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ALLIANZ RESEARCH

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EXECUTIVE SUMMARY



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- The Asia-Pacific region has fared better than most other regions during the Covid-19 crisis: Economic activity is likely to have declined by less than -2% in 2020, compared to more than -4% at the global level and almost -8% in Latin America. But labor markets were hit hard, predominantly impacting poor and low-income earners, who work often in the informal labor market with limited access to social security. This has spurred income inequality in many markets.
- The pandemic poses only a brief interruption to the aging trend in Asia: Within the next thirty years, Asia's population of those aged 65 years and older is expected to more than double from around 412mn today to 955mn in 2050; the share of this age group in the total population is set to reach 18% by then.
- There are still marked differences in the development stages of the region's pension systems, not least when comparing pension coverage ratios, which span from 3% in Cambodia to 100% in Japan. Equally huge disparities can be observed in private wealth: In Taiwan, net financial assets by households accounted for more than 400% of total GDP in 2019, while in Sri Lanka, Cambodia, Vietnam, Indonesia and the Philippines the corresponding figure was less than 50%.
- The main cause of concern with respect to the long-term sustainability is the pension age in many markets, which does not reflect the gains in life expectancy over the last decades. And although some markets are discussing an increase in the retirement age, the planned changes might not be sufficient to level the expected increases in further life expectancy.
- The message of our proprietary Allianz Pension Indicator (API) is clear: There is no market in Asia that doesn't need pension reforms. The necessary breadth and depth of reforms might differ – but not their urgency. The looming demographic crisis does not allow for pension and financial system reforms to be put on the back burner.

A TEMPORARY HIT WITH LASTING EFFECTS ON INEQUALITY—BUT NOT ON AGING

At the time of writing, the Covid-19 pandemic had already caused more than two million premature deaths worldwide, along with the most severe economic downturn since the Second World War. In 2020, global GDP is likely to have slumped by more than -4%, surpassing the contraction seen during the 2009 Great Financial Crisis by a wide margin (-0.1% in 2009). Although governments took unprecedented fiscal measures to mitigate the blow to livelihoods, Covid-19 has exacerbated existing inequalities which will probably still be felt in years from now. Scars will remain not only from the deep recession, rising unemployment and interrupted education but also from some of the support measures, which may backfire in the long run. Short-term fixes such as the temporary reduction or suspension of pension contributions or the temporary allowance to withdraw pension fund savings to ease financial burdens could increase the likelihood of old-age poverty in the years to come.

Like fiscal policies, monetary policies came to the rescue and flooded markets with ample liquidity. Here, too, the results are ambiguous. On the one hand, the latest available figures indicate that private households' financial assets proved to be almost immune to the virus. In most markets, the Covid-19 crisis is expected to leave nothing but a dip in the assets growth rate as capital markets have rallied since the March 2020 turbulence and savings rates leaped following lockdowns and reduced consumption opportunities. On the other hand, there are also some developments that raise concerns: ultra-low interest-fueled credit-financed consumption and rising

public expenditure, leading to a sharp increase in loan-to-GDP ratios. As lower income groups were especially hit by the crisis, they were also the ones who had to take out credit or make use of the offer to withdraw pension fund assets, tapping into their often already meagre savings for old age. As a consequence, the income and wealth gap has become wider.

Thus, one of the (unwelcome) legacies of the crisis and temporary stimulus measures such as the reductions in pension savings might be a higher number of the elderly who depend on social welfare in old age in the long run. Given the still very young populations in most Asian markets, old-age poverty currently seems to be only a minor problem. But the rapid aging of Asian societies, only briefly halted by Covid-19, will turn it into a major one if there are no efforts to build demography-proof pension systems, which would also be an important stabilizer in economic downturns, thanks to the consumption expenditures of pensioners.

In order to cushion the impact of population aging on pay-as-you-go financed pension systems, complementary capital-funded old-age provision is going to be necessary to secure a decent living standard in old age. Thus, increasing the access to financial services and further efforts to improve financial literacy are indispensable.

This report aims to give an overview on the current state of the pension systems in the region and future reform needs in order to make them demography-proof, guided by our proprietary Allianz Pension Indicator. It also includes

an analysis of private households' financial asset structure that hints at the awareness of the need for private pension provision, the accessibility of financial services and, last but not least, the development stage of the financial system.

