries

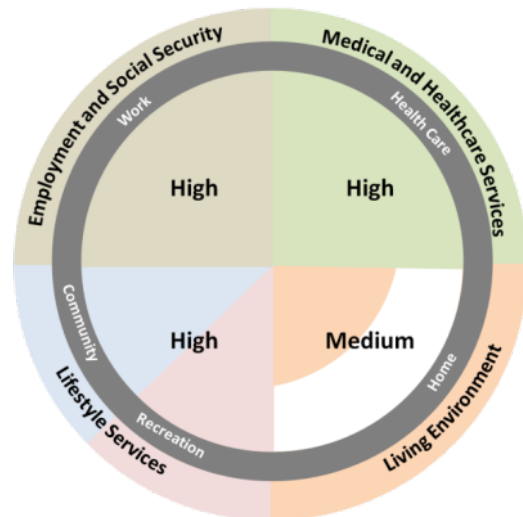


Consolidating the analyses and comparisons established in the four support areas above, the following framework is useful to see an overview of the ageing ecosystems in the 14 countries. Each of the four quadrants represents a support area, with the extent of shading indicating the level of support as shown in the figure below.



The four elderly archetypes characterize each of the quadrants and the country's readiness for its silver population can be evaluated from the extent of support in each area. Based on our research, the 14 countries have a wide variety of ageing ecosystems and each one is

unique. Nevertheless, we noted that they generally fall into one of three groups as shown below.

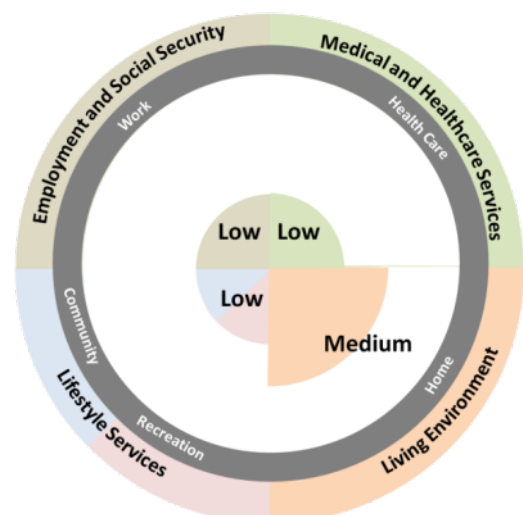
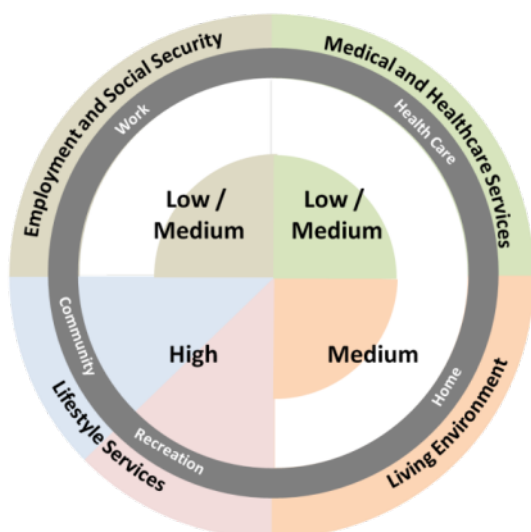


1. Very Comprehensive Countries: Japan, New Zealand, Australia

These countries have comprehensive schemes to support the elderly in employment and social security, lifestyle services, medical healthcare services and buildings and public transport are highly accessible, with Japan leading the way. However, these countries also face high costs of living. As a result, retirement homes and medical services that incorporate higher quality technology are expensive to afford and become exclusive to the upper middle class and affluent part of the population. Still, the government directly provides significant direct financial support in terms of grants and subsidies reflected by large expenditure on healthcare and social security relative to private

spending. This helps support the elderly who are less well-off.

