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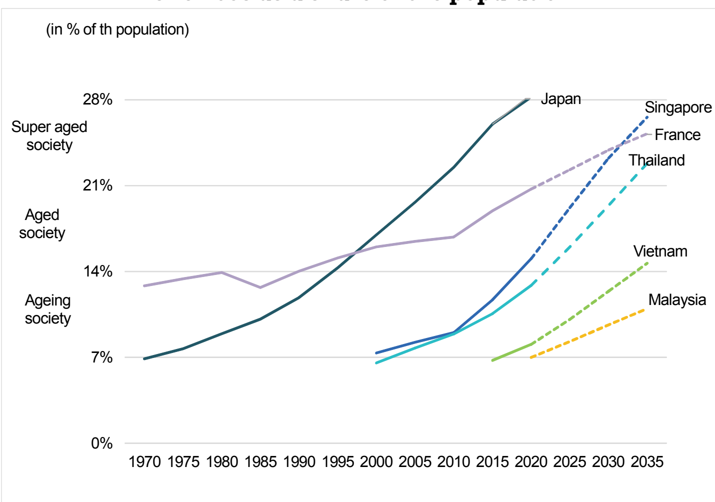
Southeast Asia faces an ageing future

- Three Southeast Asian countries – Singapore, Thailand and Vietnam – are already "ageing societies", by World Health Organization (WHO) and United Nations (UN) metrics, meaning that over-65s make up between 7% and 14% of the population. Malaysia is expected to join the group in 2020 or soon after.
- Taken as a whole, the region has a relatively young population, with a median age of 29 years (compared with 41 in France in 2019). Yet the speed at which its society is ageing will pose challenges for economic growth.
- Southeast Asia's population is ageing at a similar pace to Japan's. But in countries like Thailand and Vietnam, per-capita income remains modest and, although it is rising, there is a real risk that the region could fall victim to the "middle income trap".
- This demographic shift is constraining Southeast Asia's potential growth in two ways. First, the working-age population is expanding at a slower pace and, eventually, will begin to contract. And second, the way the region's economies are structured, coupled with the predominance of manual jobs, is causing labour productivity to decline. In Singapore and Thailand, where the ageing process is at its most advanced, the drag on potential growth could be felt in the next decade.
- Pension-related issues could also weigh on consumer spending. In Thailand and Vietnam, for instance, less than 20% of working-age people pay into a pension. Region-wide, those who do tend not to save enough, and the pension benefits they receive once they retire are inadequate.
- The ageing population is placing increasing strain on the public purse and could lead to fiscal sustainability headaches in Vietnam and Thailand.
- At present, raising the retirement age seems to be the most common strategy for mitigating the adverse effects of an ageing society. Countries could also bring in more foreign workers, or increase women's participation in the labour force, in an effort to contain the rising age-related dependency ratio.

Over-65s as a share of the population



Source: United Nations Department of Economic and Social Affairs (UN DESA); Regional Economic Department (SER), Singapore.

1. Southeast Asia's rapidly ageing population spells the end of the demographic dividend

1.1 Population ageing is already a reality in Singapore, Thailand, Vietnam and Malaysia

Southeast Asia as a whole is a relatively young region. In 2017, the median age was 29 years (compared with an EU-wide median of 42). But the situation differs markedly from one country to the next, with median ages as high as 41 in Singapore and 39 in Thailand (both classed as "ageing societies", see Box 1), falling to 31 years in Vietnam and to 29 years in Malaysia, Indonesia and Myanmar. At the other end of the scale, Cambodia has a median age of 25, while in the Philippines it is as low as 23 years.

Every country in the region is expected to move from an "ageing society" to an "aged society" within 30 years. This transition is already well under way in Singapore and Thailand (where over-65s make up 13.7% and 11.0% of the population respectively), while Vietnam is not far behind, on 7.0%. Malaysia is set to join the group next year, when the share of over-65s should pass the 7% mark. Indonesia's population is predicted to age at the same rate, becoming an "aged society" within the next three decades.[1]

Box 1: Measuring the speed of population ageing

The WHO and the UN define an "ageing society" as one in which over-65s make up between 7% and 14% of the total population.