Asia has weathered the Covid-19 crisis in relatively good shape, and its starting position for the 2020s is better than in most other regions. However, it should not forfeit its advantage by ignoring the looming demographic crisis. The next generations of Asians would have to pay a heavy price for such negligence, and it could even spell the premature end of the Asian century. It's time to act.

THE COVID-19 PANDEMIC'S IMPACT ON GROWTH, INEQUALITY AND AGING

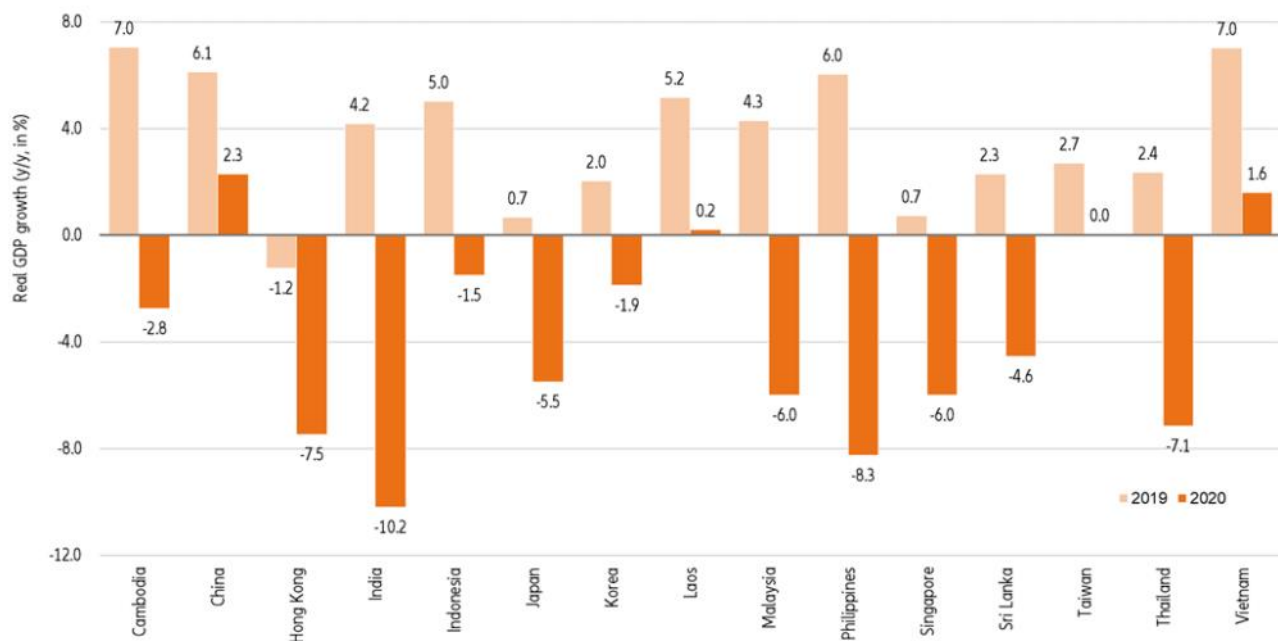
The Covid-19 pandemic has caused the most severe economic contraction in decades. The Asia-Pacific region, however, has fared better than most. For 2020, our projections point to a decline in economic activity of less than -2% in the region while global output is likely to have shrunk by more than -4%; in Latin America, for example, GDP will have slumped by almost -8%. Yet, Asia-Pacific's modest fall in economic activity conceals an unusually large dispersion of performance within the region: The hardest-hit countries in the region include India, Hong Kong, the Philippines and Thailand. The Indian economy, for example, is expected to

have shrunk by -10.2% in 2020. China, on the other hand, has already reported real growth of +2.3% in 2020. The other heavyweight of the region, Japan, was in between, with a GDP decline of -5.5% in 2020. All in all, these numbers are a far cry from the dynamic development that was observed just one year before: In 2019, real growth rates in the region's emerging economies ranged between +4.2% and +7.0% (Figure 1).