	JPN	NZ	AUS	HK	KOR	TWN	THA	SIN	CHI	MAL	INA	IND	VN	PHI
A. LIVING ENVIRONMENT														
A1. Living Arrangements	✓					✓	✓	✓		✓	✓	✓	✓	✓
A2. Housing and Building Design		✓	✓	✓										
A3. Retirement and Nursing Homes	✓	✓	✓											
A4. Public Transport and Accessibility	✓	✓	✓	✓		✓		✓	✓	✓		✓		
A5. Affordability					✓					✓		✓		
READINESS	High	High	High	Med	Low	Med	Low	Med	Low	High	Low	High	Low	Low
B. EMPLOYMENT AND SOCIAL SECURITY														
B1. Employment	✓			✓	✓									
B2. Social Security	✓	✓	✓					✓	✓	✓				
READINESS	High	Med	Med	Med	Med	Low	Low	Med	Med	Med	Low	Low	Low	Low
C. LIFESTYLE SERVICES														
C1. Recreation and Fitness		✓	✓					✓						
C2. Respect, Social inclusion and participation	✓	✓	✓		✓	✓	✓	✓	✓	✓				
READINESS	Med	High	High	Low	Med	Med	Med	High	Med	Med	Low	Low	Low	Low
D. MEDICAL AND HEALTHCARE SERVICES														
D1. Government Expenditure	✓	✓	✓		✓		✓		✓					
D2. Availability	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
READINESS	High	High	High	Med	Med	Med	Med	Med	Med	Med	Low	Low	Low	Low
OVERALL READINESS	High	High	High	Med	Med	Med	Med	Med	Med	Med	Low	Low	Low	Low



2. Moderately Comprehensive Countries: China, Hong Kong, Malaysia, Korea, Singapore, Taiwan, Thailand

Like the previous category, these countries have fairly comprehensive schemes as well, each excelling in certain areas but most having weak support in either employment and social services or medical and healthcare services. With the exception of Singapore, costs of living are lower than countries in the first category. However, governments of these countries generally give less direct financial support to the elderly, instead focusing on accessible infrastructure and elderly-friendly schemes and initiatives. As a consequence, the elderly in the lower class and a portion of the middle class often do not receive additional

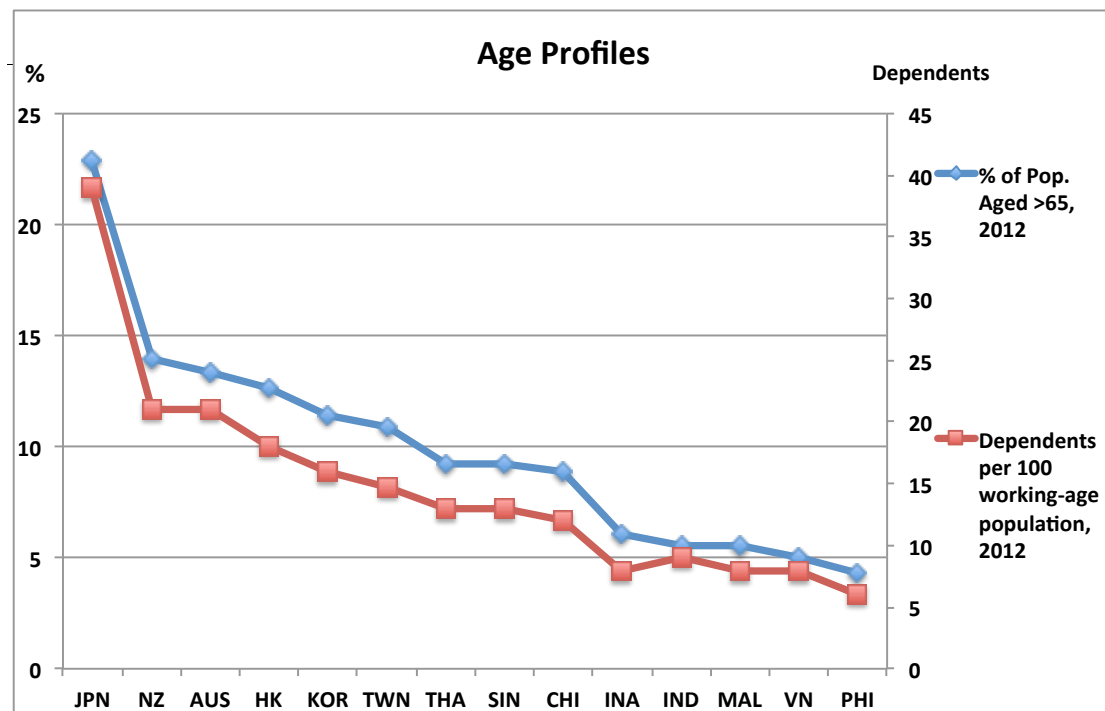
support and may find it more difficult to live out their golden years.

