

Longevity in Asia Landscape Overview 2020

Longevity Finance, Economy, Industrialization, Technology, Policy & Governance in Asia

Finance

Governance

Technology

Biomedicine

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Introduction

**Asia's Prospects for Leading
Longevity Industry Growth in the
Next Decade**

Why Asia?

What is the Longevity Industry? The “Longevity Industry” refers to scientific research into aging and its diseases and a set of synergies between four intersecting sectors: P4 (personalized, precision, preventive, participatory) medicine, AgeTech (HealthTech that focuses on technology to improve the lives of older people), and Longevity finance (consisting of a set of novel financial systems) with the combined potential to extend healthy life span.

What makes Asia a natural center for the future of Longevity Industry growth, diversification and activity?



Demographics

Asia will feel the impact of demographic aging before any other world region.

As such, there is a great demand among governments and industry for industrial solutions to this “Silver Tsunami”.



Broad Adoption of Advanced Technology

Asian technological innovations have long outpaced those in the West. Products that sound like recent or even future innovations to most Westerners have been available for decades in Asia, particularly in Japan.



Financial Centers

Long established financial centers such as Singapore have become the leading startup hub in Southeast Asia thanks to a mix of ready capital and government policies.



Technological Centers

With so much at stake, cities from Singapore to Vietnam's Ho Chi Minh City are competing to become the next Silicon Valley – home not only to successful startups but also to the mentors, investors and institutions that support them.

Asia and the Race for the Fourth Industrial Revolution

The population of Asia is over four billion, and although not every country has a problematic aging demographic, some, such as Japan, certainly do.

However, the current age demographics of Asia's oldest countries are soon to become the new normal for all of them.

This is unfortunate in many ways, and represents an accumulating financial burden, known informally among economists as "The Silver Tsunami".

But now, at the dawn of the Fourth Industrial Revolution in Asia, the dividend locked up in this older demographic represents a potential future financial opportunity for those countries with the foresight to seize it.

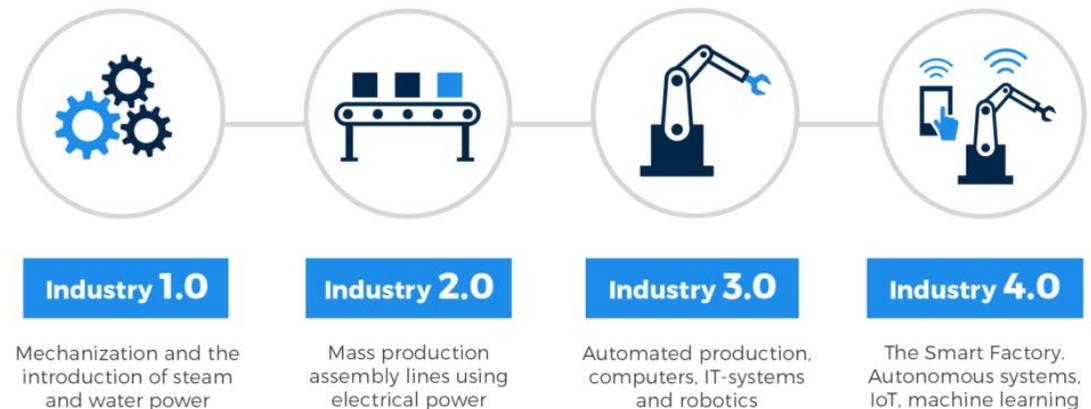
Innovations in biotechnology, financial technology, and AgeTech, will transform Asia's burgeoning population into an asset. Many of these innovations are happening much faster there than on other continents, with centres of progress being metropolitan areas of Singapore, Shanghai, Taiwan, Seoul, and Hong Kong.

Indeed, the arrival of the Silver Tsunami in those Asian countries that are most technologically, financially, and politically prepared, will mark the arrival of 5th industrial revolution, which among other things will result in elimination of inequalities between the young and old.

This introduction summarises the forms of innovation which comprise Asian countries' strengths in this regard.

Source: spectralengines.com

The Four Industrial Revolutions



The Silver Tsunami

The phrase “silver tsunami”, might have been invented for Asia. It is a term used by economists to describe the projected wave of global demographic aging sweeping from east to west, and the economic devastation it is expected to produce.

The Asia-Pacific region is undergoing profound and rapid population change. All countries in Asia and the Pacific are in the process of ageing at an unprecedented rate, although the timing of this transition varies across the region.

This process is reflected through the following trends:

By 2016, approximately 12.4% of the population in the region was 60 years or older, but this is projected to increase to more than a quarter – or 1.3 billion – people by 2050.

There are however variations across the region. In East and North Asia (which includes countries with significant ageing populations such as Japan and the Republic of Korea), over a third of the population is expected to be 60 years or older by 2050, whereas in Northern and Central parts of the continent one in four persons will be 60 years or older.

Globally, the share of older population in less developed regions is growing faster than in the more developed ones. Therefore, older persons will be increasingly concentrated in the less developed regions of the world.

By 2050, nearly 8 in 10 of the world’s older population will live in the less developed regions.

This is especially relevant for a region such as Asia and the Pacific, which comprises some of the wealthiest nations as well as some of the poorer countries in the world, and correspondingly mixed age demographics.

Projections are that between them the Asia-Pacific region will contain 60% of the global aged population by 2030.

The Technological Solutions

Asia's technological hot spots are helping to stem the tide of the tsunami, with high-tech, non-biomedical solutions to global demographic aging.

Japan for example, which is renowned for its superiority in robotics, is responding to the challenge of a dwindling workforce by extending this technological sphere into the realm of elder care.

- PARO is a robotic seal designed to provide cognitive stimulation to those dealing with Alzheimer's and dementia.
- Silver Wood Corp. is a care home operator Japan, has partnered with various companies to develop a dementia-simulating VR headset that assists caregivers in their treatment of patients.
- There are also robots designed for heavy-lifting and mobility support. E.g. Robear, a bear-shaped robot developed to assist with the lifting of elderly patients in and out of hospital beds, INNOPHYS' Muscle Suits to help employees to lift heavy items, extending the working life span of skilled and experienced physical labourers. They claim to have sold 10,000 units worldwide.



PARO, left, offers cognitive stimulation to the cognitively declined, while Robear, top, assists elderly patients in and out of bed.

The Technological Solutions

The Singapore Government has realised that by 2030, one in four of their population will be over 65 and that 92,000 of them will be living alone. This creates an opportunity for AgeTech to play a significant role in extending and improving life.

Furthermore, the city-state's small size and tiger economy allows for an extraordinary degree of strategic initiative.

But whereas robotics was the central theme to Japan's strategic initiative, the central theme in Singapore's aging strategy is smart homes and tech-enabled home care.

In 2015, Singapore launched an **Action Plan for Aging Well**, which includes a range of preventative programmes for the over-40s.

- The National Silver Academy, offers educational programmes to the elderly, providing home visits and making health services and government schemes more accessible.
- In October 2016, Singapore Health Minister Gan Kim Yong announced a rethink of care strategy that involved moving care from the hospital out in to the patient's home community.
- The Singapore Management University created the SHINESeniors Project, winner of the 9th annual SuperNova AI & Augmented Award. It aims to provide data-driven community care to seniors and "smart homes" for elderly people living on their own, with innovations ranging from smart sensors that monitor the environment and living patterns of the elderly, fall prevention sensors, medication reminder alerts and many more.
- GERI, AgeTech combines Internet of Things (IoT) technology with data analytics and a multimodal series of sensors to detect declining cognition in those at risk of dementia.
- Using a proprietary algorithm, Healthstats' BPro wearable tech captures arterial pulse wave data, converting it into 24-hour ambulatory blood pressure readings.

The Financial Solutions

Rapid demographic aging affects all aspects of our society, health care and social services, and also finance in general. If this continues as projected, it will impose huge pressures on national budgets, as the ratio of retirees to workers rises, and the growth rate of working-age taxpayers slows. AgeTech can only buy time for the economy. To keep the economy dry of the Tsunami, nations must invest in automation and methods for upskilling the current workforce, in order to enable experienced workers to stay on the job longer, and monetise the benefits of age and diverse experience.

Then there is the question of social care. As described previously, emerging technologies can address the caregiving needs of older adults – a growing reality. For this purpose, governments must improve their long-term care systems, community social infrastructures, and national industrial strategies, as populations decline and the dependency of the old increases. But we cannot assume that more and better-trained caregivers and a roboticized workplace will alleviate the net financial impact of an aging population. **Personal** financial stability becomes even more important for those living longer. Rapidly aging Asian populations, and changes to the traditional family-based, old-age support practices, have created a rising demand for income and support services for the elderly and the poor. Therefore, governments and their populations are rightly concerned about the long-term sustainability of their social security and fiscal health.

Public pension systems must find ways to cope with these pressures, as many struggle with structural challenges such as early retirement ages, and diverging replacement rates under different systems. Most developing Asian economies do not have mature and functioning pension systems, particularly the CLMVT (Cambodia, Laos, Myanmar, Vietnam and Thailand) economies. They are also not homogenous and show significant variations in their pension schemes. Some countries have publicly managed defined benefit schemes, some have publicly managed defined contribution schemes, and some have privately managed defined contribution schemes. Despite these differences, these systems share a need for significant improvements in their institutional capacity, governance, and regulation.

Each system must meet its demands by devising a strategic national plan for an integrated, professional, transparent, and independent system for old-age income support.

The Political Solutions

This brings us to the crucial question of the necessary role of government in developing this strategy.

In all cases, government must function as a coordinating force between the financial and technological solutions mentioned here, acting as a unifying component for the Longevity industry.

In the Western Hemisphere this often involves investment in the biotech or preventive medicine sectors.

In the UK for example, which might have the most comprehensive of all government strategies for preparing for the Tsunami, the focus is on things such as digital health and biotech investment.

In the Eastern Hemisphere however, where the populations are older, poorer, and more numerous, the governments often focus more on social support.

In a 2019 policy paper for example, China announced a five-point strategy outlining a mixed technological, financial and legal approach to social support.

It specified that China should deal with the ageing problem through increased social investment and input, building a high quality workforce, better health care and retirement services, use of advanced and innovative technologies, and enhanced legal and social protections.

The paper, jointly issued by the Communist Party's Central Committee and the State Council, acknowledged that the country faced a serious ageing problem but said China must "find its own way out, and that means taking a path with Chinese characteristics".

The uniqueness of each government's approach, and the strengths and weaknesses of each national economy, is briefly documented in the later chapters of this report.

Report Summary

- ▶ This report examines some of the demographic challenges faced by Asian countries and the innovations in technology, policy and finance, and the intersection between the three, which will solve these challenges by transforming Longevity into an asset, and form the emerging Longevity industry in Asia.
- ▶ It begins with **Landscape Overview** section, offers an overview of this industry, laying out the full range of sectors from biotech to finance and everything in between, and examine the sector structures of FinTech, AgeTech and P4.
- ▶ Due to the high concentration of “grey money” (wealth held by those aged 60+) in Asia, and its role as home to the many of the world’s top financial hubs, the financial sector of the Longevity industry has a special role to play here. **Longevity Financial Industry In Asia 2020** examines the burdens being imposed on traditional financial systems in the region and how some of the more forward thinking among them are reaching for novel practical technologies to transform this crisis into an opportunity, exploit the grey dollar and make health the new wealth.
- ▶ **The National Healthy Longevity Comparative Analysis** chapters elucidate the challenges and opportunities even further, comparing the health systems and demographics of different Asian countries, as well as eastern and western hemispheres.
- ▶ This has allowed us to prioritise the countries for profiling, in the chapters that follow, which document the various **national government strategies** already in place for building financial and technological defences against the looming tsunami.