Demographers measure how quickly a country's population "ages" by counting the number of years between two points: when it becomes an "ageing society", and when it becomes an "aged society" (where over-65s make up over 14% of the total population).

This shift has already happened in France (115 years), the United States (69 years) and Japan (25 years).

The transition will happen at a sustained pace in Southeast Asia: 20 years for Thailand and Vietnam, and around 25 years for Singapore and Malaysia. Singapore is set to become an "aged society" as early as 2020 (13.7% of the population is already over 65) and Thailand is expected to follow suit by 2025. Both countries are forecast to become "super-aged societies" (in which over-65s make up 21% or more of the population) around a decade later.

On 1 January 2018, 19.6% of France's population was aged 65 or older. According to INSEE forecasts, that share will have risen to 21.8% by 2025, placing France among the group of "super-aged societies" (a category that already includes Japan, German and Italy).

The region's ageing population can be attributed to two factors acting in unison: an average 15-year increase in life expectancy since the early 1970s, and a rapidly declining fertility rate. Among Association of Southeast Asian Nations (ASEAN) countries, average life expectancy is 71 years, rising to over 75 years in Thailand, Vietnam and Malaysia, and peaking at just under 83 years in Singapore. Meanwhile, fertility now stands below the sub-replacement threshold in all four countries. In Singapore, the birth rate has declined from 2.1 children per woman in 1970 to 1.2 today, while in Thailand the benchmark rate has remained under 2.1 since the early 1990s.

1.2 Population ageing could constrain development momentum in the region

Aside from its speed, population ageing in the region has another distinctive feature: whereas western countries already had developed economies before their populations began ageing, the same cannot be said for Southeast Asia. ASEAN-wide gross national income (GNI) per capita is around $4,450, a long way short of the World Bank's high-income economy threshold of $12,055.

Thailand and Vietnam have thus far reaped the benefits of plentiful labour supply and cheap production costs, lifting them into the middle-income category. Yet as their populations age, and their comparative advantage fades, both are at risk of falling victim to the so-called "middle

(1) Over-65s accounted for 4% of Indonesia's population in 2015. According to UN estimates (medium-fertility scenario), this figure is expected to rise to around 7% by 2025 and to pass the 14% mark in 2050. Indonesian government forecasts, based on the 2010 census, suggest the share of over-60s will increase from 7.6% to 15.8% in 2035.

income trap" – and of growing old before getting rich. While Thailand's ambition is to achieve high-income country status by 2036, it will become an "aged" society in 2025 and a "super-aged" society in 2035. Likewise, Vietnam aims to raise GNI per capita from $2,545 in 2018 to $10,000 in 2035 – the very same year in which over-65s will break the 14% population-share barrier. Malaysia, with per-capita GNI in excess of $11,000, should be shielded from this risk. But Indonesia, where the ageing process will begin less than a decade from now, could well fall into the trap.

2. Population ageing could begin slowing growth in Thailand and Singapore in the next decade

For Thailand and Singapore, the two ASEAN countries where the ageing process is at is most advanced, the effects on economic growth could begin to filter through as early as the start of the next decade. In Thailand's case, the ageing population could curtail average annual growth by 0.7 percentage points between 2020 and 2050.[2] The effects should be felt less keenly in Singapore, where foreign nationals make up almost 40% of the working-age population. Here, population ageing is likely to trim just 0.2% percentage points off GDP growth (or 0.5 percentage points off GDP per capita growth). Without immigration, those figures would rise to 1 and 0.7 percentage points respectively.[3]

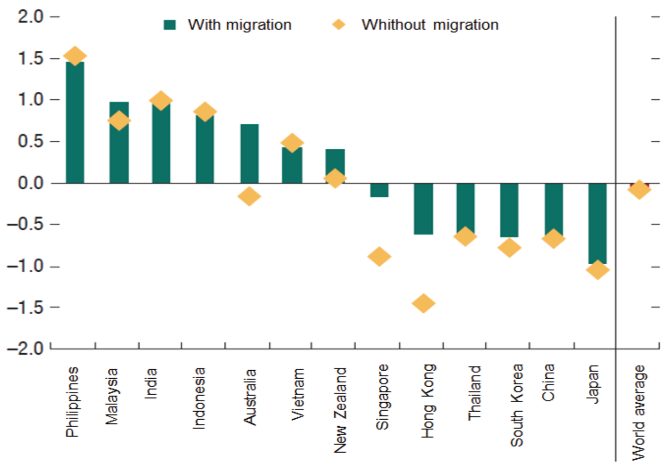
Demographic shifts are not expected to significantly impede near-term economic growth in Vietnam, where the International Monetary Fund (IMF) predicts only a slight dip in GDP per capita growth (down 0.1 percentage points) between 2020 and 2050.