Although the pandemic crisis was not as severe in Asia as in other parts of the world, it wreaked havoc on the labor markets. Rising unemployment rates

and reductions of working hours equalling 30 million full time jobs lost in the third quarter of 2020 alone¹. Those hit were the poor and low-income earners who often work in the informal labor market with limited access to social security, thus spurring income inequality in many markets. These inequalities will also translate into inequalities in old age as many low-income earners neither have access to a public or occupational pension system nor enough earnings for private old-age provision. Temporary reductions of contribution rates or granting the possibility to draw from employee provident funds, as seen in

Figure 1: The Covid-19 pandemic took a toll on economic growth



Sources: IMF, Allianz Research.

1. Referring to South-East Asia: See ILO (2020), Asia-Pacific Employment and Social Outlook, p. 6 and p. 17.

China, Malaysia and Singapore, could also increase the gap. As lower income households are particularly set to make use of these offers, they will face reduced pension income in the future. Thus, the Covid-19 pandemic has shown the importance of functioning social security systems. This also holds true for public pension provision, not only from an individual point of view, but also from the macroeconomic perspective: an adequate pension system that provides a decent living standard in old age tends to have a stabilizing effect on consumption in times of crisis.

By causing millions of premature deaths around the world, the Covid-19 crisis also reduced the average period life expectancy in 2020 by several months, in some markets maybe even years. But the underlying demographic trends

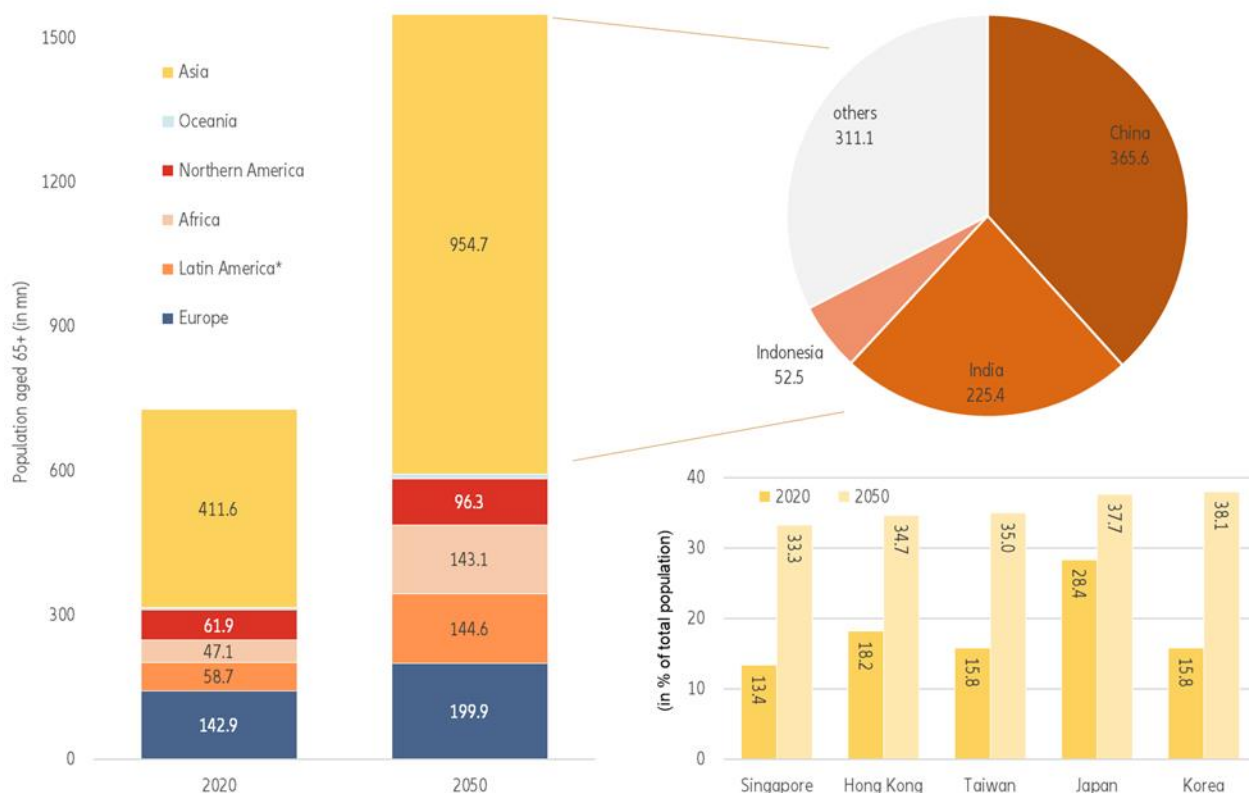
are going to remain intact: Due to decreasing fertility rates and increasing life expectancy, the world's population will continue to age.