Longevity Industry in Asia Landscape Overview 2020

Longevity in Asia Industry Landscape Overview 2020

Regenerative Medicine

AgeTech

Companies - 1730
Investors - 1070

AI for Longevity

Biomarkers of Longevity

FinTech

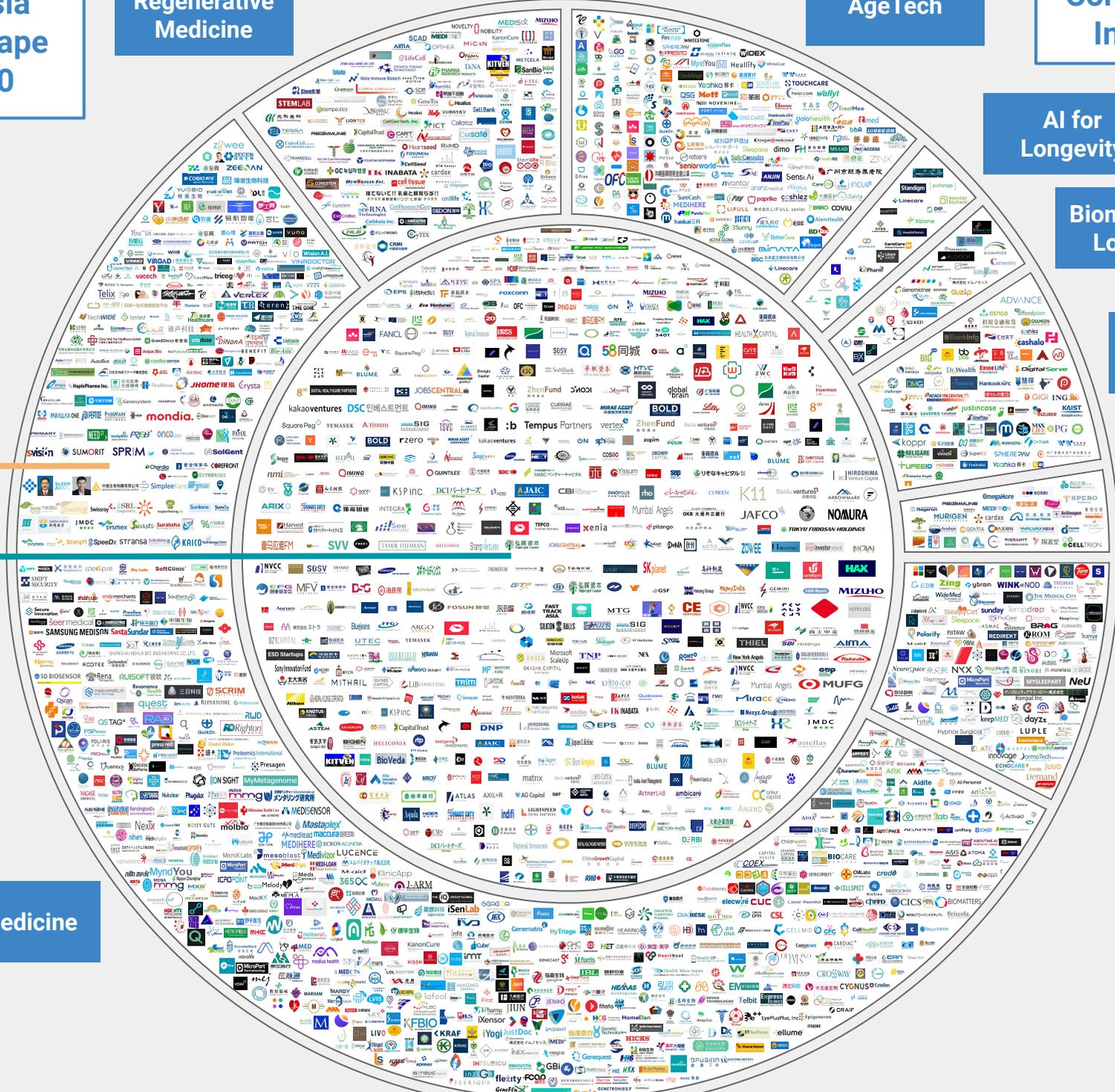
Geroscience

NeuroTech

Companies

Investors

P4 Medicine



Longevity in Asia AgeTech Regional Distribution

Companies - 200
Investors - 180

South Korea

Singapore

Indonesia

Other

Hong Kong

Japan

China

Companies

Investors

India



Longevity in Asia Industry Landscape Overview 2020 (Regional)