2.1 Working-age population growth is falling already in four countries

In 2006-2010, the working-age population in Southeast Asia's three "ageing societies" grew at an average of 1.5% a year. The rate slowed to 0.8% in 2011-2015, and is expected to come in even lower, at 0.4%, in 2016-2020. The World Bank estimates that Thailand's working-age population could begin shrinking next year. This slowdown is weighing on growth potential across the region. Singapore and Thailand are reliant on immigration to fill a significant skilled and unskilled labour gap (1.4 million and 3 million foreign workers, with populations of 5.7 and 69 million respectively), while Vietnam's economy remains heavily dependent on labour-intensive manufacturing.

Labour-force participation is declining as the working-age population shrinks and people live longer. The United Nations Development Programme (UNDP) predicts that Southeast Asia's labour force, as a share of the total population, will peak at 69% in 2020. In Vietnam, Thailand and the Philippines, which have pay-as-you-go pension systems, declining labour-force participation is pushing up the pension burden, leaving workers with less disposable income. Although the long-established family support culture is on the decline, many Asian seniors still live with relatives, while cash transfers from other family members remain a significant source of income for many older people.[4]

Chart 1: Asia: Impact of demographic trends on real GDP growth, 2020-2050



Sources: IMF 2017.

IMF staff projections based on Amaglobeli and Shi 2016, UN 2015 (medium-fertility scenario), and Penn World Tables 9.0.
Note: The baseline estimates assume unchanged labour-force participation by age-gender cohort, constant capital-to-labour ratio, and total factor productivity growth unchanged from historical average. Migration projections follow historical trends. Global impact indicates the purchasing-power-parity-weighted average as a percent of global GDP.

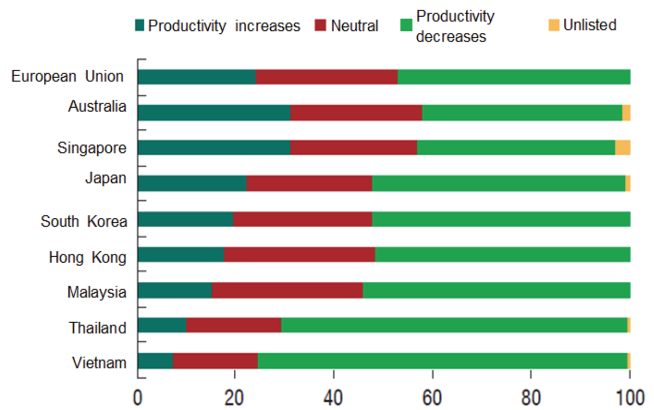
(2) IMF, "Asia and Pacific, Preparing for Choppy Seas", *Regional Economic Outlook*, April 2017, pp. 49-51.
(3) IMF per-country forecasts assume unchanged immigration trajectories.
(4) In both Thailand and Malaysia, around 80% of elderly people receive money from their children, and family transfers are still the number-one source of income for 36% of Thai seniors. In Singapore, 75% of over-65s were financially dependent on their children until the 2016 introduction of the Silver Support Scheme, which provides a cash supplement to the bottom 20% of elderly Singaporeans.

2.2 An older workforce is less productive

Productivity is expected to fall in most Asian countries as the region's population ages. Individual workers, especially technical professionals and manual labourers, become less productive with age. This is particularly true in the primary and secondary sectors, which employ the vast majority of workers in Vietnam, Thailand and Malaysia (see Chart 2). Some studies have also established a link between demographics and innovation potential, reporting a decline in innovation above a certain average age.[5]

Chart 2: : Share of workforce whose productivity rises or falls with ageing

As a percentage of total labor force, latest availabe data



Sources: International Labour Organization (ILO); Veen 2008; and IMF staff calculations.