3. Underdeveloped but Affordable Countries: India, Indonesia, Philippines, Vietnam

This final group of countries generally lacks comprehensiveness in their schemes and policies compared to the other countries. Government expenditure on healthcare and social security is low, especially when measured in per capita terms for countries such as Indonesia and India. Nevertheless, rent, goods and services remain affordable in these countries, even after taking relative purchasing power into consideration.

These three classes of ageing ecosystems are by no means exhaustive, but appear to be the ones most prevalent in the Asia-Pacific.

Country recommendations

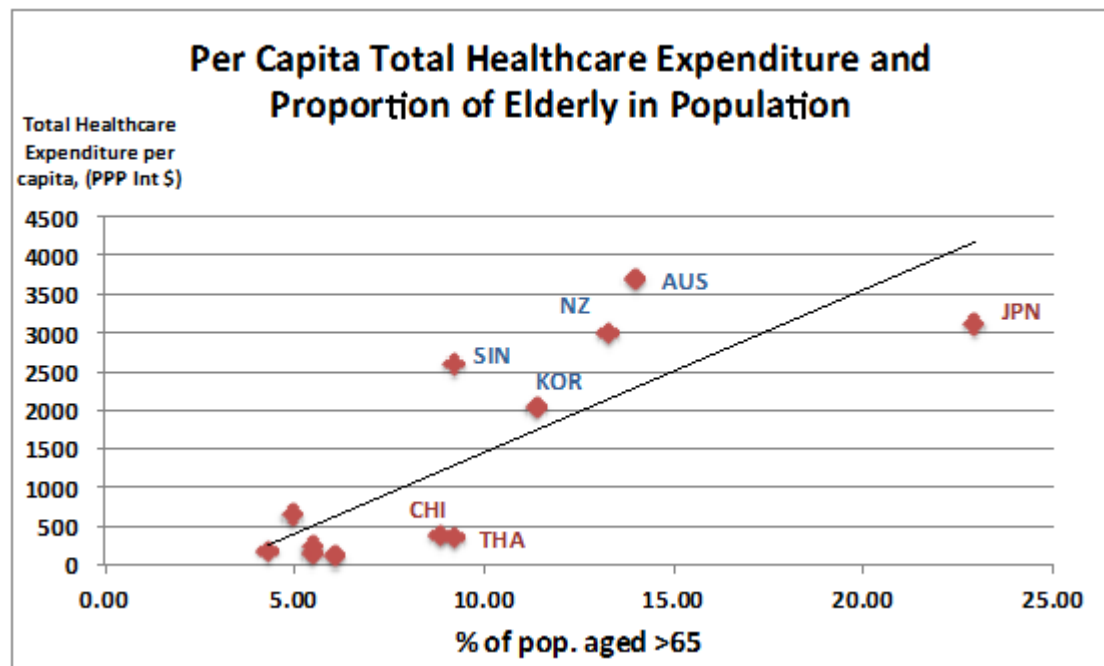


We have observed that different age profiles among the countries may account for the difference in types of ageing ecosystems.

Based on the countries that are placed in the various ecosystems, one may be inclined to make the conclusion that the most elderly-friendly countries are those with the strongest economy and greatest wealth. While this is generally true, we have established earlier that GDP per capita only has a weak positive correlation with social security and healthcare expenditure. Instead, how elder-friendly a country is more closely correlated with the state of ageing and we return to these factors to consider the countries' performance.

The figure above shows two of the most widely used indicators of the state of ageing in a country, and both support each other in the age profile they depict for the 14 countries. The data depicted above helps to provide context for the ageing ecosystems outlined in the previous section and enables one to assess how adequately prepared the countries are in supporting their elderly at the present.