Companies - 1730
Investors - 1070

Singapore

Vietnam

Taiwan

Indonesia

Pakistan

Malaysia

Others

South Korea

Thailand

Hong Kong

Australia

New Zealand

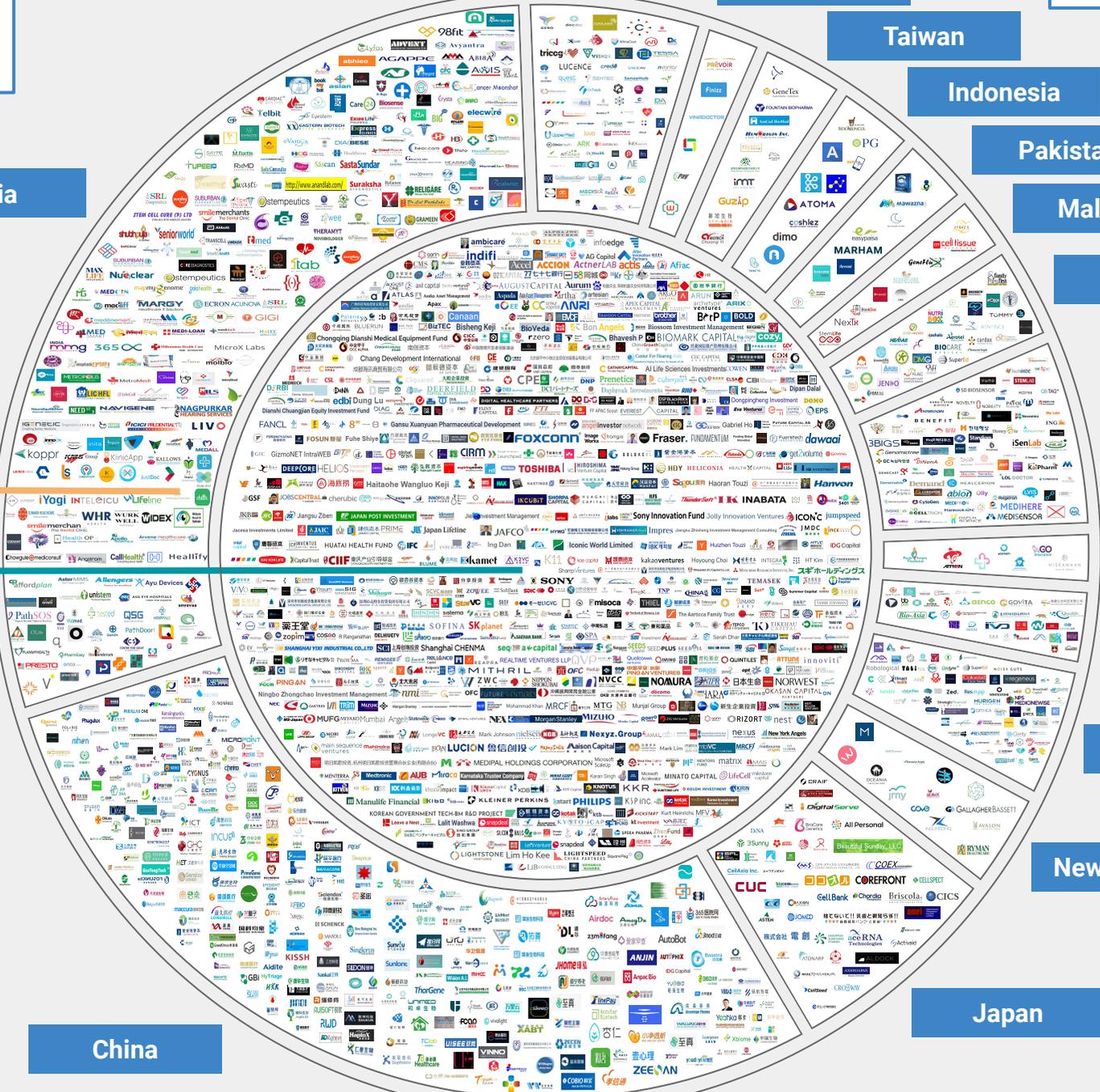
Japan

India

Companies

Investors

China



Longevity in Oceania Industry Landscape Overview 2020

Companies - 102
Investors - 32

GeroScience

RegMed

AgeTech

FinTech

Companies

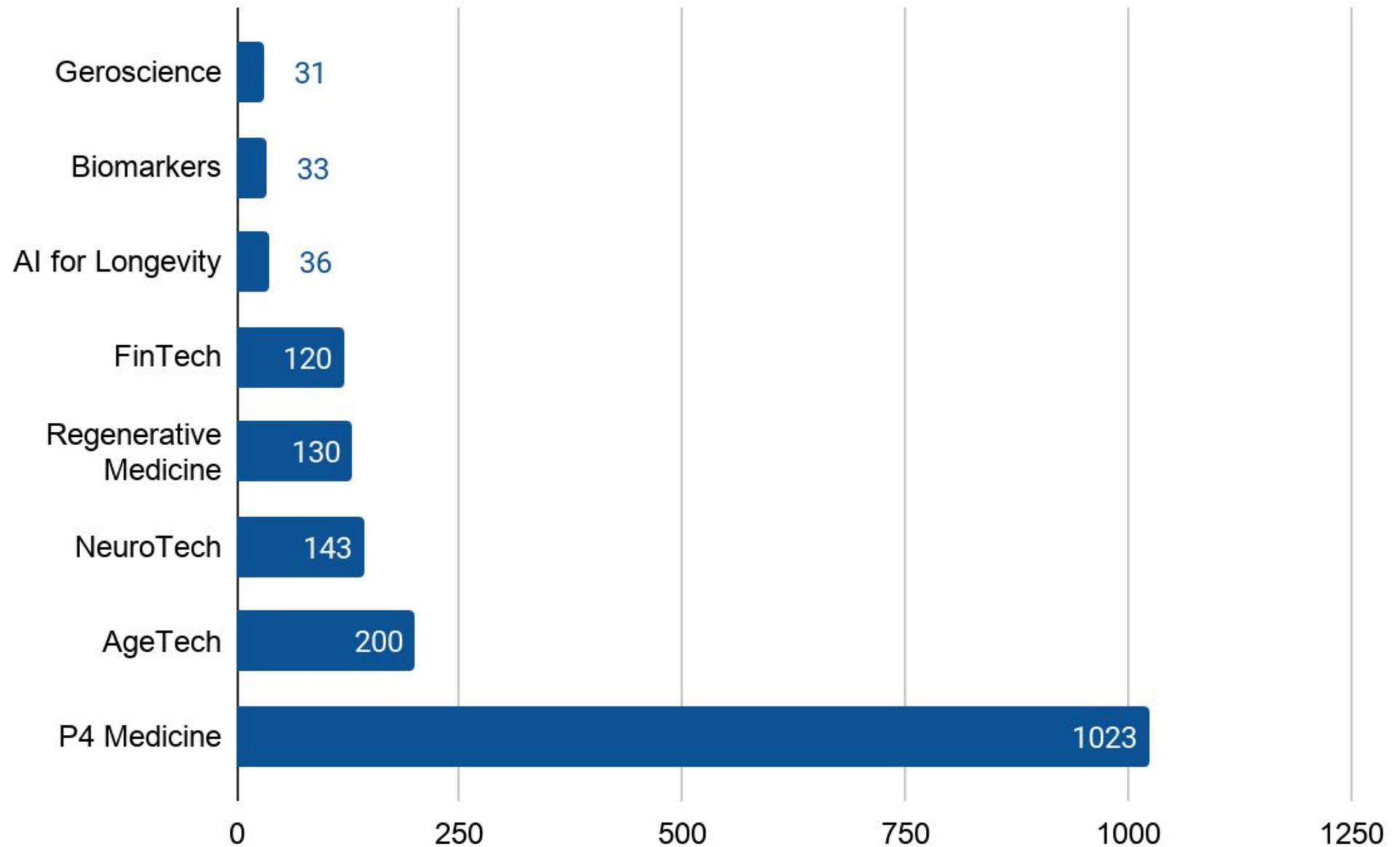
Investors

P4 Medicine

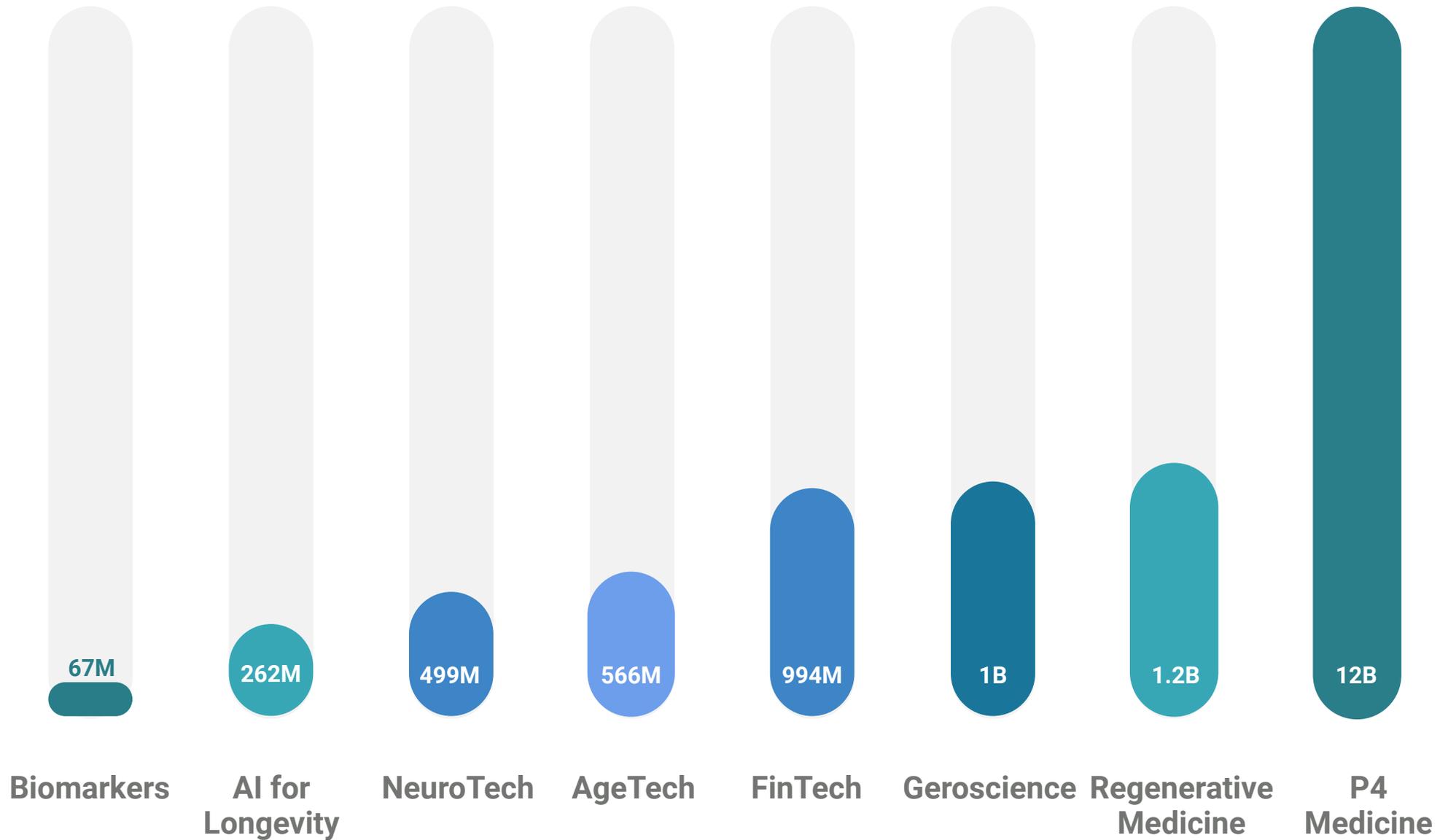
NeuroTech



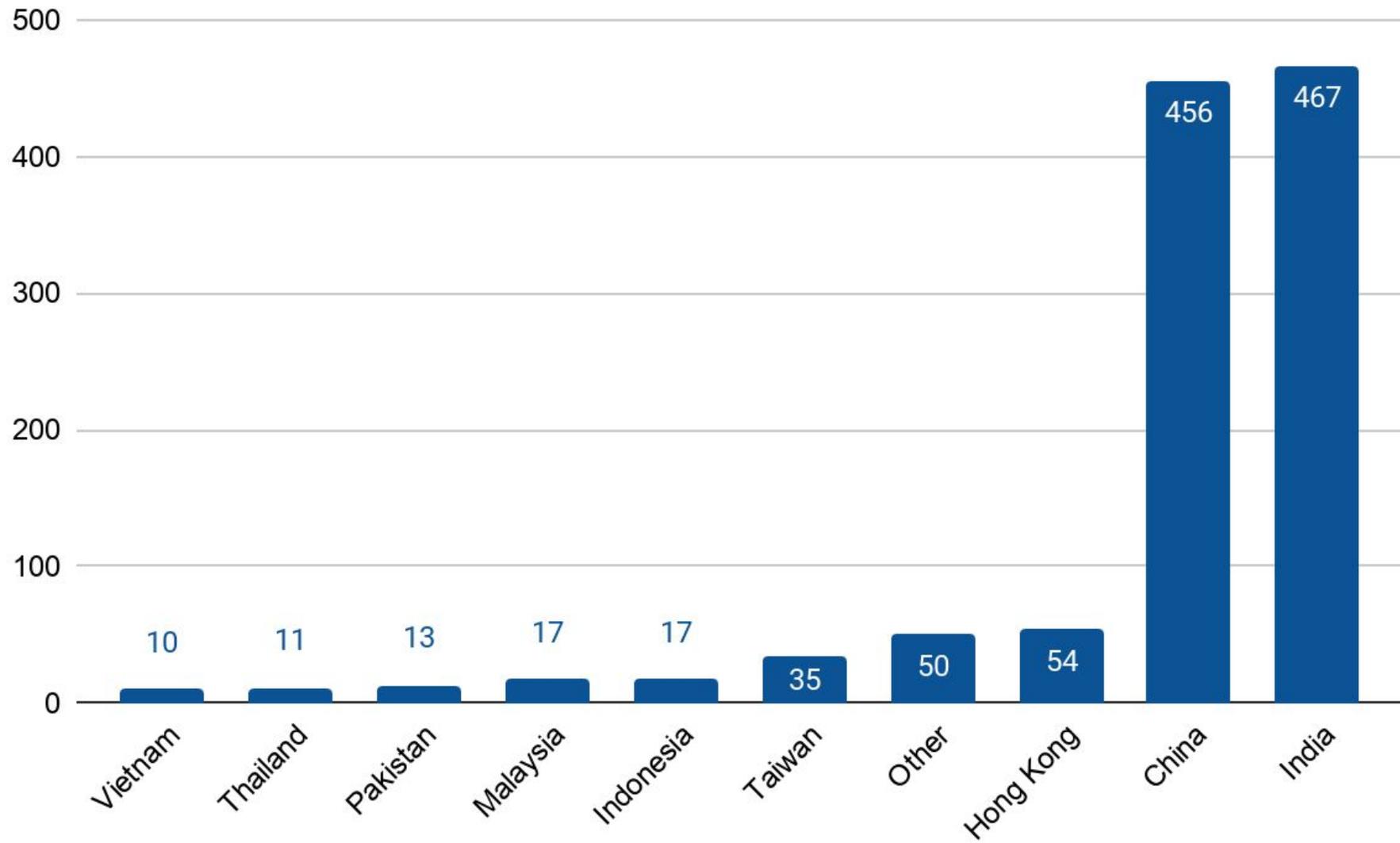
Longevity in Asia: Companies Distribution by Sector