Note: Category productivity "increases" with age comprises managers and professionals; category "neutral" comprises clerical support workers and services and sales workers; category "decreases" comprises technicians, skilled agricultural workers, forestry and fishery workers, craft and related trades workers, plant and machine operators and assemblers, elementary occupations, and armed forces occupations.

More generally, IMF economists estimate that population ageing could slow total factor productivity growth in Asia by between 0.1 and 0.3 percentage points a year.

Training the workforce is an effective solution to slowing productivity and skills obsolescence, but only if programmes are designed with their target audience in mind. At end-2017, for instance, 28% of people who had enrolled on Singapore's SkillsFuture programme – a government-funded future skills training scheme – were aged 55-69 years. But many of these older learners drop out part-way through the programme on account of ill-suited course content or teaching methods.[6]

2.3 Inadequate pension provision means seniors spend less

As people's income falls in later life, they are likely to scale back their spending. This is particularly true in Southeast Asia, where patterns of dissaving fall well below levels predicted by the life-cycle hypothesis. A shortage of reliable social safety nets forces seniors to maintain precautionary savings, although the amount they set aside is far from adequate.

Due to the persistence of the informal sector, only 15% of the region's working-age population saves for a pension. Other than in Vietnam, Thailand and the Philippines, workers typically pay into funded pension schemes. The figures vary between countries: fewer than 20% of working-age people have a pension in Thailand in Vietnam, compared with 60% in Singapore.

Moreover, earnings replacement rates are below 40% in Malaysia and Singapore,[7] as against 67% in Vietnam.[8] As a result, some 70% of Malaysian retirees draw down their entire pension pot within a decade, and 55% do so in the first five years. Many receive their pension in a single, lump-sum payment when they reach retirement age.[9] And while most countries in the region have health insurance schemes or provide subsidised medical care, out-of-pocket expenses remain high.

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(5) For the impact of ageing in the United States, see: Feyrer, J. (2008), "Aggregate evidence on the link between age structure and productivity", *Population and Development Review*, pp. 78-99. For the impact of demographic shifts in OECD countries, see: Aksoy, Y., Basso, H., Smith, R. and Grasil, T. (2015), "Demographic Structure and Macroeconomic Trends", *Birkbeck Working Papers in Economics and Finance*, No. 1501.

(6) Kok, P.S. (2019), "Reimagining Productive Longevity", *Ethos*, Civil Service College, January, pp. 4-21.

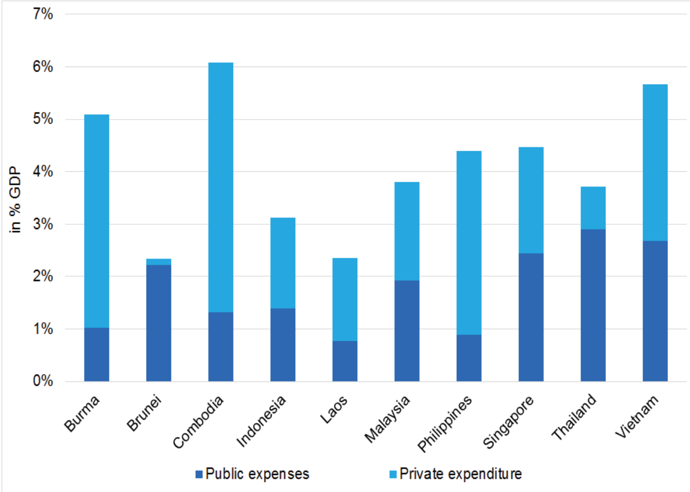
(7) In Singapore, almost 90% of households are owner-occupiers, which reduces the cost of living for retirees. The country's pension system, managed by the Central Provident Fund (CPF), was set up with the express purpose of helping people buy their own home. Workers can take a lump-sum payment from their pension pot before they reach retirement age, either to put towards a property purchase or to cover medical bills.

(8) OECD (2014), *Society at a glance: Asia/Pacific* 2014", p. 101.