Asia is one of the regions where the outcomes of this trend are going to be most evident. Within the next thirty years, Asia's population aged 65 years and older is expected to more than double from around 412mn today to 955mn in 2050; the share of this age group in the total population is set to reach 18% by then². This means that in some Asian markets, the share of the elderly is set to more than double within less than a generation; in Europe, this took more than 50 years.

In 2050, around two thirds of Asia's population aged 65 and older will be located in just three markets: 366mn,

i.e. more than a third, in China, 225mn in India and 52mn in Indonesia, which will have surpassed Japan as the place with the third-highest number of elderly citizens in Asia by then. South Korea is set to replace Japan as the place with the oldest population in Asia; together with Hong Kong, Japan, Singapore and Taiwan, it will be among the ten markets³ with the oldest populations worldwide. By mid-century, in all five markets, at least one third of the population will be aged 65 or older, with the shares in Japan and South Korea reaching almost 40%. This is all the more remarkable as Singapore, South Korea, Taiwan and Hong Kong still have relatively young populations today, with the share of the elderly ranging between 13.4% and 18.2% (Figure 2).

Figure 2: In 2050, 955mn of the world's 1.5bn elderly people will live in Asia



Source: UN, Department of Economic and Social Affairs, Population Division (2019).

2. See UN, Department of Economic and Social Affairs, Population Division (2019). In the UN's constant-mortality scenario, the number of people aged 65 and their share in total population are expected to increase to 826.4mn and 16.3%, respectively.

3. The others are Spain, Greece, Italy, Portugal and Puerto Rico; see UN, Department of Economic and Social Affairs, Population Division (2019).

By 2050, the average life expectancy of 65 year olds is also set to increase further. Among the markets covered in our report, Laos and Hong Kong set the borders: The average further life expectancy is set to range from 14 years in Laos to 23.1 years in Hong Kong for males, and between 16.8 years and 27.8 years for women (Figure 3).

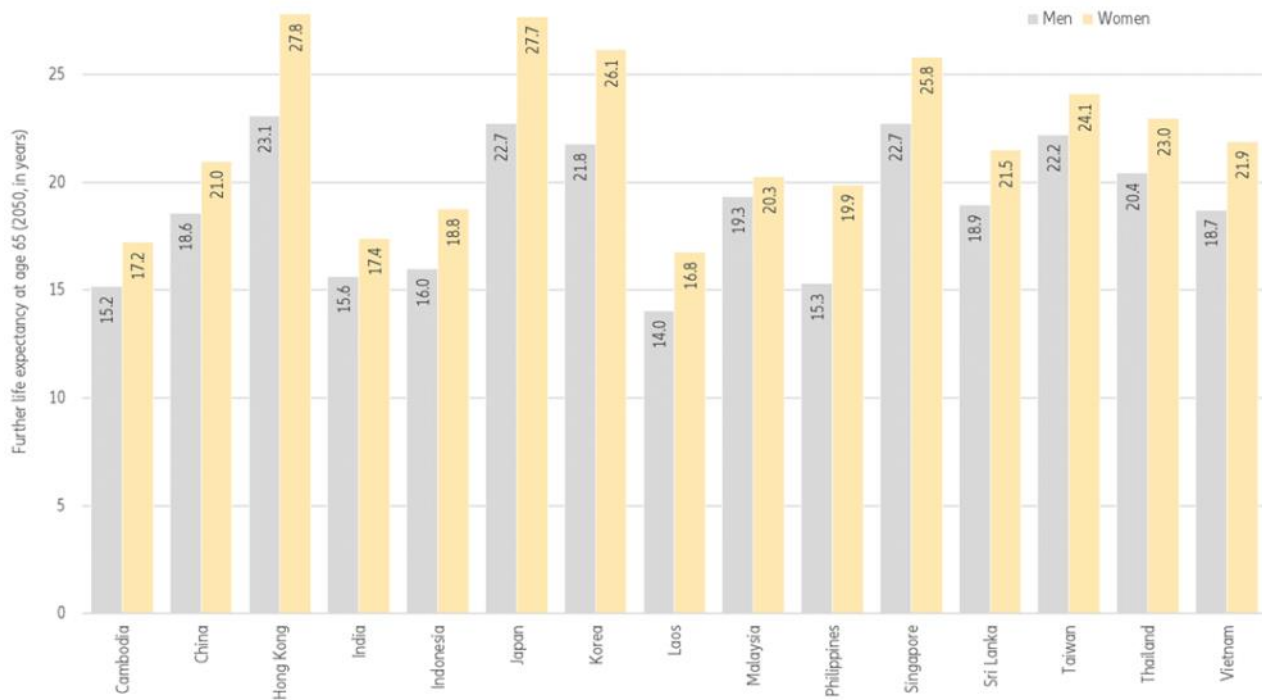
Thus, one of the main future challenges will be how to finance the longer retirement periods of an increasing number of people. Combined with the breakup of traditional family structures, not least due to decreasing fertility rates⁴, there is a rising need for sustainable pension systems that guarantee a decent living standard in old age. Though the