1700 Companies Total Funding Amount Split by Sector

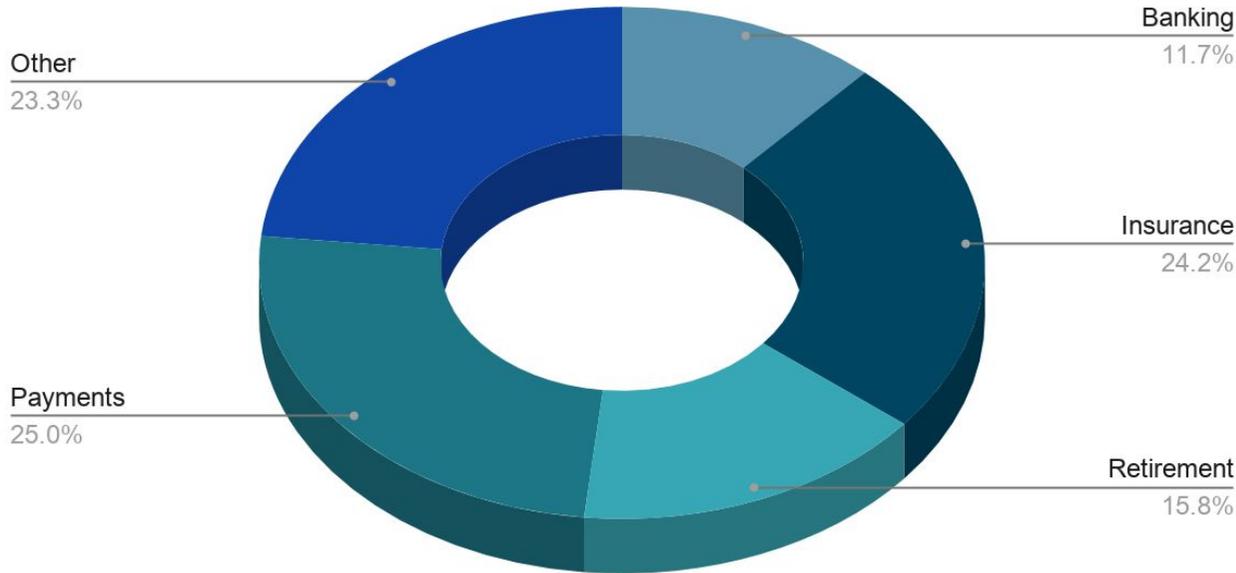


Longevity in Asia: Companies Distribution by Region

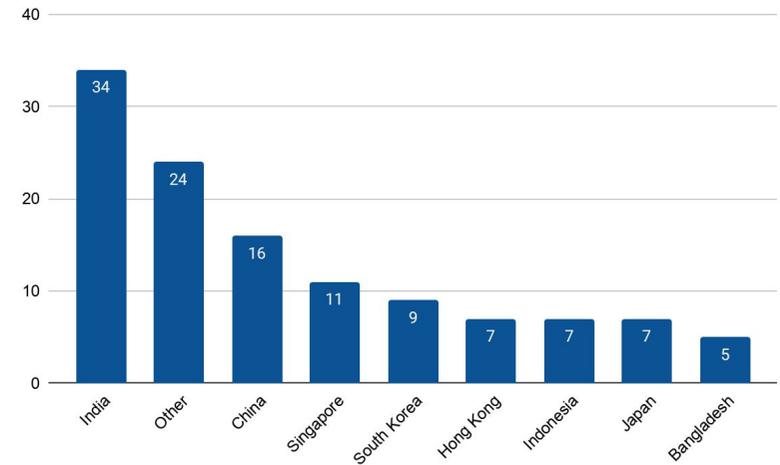


Longevity in Asia: FinTech Sector Structure

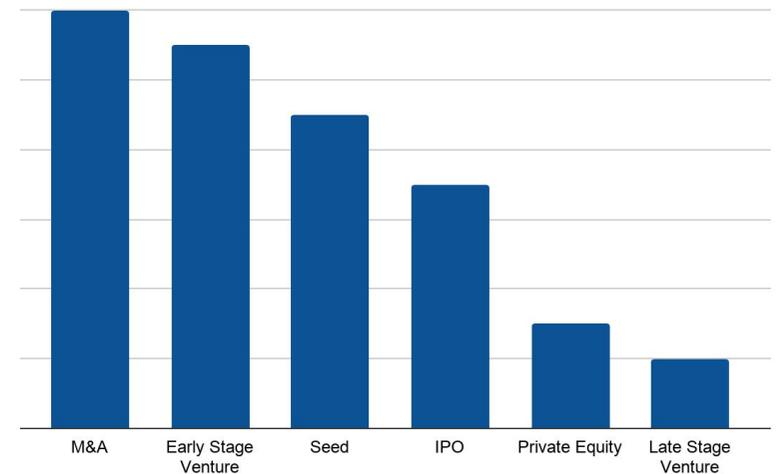
Distribution by category



Distribution by country

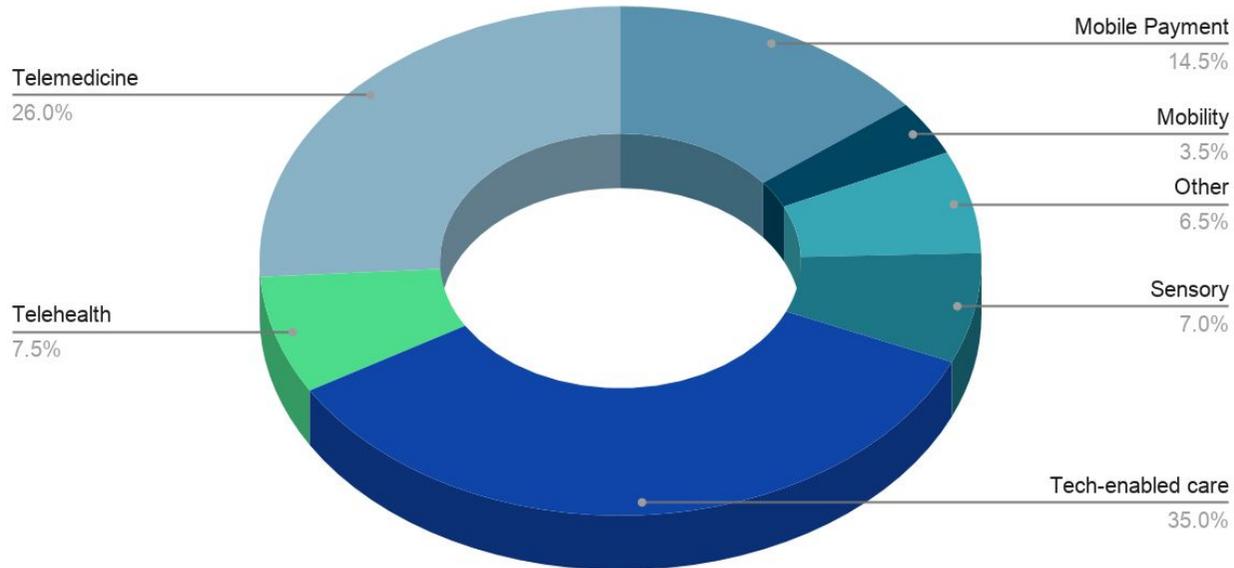


Distribution by funding status

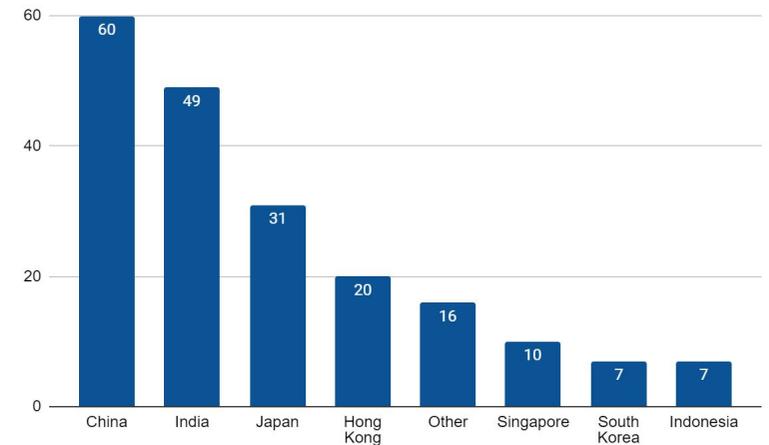


Longevity in Asia: AgeTech Sector Structure

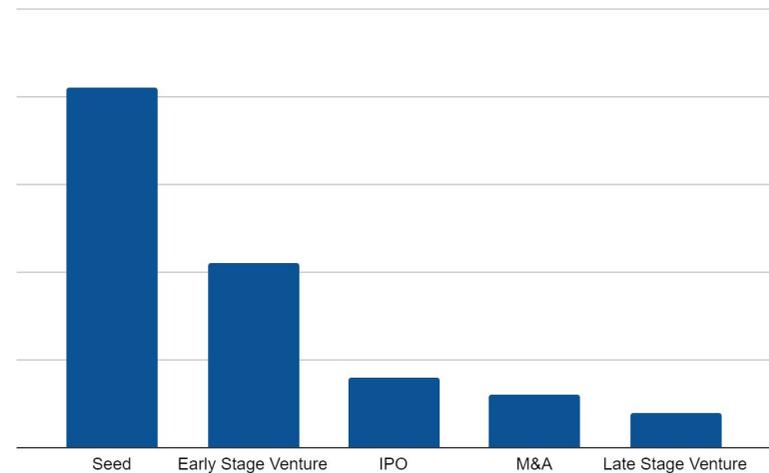
Distribution by category



Distribution by country

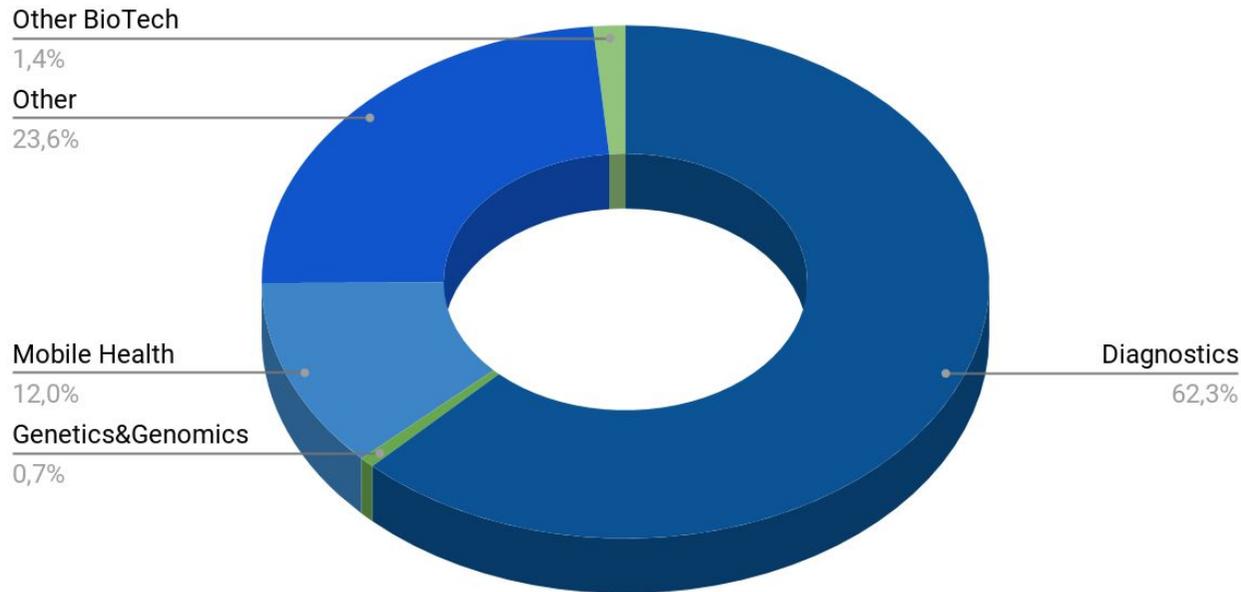


Distribution by funding status

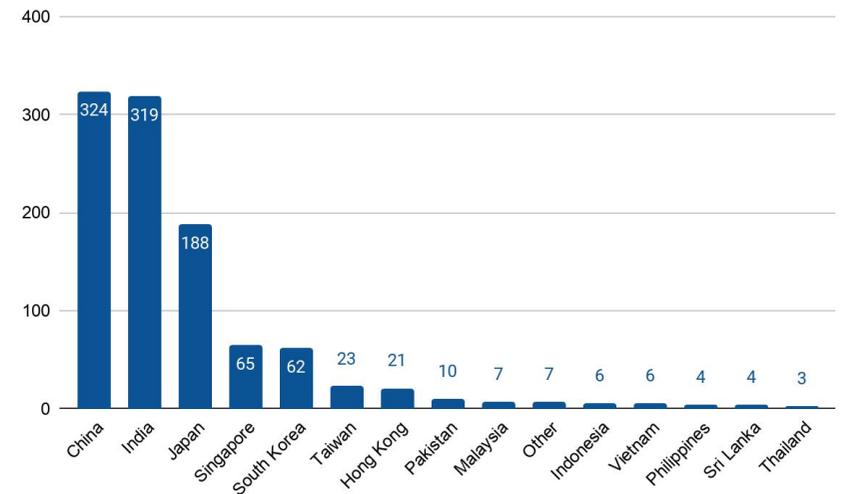


Longevity in Asia: P4 Medicine Sector Structure

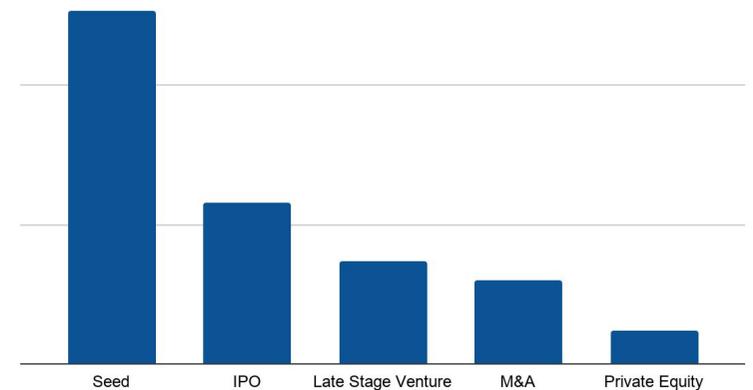
Distribution by category



Distribution by country

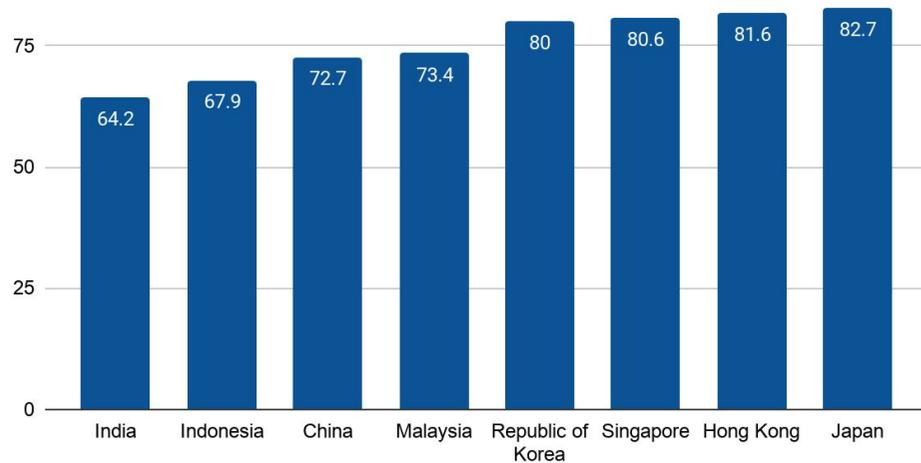


Distribution by funding status

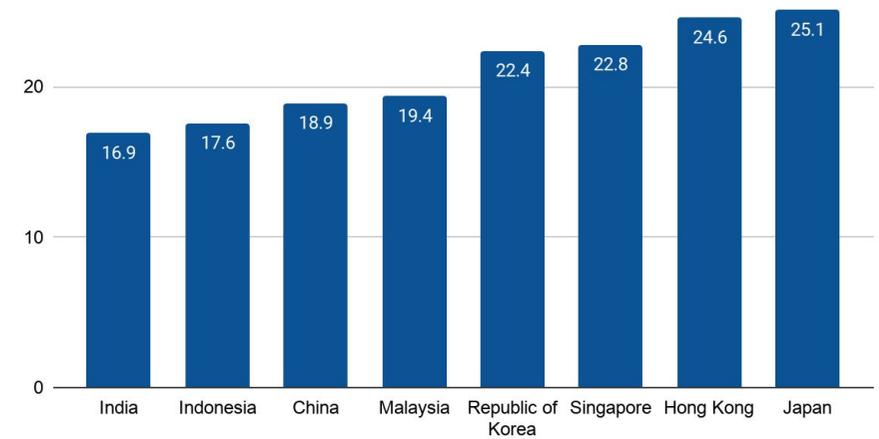


Longevity Trends in Asia

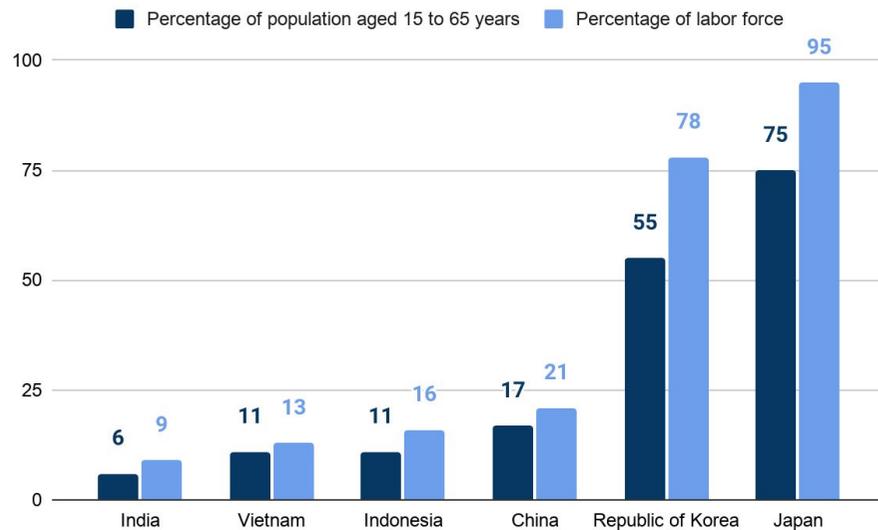
Life Expectancy at Birth, 2015-2020



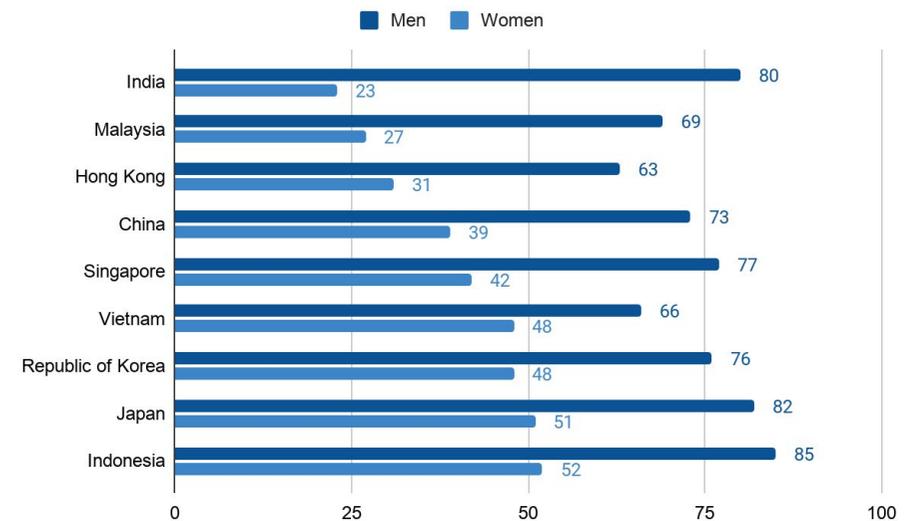
Life Expectancy at 60, 2015-2020



Coverage of mandatory pension schemes



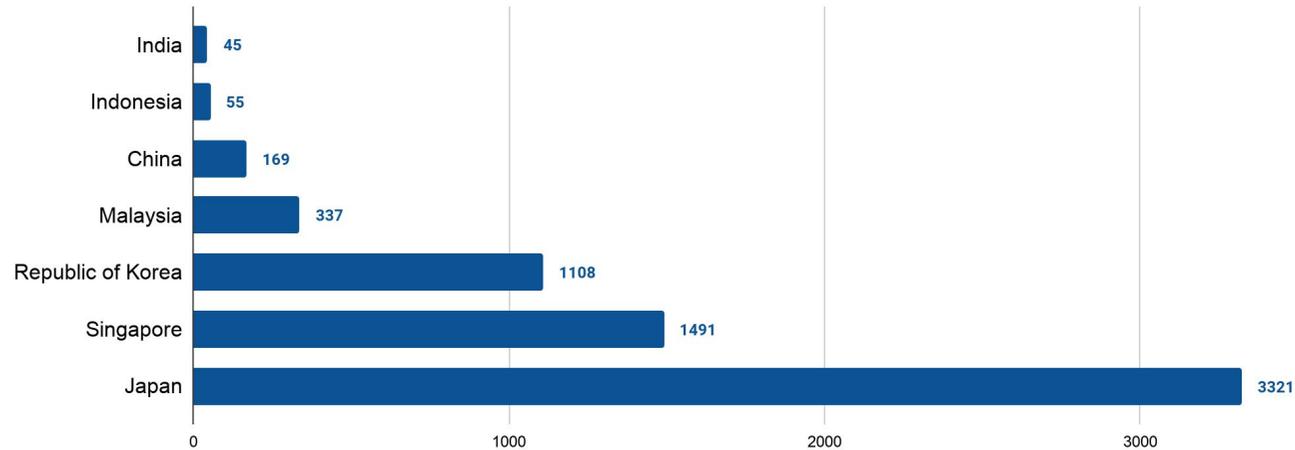
Labor Force Participation among older Workers, age group 55-64 (%)



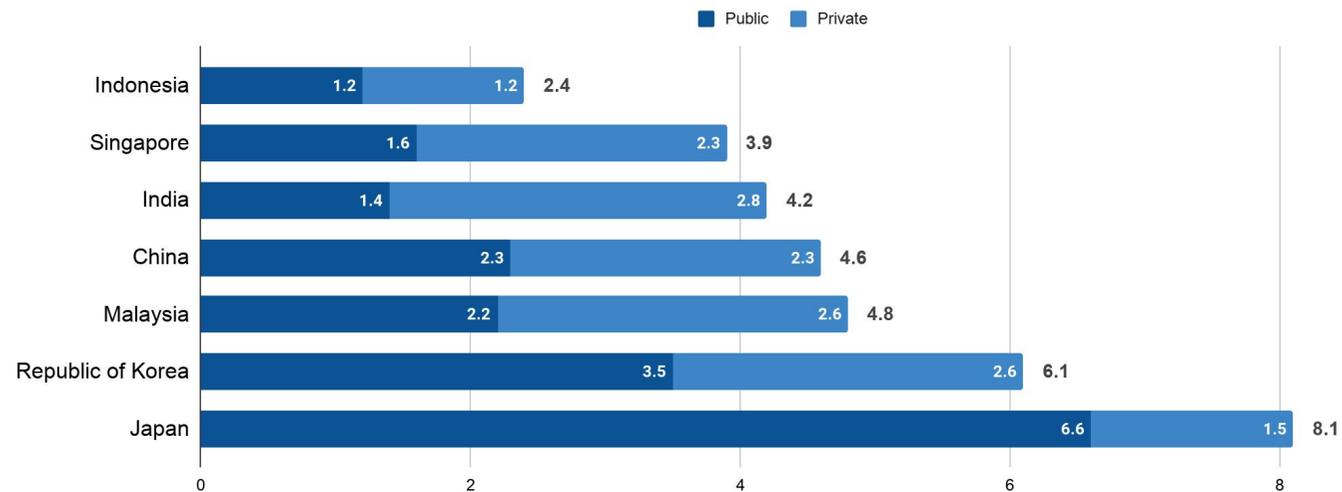
Source: ADBInstitute

Health Expenditures in Asia

Health Expenditure per Capita, US\$, 2009



Public and Private Health Expenditure, % of GDP, 2009



Source: [ADBInstitute](#)

A decorative yellow frame with four corner brackets surrounds the central text.

Longevity Financial Industry In Asia 2020

Summary

- As the global demographic continues to age, this imposes enormous burdens on global finance.
- On the other hand, it also means that global purchasing power of the elderly – the lion's share of global retirement wealth – is concentrated in Asia.
- The prospect of technological solutions (digital, biomedical and financial), is now a recurring talking point at conferences hosted by major financial institutions globally. Asian Finance is increasingly putting its money where its mouth is in this regard, both in their publications, and their in-house policies.