(9) Employer Provident Fund study; results reproduced in Sulaiman, H. and Masud J. (2012), "Determinants of income security of older persons in Peninsular Malaysia", *Pertanika Journal of Social Sciences & Humanities*, Vol. 20 (1) 2012.

Although seniors have little option but to amass precautionary savings, the amounts they set aside are nowhere near enough. In Singapore, for instance, 67% of people expect their savings to run dry in their lifetime. Consequently, younger people anticipate having to prop up older relatives financially, leaving them with less disposable income. Some 70% of Singaporeans aged 19-25 years presume they will need to curtail their spending to support their parents.[10] This situation, whereby groups across the age spectrum spend less and keep more of their money in savings, could weigh on demand.

Chart 3: Government healthcare spending as a share of total healthcare spending in Southeast Asia



Sources: World Bank (2016), SER, Singapour.

3. Modest reforms to cope with an ageing population

3.1 Population ageing demands a rethink of how government spending is financed

Although the ILO puts the cost of pensions and elderly welfare benefits at just 1.4% of regional GDP, that figure is rising rapidly. By 2030, pension outlay is expected to more than double in Singapore and Malaysia, and rise to almost three times current levels in Thailand. Population ageing also pushes up healthcare spending as treatment costs increase, and as the effects of a growing elderly population – people typically in poorer health and with complex conditions – filter through. In Singapore, government healthcare spending jumped four-fold in 10 years, to 2.2% of GDP in 2015 and to 2.7% of GDP in 2017. Meanwhile, government healthcare spending as a share of total healthcare spending increased from 33% in 2005 to 53% in 2015. In most Southeast Asian countries, government spending accounts for between 20% and 50% of total healthcare spending, topping out at 78.1% in Thailand and 94.9% in Brunei.

These growing costs are likely to put public finances under strain across the region. The problem could be especially acute in Thailand and Vietnam, which have eschewed funded pension systems and opted instead for pay-as-you-go schemes with relatively high earnings replacement rates and low employee contributions.[11] Both systems could fall into deficit within the next 20 years and potentially run out of reserves altogether some time before 2040 or 2050.[12] Public debt currently stands at 41.9% of GDP in Thailand and 58.5% of GDP in Vietnam.

Singapore and Malaysia seem better prepared to cope with the growing costs of an ageing population, with rising pension outlays posing only a modest fiscal sustainability risk in the medium term (Malaysia's public debt stands at 54.1% of GDP, while Singapore posted a surplus equivalent to 0.4% of GDP in 2018).

(10) NTUC Income study, Nielsen, 2018.
(11) The estimated long-term cost of Thailand's pension system is 11.6% of earnings, but the current contribution rate is just 6%, with employers and employees contributing an equal share. In the Philippines, the contribution rate is again low, at 11%. It is higher in Vietnam, at 22%.
(12) World Bank (2016), Republic of the Philippines Review of the Social Security System", June 2016; Park D. (ed.) (2011), P*ension Systems and Old-Age Income Support in East and Southeast Asia*", Asian Development Bank, 2011/2012.

Table 1: Forecast trajectory of old-age spending (as a % of GDP)

	Cost of non-healthcare benefits (latest available year/ 2015)	Change in cost of pensions, 2015-2030	Cost of healthcare spending (2015)	Change in cost of healthcare spending, 2015-2030
Singapore	0.7	+0.8	2.2	–
Thailand	2,.2	+3.8	2.9	+0.7
Vietnam	5.5	+2.5	2.4	+0.5
Malaysia	0.9	+2.1	2.1	+0.5

Sources: ILO (2017), IMF (2018).

The Singaporean government has also introduced tax reforms in anticipation of growing public spending, especially on old-age healthcare. The general sales tax (GST) will rise from 7% to 9% between 2021 and 2025, while buyer's stamp duty on properties worth more than 1 million SGD increased from 3% to 4% in 2018. In 2019, the government also announced 11.2 billion SGD in funding for two new packages to top up allowances paid to Singaporeans born between 1950 and 1959 (12% of the population), and to cover ageing-related healthcare costs.

Although pension reform is not a fiscal necessity in Singapore or Malaysia, some economists stress that the systems are inadequate because there is no guaranteed minimum income for people who have not contributed enough over the course of their working life.