We have established that Japan has the most comprehensive policies and schemes, backed by the highest government funding in social security and second-highest in per capita healthcare expenditure, as well as the highest availability of hospital beds to

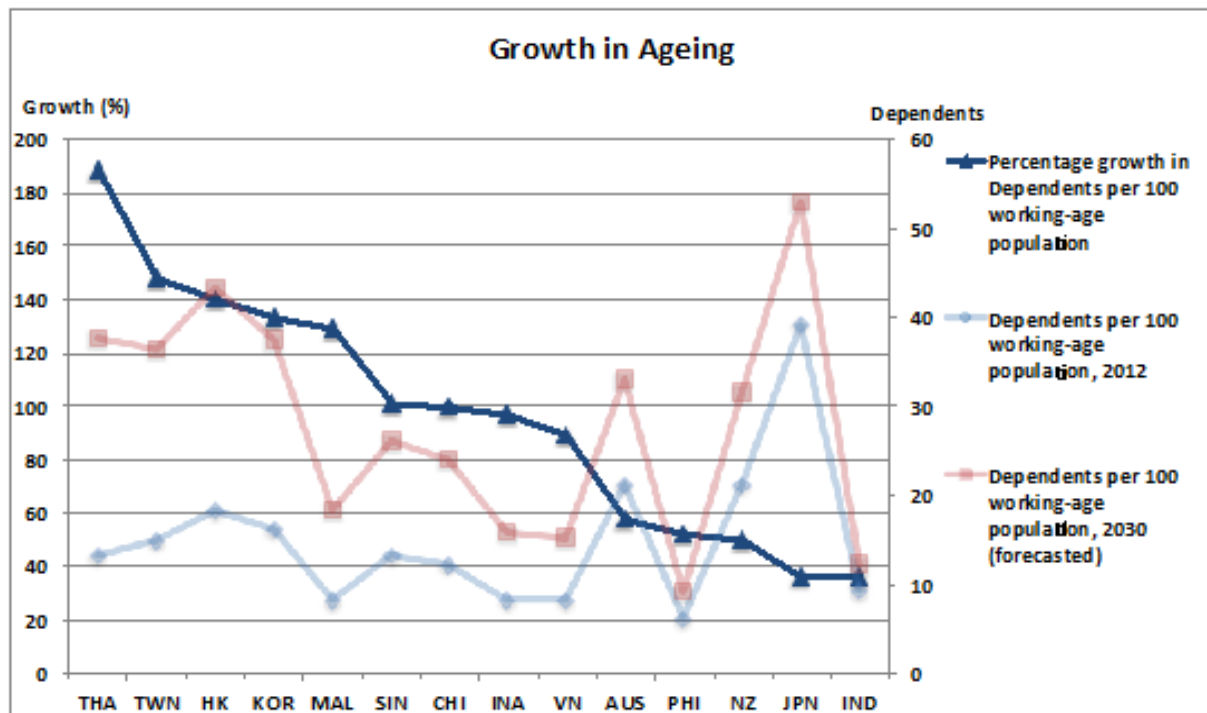


Source: World Health Statistics 2013, WHO, and Indexmundi

meet the demands of its ageing population. This makes it a good role model and reference point to compare other countries against. However, Japan's significantly higher dependency ratio and proportion of the elderly compared to the rest of the countries is a clear observation from the data. Furthermore, Japan has the highest life expectancy. This means that the demands of the elderly as a group are much higher, thus possibly accounting for the high government expenditure and comprehensive schemes and policies. New Zealand and Australia, while lagging slightly behind Japan in terms of comprehensiveness, have a much lower dependency ratio and life expectancy. Thus, in relative terms, they can more adequately prepare to meet the demands of their elderly at present, at least based on the quantitative indicators. These two

countries are spending higher than average investments on healthcare and social security, relative to the other countries based on their present dependency ratio. In contrast, Japan, along with China and Thailand, would appear to need to spend more on healthcare in particular.

Finally, the countries with underdeveloped ageing ecosystems have very low dependency ratio, meaning that while they may presently be adequate in meeting the needs of their elderly populations, they may face difficulties over the next few decades. There is also considerable room for improvement to be considered in the quality and comprehensiveness of their schemes and policies.



Source: World Bank, Eden Strategy Institute Analysis

Looking to the future, the figure above shows the forecasted growth in dependency ratio by 2030. It shows that by 2030, Thailand, Taiwan, Hong Kong, Korea, New Zealand and Australia would have a dependency ratio close to that

faced by Japan today. While most of these countries already have a comprehensive ageing ecosystem, Thailand and Taiwan presently do not and should look to upgrade their ageing ecosystem in anticipation of their ageing populations.