- Asian Financial Institutions are making huge sacrifices to survive, e.g. **MUFG Bank**, **Mizuho Financial Group**, and **Sumitomo Mitsui Financial Group** – structural overhauls to slash their headcount by over 30000 to save up on costs.
- There is a growing interest in the **Longevity Dividend**, in extending the productive working life of the elderly, by means of technology and social support.
- Asian finance is not well known for its activities related to seniors, although some financial institutions in Asia, **HSBC** in particular, offer extensive products aimed at senior citizens.
- Asia has a blossoming FinTech startup environment, and the **rise of FinTech which may appear to threaten rival traditional finance corporations** in some of its aspects.
- Until recently, few if any actual FinTech firms had specialized products aimed at senior citizens. Seniors in Asia are far less comfortable using technologies related to finance.
- However, **the rise of FinTech presents an opportunity** to enable traditional finance to embrace health as the new wealth.
- The groundwork is already being laid for a FinTech future for Asian seniors. Governments are undertaking outreach initiatives and education and awareness drives with this form of technology.
- The example of the memorandum of understanding between the **Singapore FinTech Association (SFA)** and the **Life Insurance Association Singapore (LIA Singapore)** Financial corporation demonstrates the opportunity for traditional financial corporations to onboard upstart FinTech firms in the overall pursuit of the Longevity Dividend.

Elderly Purchasing Power

There are many countries in the Asia region which have essentially larger proportions of young than old in their populations, and there we see an obvious opportunity to reap the dividend of all this healthy human capital.

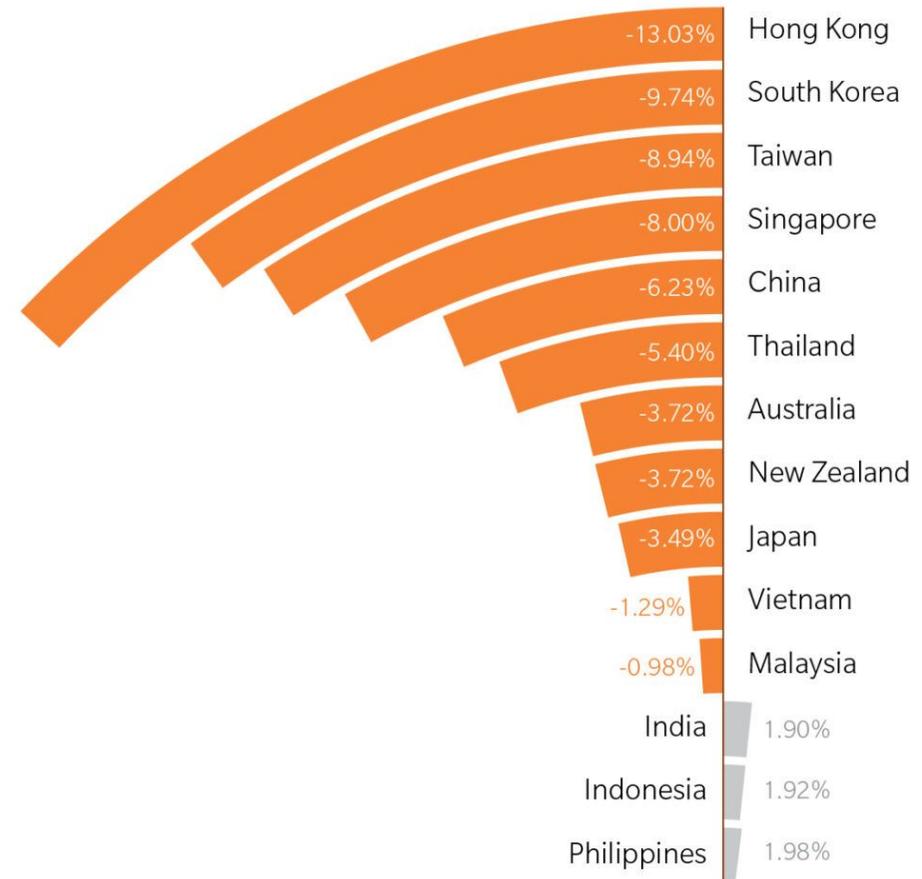
But even in these countries with low proportions of older persons, the absolute numbers of older persons in each country can be economically significant.

Large share of global wealth is concentrated in the hands of global retirees, and those are most densely concentrated in various clusters throughout the Asia-Pacific region.

There may be another dividend to be found there also.

For example, the South and South-West Asia subregion has the lowest proportion of over-60s among APAC subregions, at 8.7%.