3.2 ASEAN countries are delaying retirement age to capture a second demographic dividend

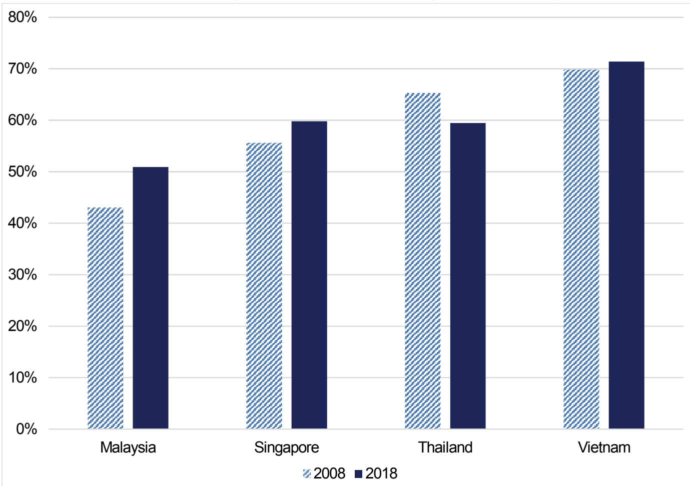
As Southeast Asia's working-age population shrinks, governments are responding by keeping people in work for longer.

In most countries across the region, the legal retirement age is currently 60 years. In Vietnam, the age will rise to 62 years for men and 60 years for women in 2021 (up from 60 and 55 years at present). In Thailand, it will increase to 63 years in 2024. In Indonesia, the retirement age will be pushed back from 56 years at present to 65 years in 2043. In 2019, Singapore announced a hike from the current 62 years to 65 years by 2030. Malaysia is considering a similar move.

In Singapore, the government has also taken steps to encourage older people to keep working. Pension entitlement is decoupled from work. Under the pre-reform system, Singaporeans could retire at 62 but were not eligible to draw a pension until the age of 65 – a situation that strongly encouraged them to keep working. Once they reached 65, they could still claim a pension alongside their earnings. In addition, employers were legally required to offer re-employment to eligible employees up to the age of 67 (rising to 70 in the post-2019 reformed system). As a result, labour-force participation among older age cohorts rose sharply between 2008 and 2018: from 48.8% to 62.2% among 60-64 year-olds, and from 27.5% to 43.5% among 65-69 year-olds. There has been a similar spike in the share of over-70s in employment, which stood at 17% last year.

Singapore and Malaysia could also offset the impact of population ageing by increasing women's participation in the labour force. In 2018, the employment rate for women stood at 50.9% in Malaysia and 59.8% in Singapore, compared with 60% in Thailand (a sharp decrease since 2011) and 71.4% in Vietnam.

Chart 4: Employment rate among women aged 15+



Sources: ILO, Statistics Singapore, CEIC.

3.3 Countries need to plug gaps in healthcare provision as their populations age

Health-adjusted life expectancy in Southeast Asia has improved in recent years but remains nine years below total life expectancy. Demand for healthcare is likely to increase as the population ages and economies move into higher income bands. But a shortage of medical doctors (fewer than 10 per 10,000 population on average, compared with an OECD average of 34) and inadequate hospital infrastructure could leave the region's healthcare systems struggling to cope with a growing number of elderly patients with complex conditions. Governments and private hospital operators, especially in Malaysia and Thailand, are building new facilities to plug the gap.

Authorities across the region are also exploring alternative options such as home care and community health centres, and capturing the opportunities of medtech and other new technologies, in an effort to increase access to healthcare and achieve productivity gains. In Singapore, a telemedicine service has been launched in public hospitals, although the service is currently limited to certain follow-up consultations. Other countries could capitalise on high internet penetration rates (66.3% in Vietnam and 82% in Thailand), and widespread uptake of domestic services more generally, to expand telemedicine provision and bring healthcare services to isolated sections of the population. In Indonesia, for instance, 14% of people who own a mobile phone (all age groups combined) have used a service of this type.

In any event, rapidly growing demand for healthcare in the ASEAN region brings with it a wealth of technical cooperation and business opportunities.

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