CASE STUDY: JAPAN



The Japanese have been very perceptive in creating an enabling home and urban environment for their seniors, empathising with the seniors' user experience and incorporating these insights into design features of various spaces and facilities. Many buildings, especially those frequently visited by seniors, have sliding doors instead of push-pull ones, as the latter requires more exertion of force and may be challenging for seniors on wheelchairs or walking sticks. Some retirement homes use floorings of different-coloured tiles to demarcate spaces, accommodating the seniors' declining perceptual depth accuracy. Instead of the usual bare corridors, isolated tables, canteen-like meal areas, as well as sparse and mismatched decorations that we often see in nursing and retirement facilities, the Japanese creates none of this institutionalised atmosphere. A typical Japanese retirement facility has a common living room with sofas around the television, group tables to facilitate interaction, restaurant-like dining areas, carpeted corridors, polished tiles, and the use of wood and lighting to create a cosy environment. After careful observation that seniors face difficulties standing up from sitting positions and this results in a slight rock which often cause seniors to fall, chairs are chosen or designed to prevent easy rocking and to ensure comfortable backing, instead of simply choosing colourful stools to brighten the atmosphere at an elderly facility. For rehabilitation or exercise, gyms are designed for seniors in place of the typical hard and cold metal rings and ropes, and lining up to be given just a few minutes of "physiotherapy". In long-term care residences, seniors are given more than just a bed and a small movable drawer cupboard: homeliness is designed into every space possible by having nicely cushioned beds, aesthetically pleasing restrooms, a personalized environment for every resident, residents' participation in domestic activities, dining and kitchen area designed like it is at home and not a canteen, or even a comfortable pantry for their caregivers to rest and recharge. Seniors are able to enjoy views of the sky, trees, or other city structures from their windows, just like in most regular houses. To strike a balance between retaining privacy and being checked on for care as well as the sharing of common facilities, spatial hierarchy are clearly demarcated into spaces which are private, semi-private, semi-public, and public.

Another interesting example of perceptive architecture and design philosophies would be the "Reversible Destiny Loft", a response by a pair of Japanese designers with their own ideas about aging. Designed to reverse, or at least postpone, the physical and cognitive changes that often occur in old age through intervention of muscle and brain training, floors in some rooms are textured to stimulate the senses of the elderly resident; some doors are made deliberately low so that the elderly has to stoop to pass through; and electric switches are intentionally placed in unexpected locations so that the elderly have to feel around for them¹. The Japanese are also known for innovating with everyday use items to make them more elder-friendly and subsequently commercializing them, such as ergonomic chairs with elbow rests, book readers for seniors lying on bed, magnifying readers, walking assistances with a portable table, seating, and compartments, hoisting devices to help seniors get up and many more. Japanese seniors expect to enjoy products and services no less than what is being enjoyed by the younger generation, and their community acknowledges and acts upon this wholeheartedly.

Conclusion

Many studies and reports on ageing adopt a personal angle, to throw light on how prepared an elderly person is to cope with ageing in the years ahead. In this paper, we adopted a top-down approach to assess how countries are presently prepared to support their elderly.

We identified four support domains that can be used to compare and evaluate the elder-friendliness of countries. These are by no means exhaustive, but broadly address the key areas identified in our interviews. Within each area, we listed numerous quantitative indicators and specific schemes that help to operationalize and benchmark the countries. As much as we hope that future researchers will build on these indicators, we believe that they offer fertile ground for government agencies and corporations to develop solutions to attend to the gaps identified.

Finally, we classified 14 countries into three broad types of ageing ecosystems and noted several key trends such as that between the age profile of a country and the expenditure on healthcare and social security. We trust that this report would be a useful platform and resource to initiate a dialogue on how countries can view elder-friendliness as a national issue to address.

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Management Consulting



Think Tank



Social Venture Capital



End notes

1 WHO Global Age friendly report: Seniors are defined as age over 60; children are defined as age below 14.

2 Population Ageing 2006. New York, United Nations Department of Economic and Social Affairs, Population Division, 2006 ([http:// www.un.org/esa/population/publications/ageing/ageing2006.htm](http://www.un.org/esa/population/publications/ageing/ageing2006.htm), accessed 10 July 2007)

3 Asia-Pacific Silver Economy Business Opportunities Report, published by Ageing Asia Pte Ltd in 2011

4 UNFPA report

5 The IMF's Global Financial Stability Report 2012

<http://www.healthxchange.com.sg/News/Pages/imf-world-sitting-ageing-time-bomb.aspx>