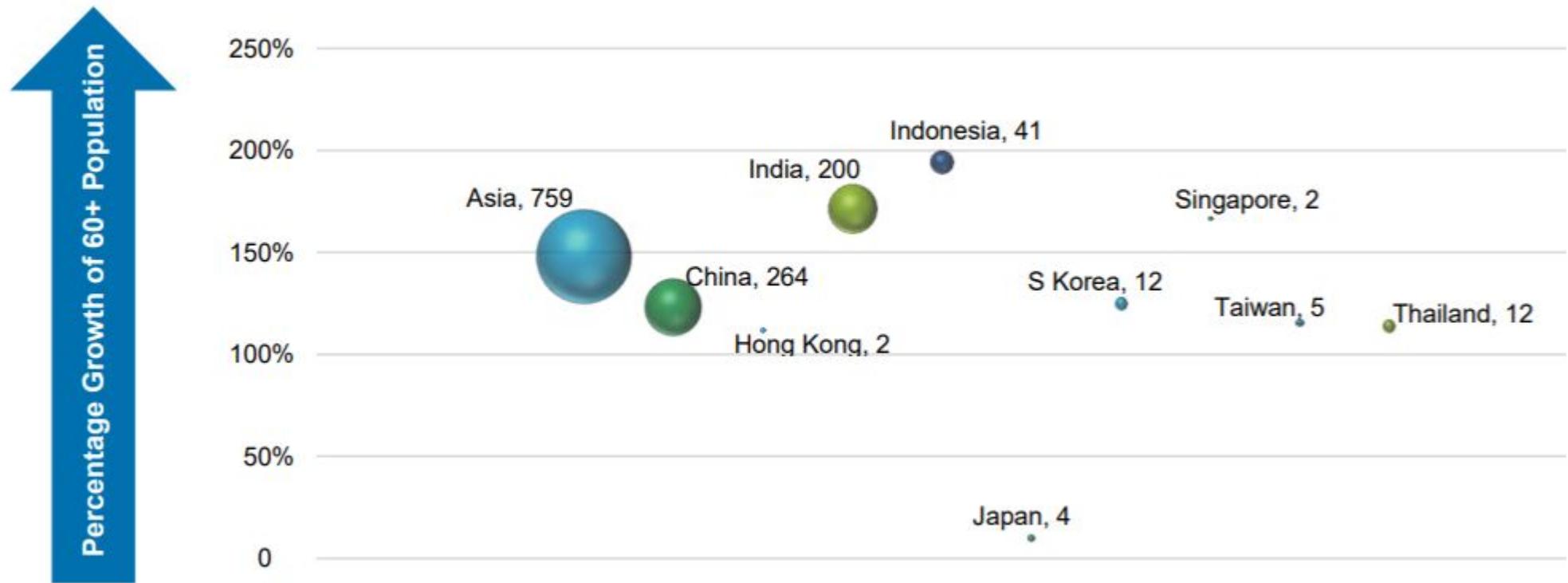
But even that amounts to 168 million in a world of 962 million retirees.



Aging Workforce Cost and Productivity Challenges of Ill Health”. APRC (annual percentage rate of charge) analysis on data from UN Population Division

The figure below depicts where this financial resource is likely to be concentrated. The population of over-60s is likely to grow from 513 million in 2015 to 1.3 billion in 2050. These increases will more than double the existing age 60+ populations across Asia. Some countries are more likely to be severely impacted than others. For example, China will likely double in its number of elderly by then. India will more than double by adding 200 million elderly. Indonesia will triple its elderly population with an additional 40 million elderly. To put this demographic shift in perspective: on a relative basis, Asia's anticipated new age 60+ populations are larger than Europe's entire existing population and double that of the United States. It is important to note here that while current thinking typically focuses on the aging markets of Japan, Korea, Hong Kong, and Singapore, close investigation shows that a majority of the "new" elderly will reside in China, Indonesia, and India.

Additional Age 60+ Populations by 2050 Versus 2015



Size of bubble represents absolute increase in age 60+ population (in millions)
 *UN Population Division, 2017 data, LIMRA International Research.

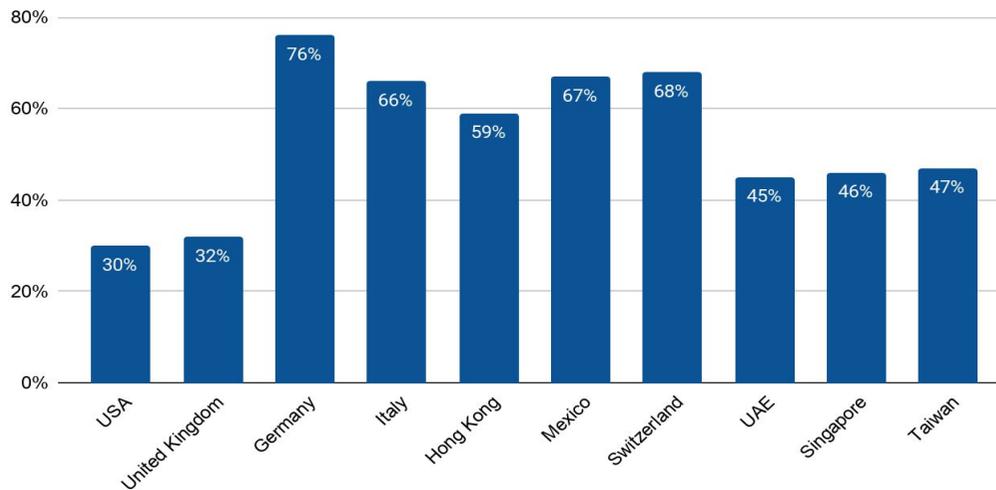
Growing Awareness of Health as the New Wealth

The global aging demographic challenge, and the prospect of technological solutions (digital, biomedical and financial), are now recurring talking points at conferences hosted by major financial institutions.

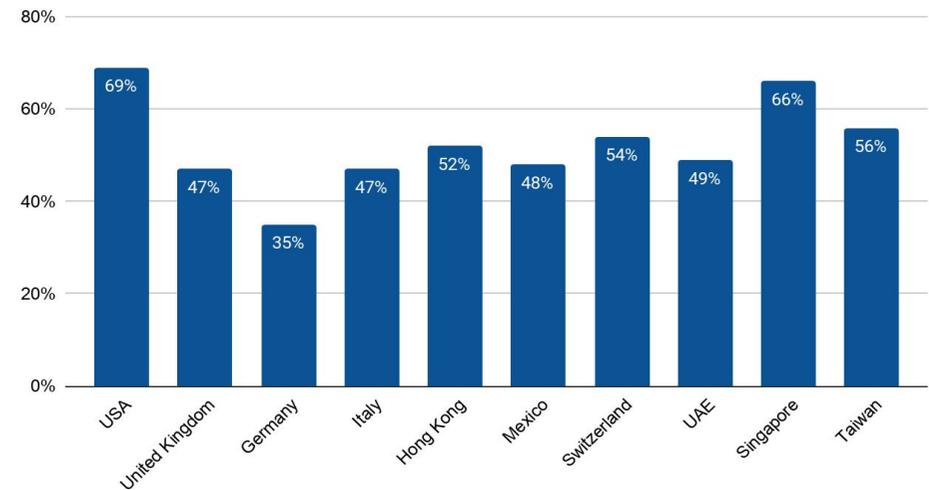
In April 2018, UBS Investor Watch, the world's largest surveyor of wealthy investors, documented the general state of individual investor optimism regarding Longevity globally. It found that: 9 out of 10 believe their health to be more important than their wealth. Many investors are anxious about the financial implications of old age, with healthcare costs being a top concern. Investors also worry about having less wealth to pass on to successors.

UBS Investor Watch concludes: *"Don't let skepticism about living to 100 keep you from planning for it. Life expectancies are rising, and it's a real possibility. In fact globally, 9 in 10 investors are already adjusting how they are planning for their life and their legacy."*

Percentage of investors who expect to live to 100



Percentage of investors worried about rising medical expenses



Source: UBS

Asian Finance is increasingly putting its money where its mouth is in this regard.

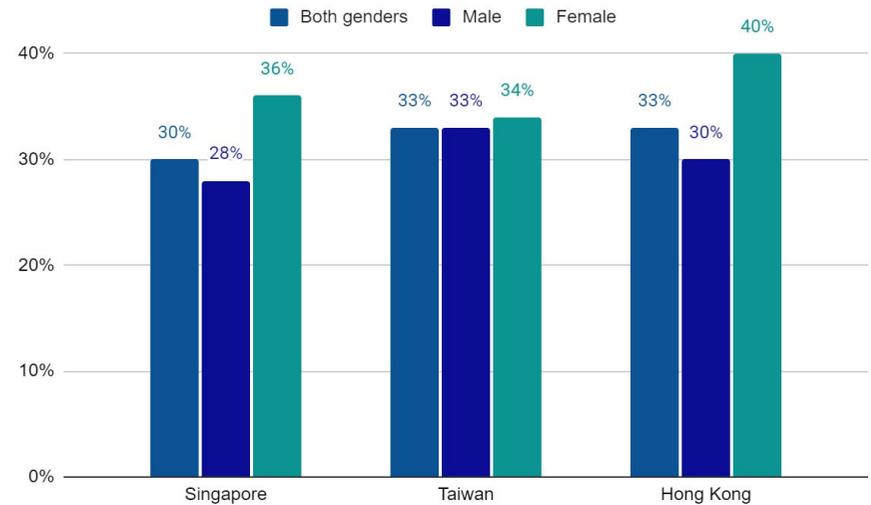
In 2019, in anticipation of longer employee lifespan, Prudential Singapore raised its Central Provident Fund (CPF) contribution rate for those above the age of 55. It is the first financial institution to introduce this CPF scheme.

The same year, Prudential released **A Longevity Agenda for Singapore**, a report in which health was portrayed not only as a new form of wealth, but as a new form of capital. The report concluded by emphasising the continuing role of government coordination.

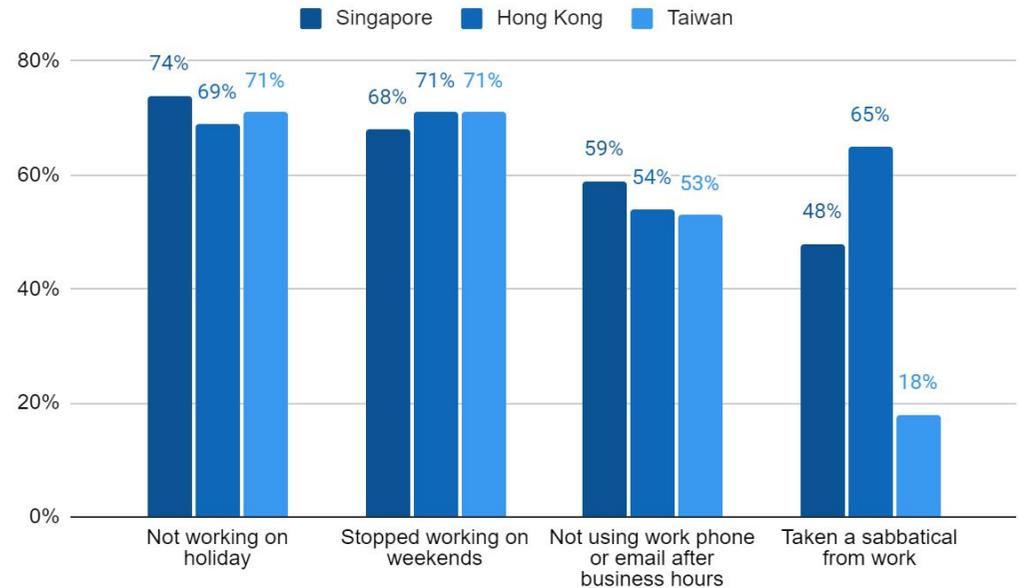
“As the [Singapore] government extends the retirement age, it needs to recognise that not everyone will be able to work for longer or in similar ways; conversely, those aged 67 or 73 may want to continue working. Governments and corporates need to shift to a system that is less definitively based around chronological age to one that supports a greater diversity of outcomes, so that those over 73 who wish to continue working can do so, and those who are unable to work until 65 can also receive some form of financial support.”

Source: UBS

Percentage of wealth willing to sacrifice for health



Percentage of investors who have made the following changes to improve work / life balance in the last 3 years



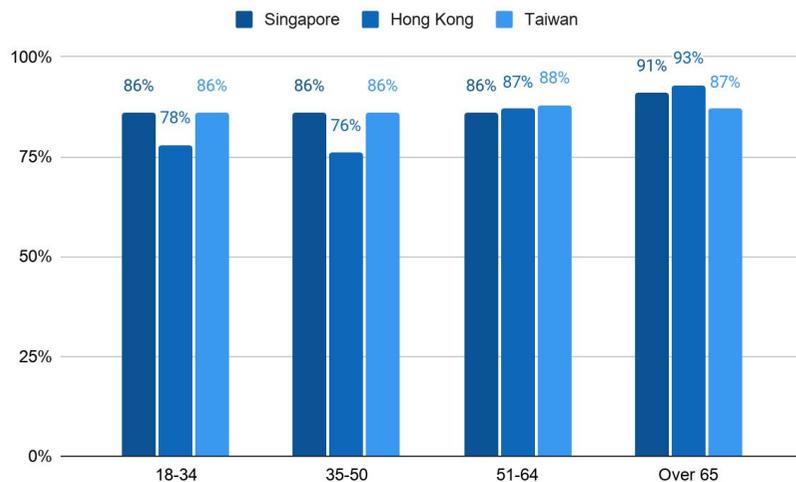
Adapting to Survive

An ageing population slows down economic growth, hits interest rates and squeezes profits from lending activities. Slower economic activity will translate into weaker loan demand for capital spending among corporates, and small and medium-sized enterprises (SMEs), which will be detrimental to loan growth.

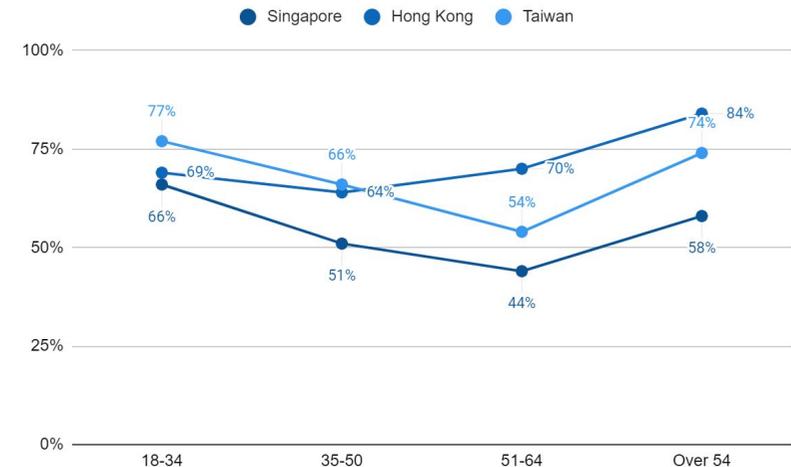
The wealth management business of banks has also been caving under pressure amidst falling savings rates brought about by higher dependency level.

For example, Japan's three megabanks – **MUFG Bank**, **Mizuho Financial Group**, and **Sumitomo Mitsui Financial Group** – have already announced structural overhauls to slash their headcount by over 30,000 to save up on costs. Similarly, banks in Korea and Taiwan with fast-aging population will also come under pressure as they have high costs relative to revenue and lower returns on average assets.

Percentage of investors who agree they have a duty to improve the health of wider society



Percentage who give away more of their wealth while still alive



Source: UBS

A Growing Interest in the Longevity Dividend

This new interest shown by pension funds, insurance companies and investment banks on the topics of ageing and Longevity is motivating them to search for technological solutions.

The nascent AgeTech industry for example, in combination with the FinTech and WealthTech for an ageing population, is in a position to command large amounts of capital.

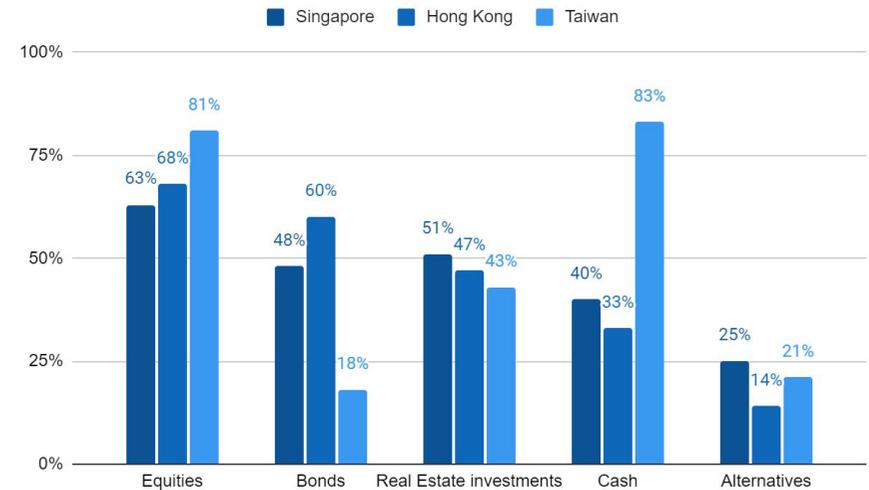
Thus Asian politics and finance has recently turned their eyes toward AgeTech.

The result has been an assortment of government programs in Asia, ranging from social programs to AgeTech investment, for extending the productive working lifespans and independence of the elderly.

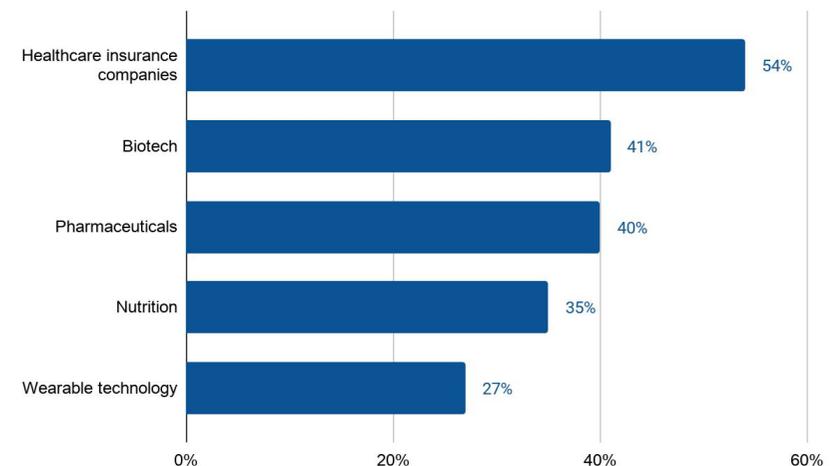
Large financial institutions including private wealth banks, insurance companies and pension funds have also entered this nascent market, with their own various products and programs.

Source: UBS

Percentage of investors who see different asset classes as a strong long-term investment



Percentage of investors who invested in different areas of healthcare



A Growing Interest in the Longevity Dividend

On a statement on the HSBC website, Alistair Chamberlain, Head of Product and Actuarial, Global Insurance, HSBC Life, stated:

*“The insurance sector has a role to play here. Demand is already rising in Asia, with mainland China on course to become the world’s largest market for insurance. The insurance industry needs to meet that demand – and also anticipate people’s changing requirements, in three key ways. Insurers are developing new products to help people access support that they may be more likely to need later in life. In Hong Kong, for example, HSBC has launched **a product that provides protection if the policyholder is diagnosed with dementia** – a condition which now affects around 50 million people worldwide.”*

The bank has also embraced technology to improve customer access and tap into the silver economy.

“To support our aging population, the banking sector has an important role to play in delivering goods and services that cater to their needs and help them to prepare for their financial future. By promoting ‘age-friendliness’, we can ensure that customers of all ages receive the necessary support to access our banking services, stay vigilant for financial crimes and be aware of the legal instruments available to support them in the years ahead.”



Some institutions have reacted to demographic aging by mitigating, transferring or sharing risk among a larger group. The responses from pension plans include a shift from offering defined benefits (DB) to defined contributions (DC) and from being unfunded to funded, implementation of asset management strategies that better match liabilities, and utilization of Longevity-linked instruments to remove Longevity risk from the balance sheets of existing DB plans.

Individual retirees face the risk of outliving their resources if they spend aggressively, or under-consuming their wealth if they spend conservatively.

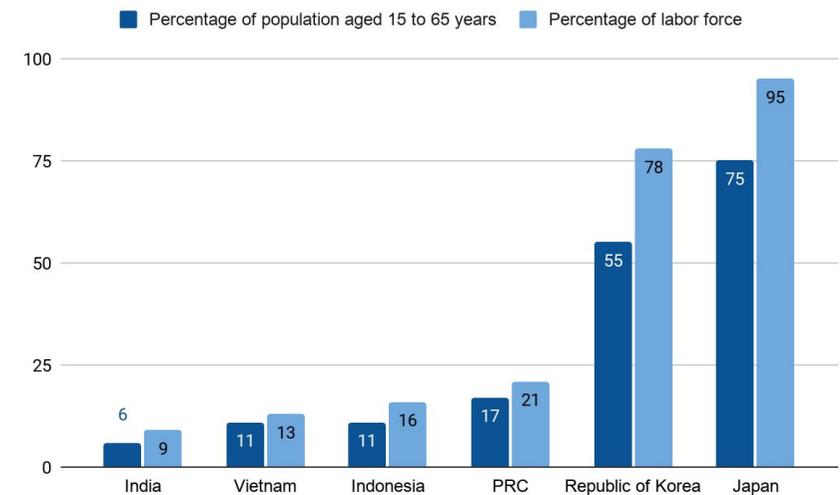
The primary appeal of **annuities** is that they offer an effective solution to wealth allocation and consumption decisions for retirees – “the opportunity to insure against the risk of outliving their assets by exchanging assets for a lifelong stream of guaranteed income”. Broadly, there are three sources of annuities for retirees:

- Social security,
- Employer-sponsored DB plans,
- Actual annuity contracts.

Longevity indices and **Longevity bonds** provide hedging tools of aggregate Longevity risk of the overall population at an institutional level.

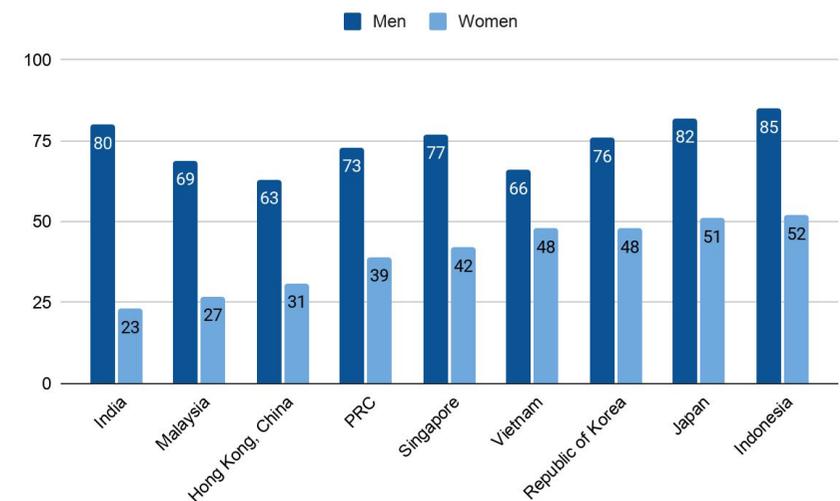
Coverage of Mandatory Pension Schemes

Percentage of population in working age group and labor force covered



Labor Force Participation among older Workers

Participation rate for age group 55–64 (%)



Insurance and Incentives

This Longevity focus of Asian financial organisations is influencing the health incentive structures of Asian societies.

Consider for example Singapore. Due to a strong, rapid-reaction healthcare system, robust immunisation programmes to protect against many preventable diseases; and people following a healthy lifestyle that reduces their risk of serious illness, Singapore has one of the world's healthiest populations. This may be due to the economic incentives built into Singapore's health care system.

The Health Promotion Board (HPB) has over the years stressed the importance of exercise. The Board's National Steps Challenge, has seen the number of participants grow, from 156,000 in 2015 when it was launched to 913,000 in the fifth session that ended earlier this year.

Incentives include a free steps tracker for those who do not have one as well as prizes like air tickets for teams and individuals. There are also vouchers for those who fulfil the required number of daily steps.

The government, and the insurance companies that pay the hospital bills, try hard to keep Singaporeans healthier. Prudential Singapore, which provides MediShield Life Integrated Plans to the citizens, reports that the top three causes of claims are heart problems, stroke and kidney treatments. In Singapore, the majority of kidney failure is due to uncontrolled diabetes.



As such, Prudential introduced its "Pulse App" this year. It already has 120,000 users. The App allows people to check their health status as well as access a tele-consultation should they think they have a problem.

It was launched during the circuit breaker period, when most people stayed home as far as possible. There are also fun elements in the App, like a wrinkle-mirror, to encourage people to lead healthy lifestyles.

Rise of Asian Longevity FinTech

But although many financial institutions in Asia offer products aimed at senior citizens, until recently few actual FinTech firms had specialized products aimed at senior citizens. With flashy apps and slick marketing campaigns, most FinTech apps are not designed to penetrate the senior population.

In the West, a number of FinTech startups have already rushed in to fill this vacuum. FinTech firms and banks in the west are already integrating products aimed exclusively at older customers. UK-based apps MoneyHub and Pensionbee have partnered to offer pension management tools, while in the US, Pefin and Onist provide financial planning advice to seniors and their close family members.

Asia's overall FinTech industry also is growing at a rapid pace and quickly emerging as a serious global contender. As the region turns into a FinTech powerhouse, it has become critical for financial professionals to keep up with this burgeoning industry.

But unlike in the West, seniors in Asia are far less comfortable using technologies related to finance, and so the rate at which Asian financial and FinTech corporations get involved in Longevity is in some respects slower.

According to a VISA Singapore survey of seniors between the ages of 50 – 80, over 80% were active on social media and messaging apps, yet only 30% used mobile payments. Only 22% had tried online shopping and 29% used ride-hailing. Card ownership is also relatively low among seniors, with cash remaining the preferred payment option due to a lack of familiarity with FinTech and fear of fraud. Since they are still a minority in the FinTech customer ecosystem, specialized products have not yet been forthcoming.

There is still a sizeable population that is digitally financially underserved in Asia. In fact, a report from FinTech and Digital Banking 2025 Backbase & IDC found that only 30% of APAC banking customers are active on digital banking channels.

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But the groundwork is already being laid for a FinTech future for Asian seniors. Outreach initiatives and education and awareness drives are necessary to build senior citizen confidence in technology. The Singaporean government has already shown the effectiveness of such campaigns, with the anti-scam drive for the elderly launched in late 2018 by the Singapore Police Force. On the business front, VISA has partnered with People's Association to conduct a series of workshops aimed at senior citizens as part of their digital inclusion initiative. The **OCBC Bank** has also held similar training programs for the elderly in Singapore.

Major Chinese FinTech player Ant Financial has launched a health insurance plan for seniors aged between 60 and 70 years which gives pay-outs of up to CNY 100,000 (\$14,700) if the insured is diagnosed with cancer, according to a report from state news agency Xinhua. The plan is offered through **Alipay** and is an extended version of existing online healthcare platform, '**Xiang Hu Bao**', which means 'mutual protection'. The original version of the platform is open only to customers aged 59 years and below who meet the basic health criteria.

In this respect, the rise of FinTech in Asia presents an opportunity for cooperation, rather than a threat to traditional finance corporations.

For example, the Singapore FinTech Association (SFA) and the Life Insurance Association Singapore (LIA Singapore) this year signed a Memorandum of Understanding on the sidelines of the Singapore FinTech Festival 2020. The MOU reaffirms the commitment of both associations to work for the progress of the InsurTech and FinTech industry in Singapore. Under the MoU, both parties will collaborate on the development of the life insurance and InsurTech talent pool and expertise through mentorship, reverse mentorship programmes and deep dive workshops. The associations will also collaborate on market research and publications focussed on life insurance and InsurTech.

Innovators, Leaders and Overtakers



Leader

Raised its (CPF) contribution rate for older employees.

Published the report **“A Longevity Agenda for Singapore”**.

Sponsored the The Economist’s Longevity summit conference which brought together Asian business leaders, political decision-makers and health-care entrepreneurs to discuss how to make longevity a source of healthy innovation and foster thinking on the topic of “living to 100”.

Prudential introduced its Pulse App. It already has 120,000 users, The App allows people to check their health status as well as access a tele-consultation.



Leader

UBS now provides financial advice and solutions to extremely wealthy, institutional and corporate clients worldwide based on the clear prospect of living past 100.

They marked this shift with a report entitled The Century Club, a study of High Net Worth Individuals (HNWIs) in the world, which revealed that most investors in Singapore **believe they will live to 100**, and are keen to **invest in health to create a positive social impact**.



Leader

Offer extensive “age-friendly banking” products aimed at senior citizens.

Dementia Friends Ambassadors

Smart Seniors program: Community Care Ambassadors and Smart Seniors stationed in every HSBC branch. They are trained in providing support to different customers in need.

Launched a product that protects policyholders diagnosed with dementia. Published **“Managing money when living with dementia”**.

Innovators, Leaders and Overtakers



Innovator

Signed MOU with LIA Singapore at Singapore FinTech Festival 2020

Innovator

This traditional finance corporation cooperated with SFA to move forward Longevity Finance.

Innovator

Health insurance plans via online platforms.

Innovator

Laid the foundations for a FinTech future, training programs for digital inclusion of senior citizens.



MUFG

Overtaker

Slashed headcount under pressure amidst falling savings rates brought about by higher dependency level.



Overtaker

Slashed headcount under pressure amidst falling savings rates brought about by higher dependency level.



Overtaker

Slashed headcount under pressure amidst falling savings rates brought about by higher dependency level.

Challenges Facing Financial Institutions Entering the Longevity Market

Longevity risk is a risk to which a pension fund or life insurance company can be exposed as a result of higher-than-expected payout ratios. It exists due to the increasing life expectancy trends among **policyholders** and **pensioners** and can result in **payout levels** that are higher than what a company or fund originally accounted for. The types of plans exposed to the greatest levels of longevity risk are **defined-benefit pension plans** and **annuities**, which guarantee lifetime benefits for policy or plan holders. Only those financial institutions which can deal with longevity risk will survive and flourish.

Longevity risk affects governments so that they must fund promises to retired individuals through pensions and healthcare, and they must do so despite a shrinking tax base. Corporate sponsors who fund **retirement** and **health insurance obligations** must deal with the longevity risk related to their retired employees. In addition, individuals, who may have reduced or no ability to rely on governments or corporate sponsors to fund retirement, have to deal with the risks to their own finances presented by their own longevity. Average life expectancy figures are on the rise, and even a very small change in life expectancies can create severe **solvency issues** for pension plans and insurance companies. Precise measurements of longevity risk are still unattainable because of the limitations of medicine and its impact on life expectancies has not been quantified.

The parts of the industry left standing will be those in which the only measure of success is **QALY (quality-adjusted life years)**, **DALY (disability-adjusted life years)** and **HALE (health-adjusted life years)**.

There will be a period of crisis following the tsunami landfall, and preceding the completion of the first “flood defences” in the form of healthy life-extending biomedicine. But for many, these intervening years will be a **window of opportunity** to become captains of an entirely new industry and chart a new course for humanity.

One of the main sources of longevity risk is the discrepancy between actual and expected lifespans, which has been large and one-sided: forecasters, regardless of the techniques they use, have consistently underestimated how long people will live.

Longevity Risk in Asia

Potentially risky regions

70%
Europe

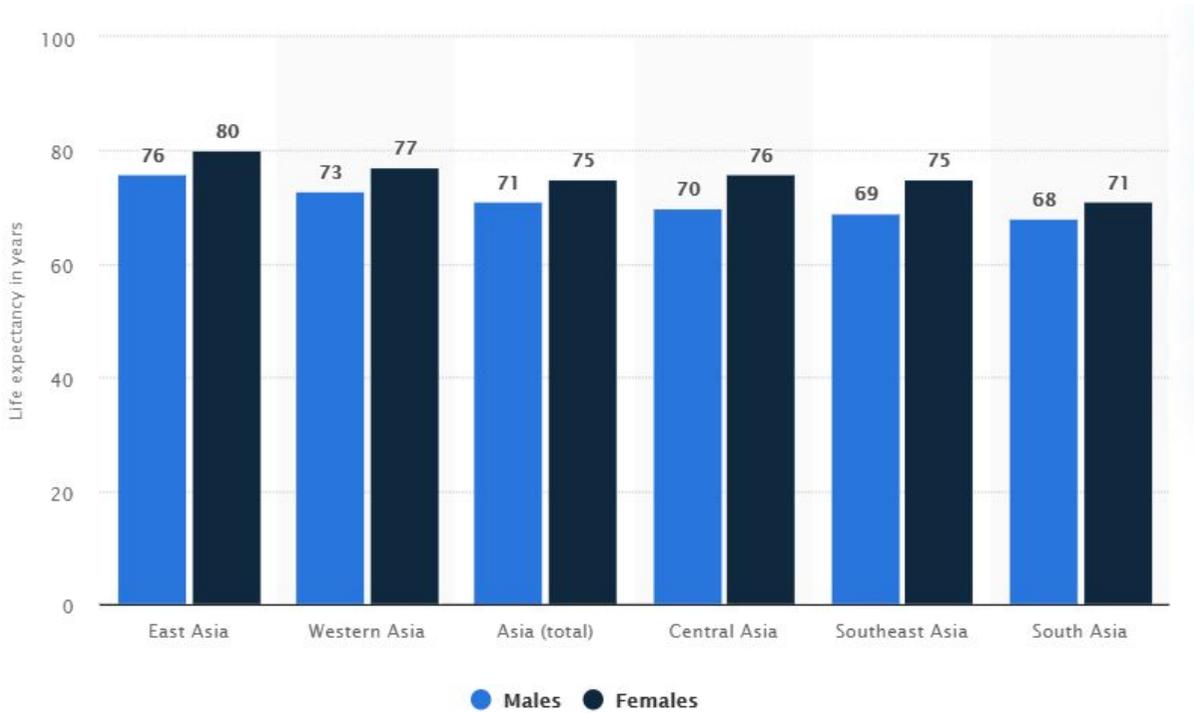
15%
Asia

10%
Australia

Asia is the second most “dangerous” region in the context of longevity risks. It is important to highlight those countries that require increased attention to the ageing regulation. According to OECD, this list includes Japan, Switzerland, Spain, Italy, and Luxembourg.

Moreover, we should take into consideration Blue Zones, which are the regions where people live much longer than average. Therefore, China, South Korea and other Eastern Asia countries could be included in the list of “risky” countries.

Average life expectancy in Asia for those born in 2020, by gender and region



Sources

OECD

Implications

Elderly purchasing power

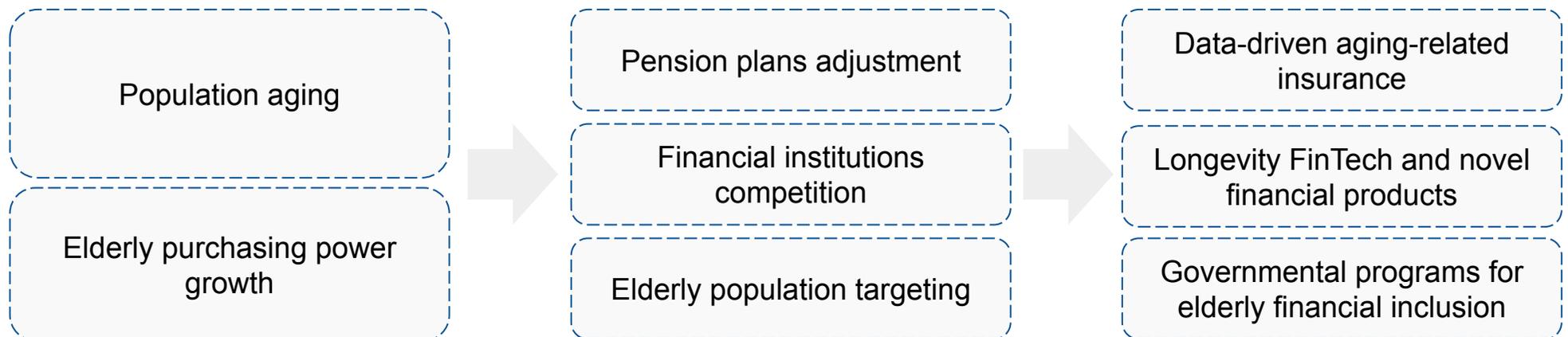
- More than 60% of global retirement wealth is concentrated in Asia. This number will continue to grow as the speed of population ageing in Asia is higher than globally.
- The consequences of the population ageing are reinforced by income per capita growth.
- The prospect of technological solutions is now a recurring talking point at conferences hosted by major financial institutions globally.

Pressure on financial institutions

- Asian Financial Institutions are making huge sacrifices to survive, e.g. **MUFG Bank**, **Mizuho Financial Group**, and **Sumitomo Mitsui Financial Group** – structural overhauls to slash their headcount by over 30000 to save up on costs.
- Asian finance is not well known for its activities related to seniors, although some financial institutions in Asia, **HSBC** in particular, offer extensive products aimed at senior citizens.

Rise of FinTech

- Asia has a blossoming FinTech startup environment, and the **rise of FinTech which may appear to threaten rival traditional finance corporations** in some of its aspects.
- The groundwork is already being laid for a FinTech future for Asian seniors. Governments are undertaking outreach initiatives and education and awareness drives with this form of technology.





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