development stages of Asia's pension systems differ markedly, they have one thing in common: The window of opportunity to make them demography-proof is gradually getting smaller.

Besides the rapid demographic change, most markets have one further argument in common for striving for demography-proof, i.e. sustainable and adequate pension systems: Due to their fiscal support measures to cushion the impact of the Covid-19 crisis, general government gross debt has increased and thus their future financial leeway to subsidize pension systems has shrunk. However, there are marked differences with respect to the degree of indebted-

ness: while the gross budget deficit of Japan is expected to reach 266%, that of Hong Kong will probably remain below 1%⁵ (Figure 4).

Figure 3: In most Asian markets, women are set to spend more than 20 years in retirement

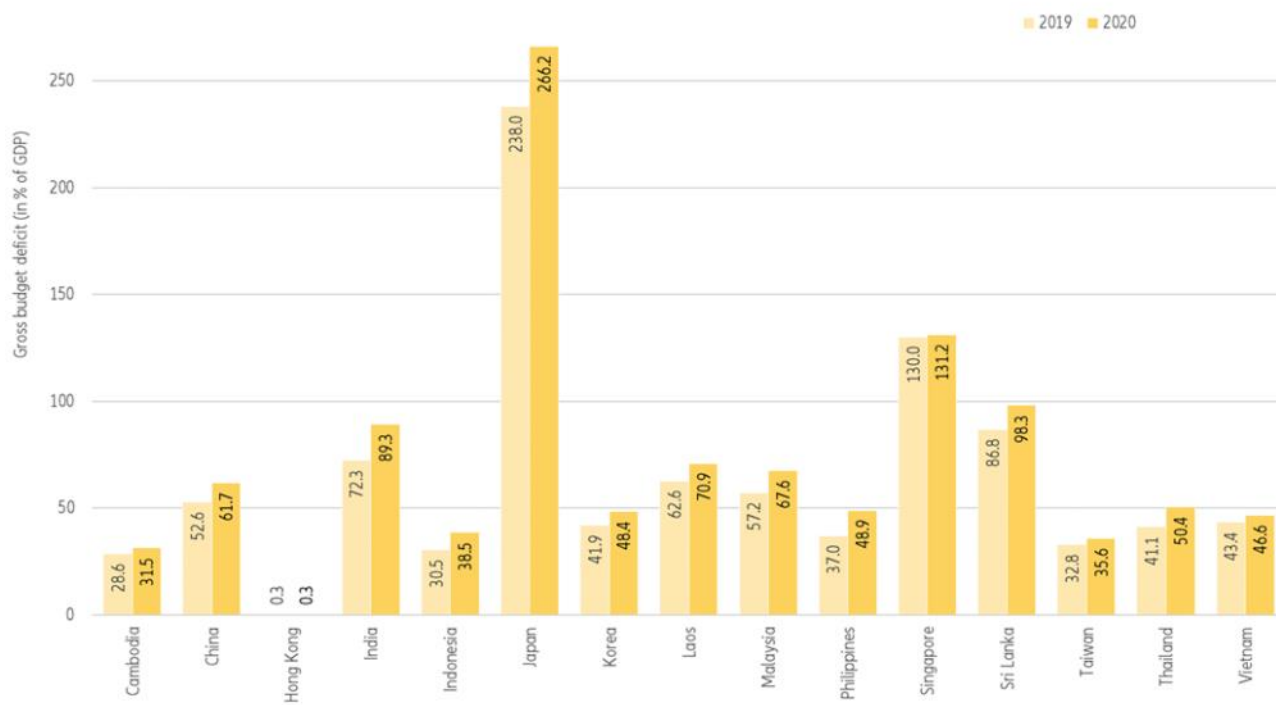


Source: UN, Department of Economic and Social Affairs, Population Division (2019).

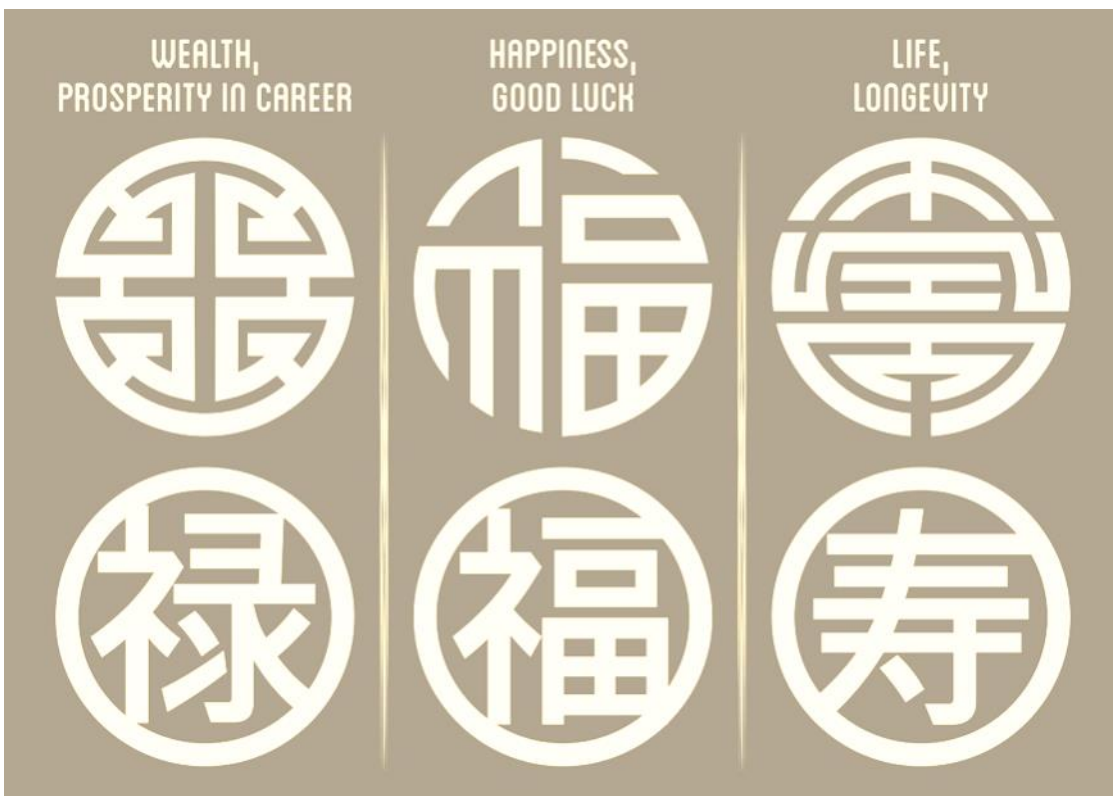
4. The average number of children per women in Asia declined within the last 50 years from 5.5 children to 2.2 children in 2020 and is expected to fall below the reproduction level of 2.1 in the course of the next five years. UN, Department of Economic and Social Affairs, Population Division (2019).

5. IMF (2020), World Economic Outlook October 2020, database.

Figure 4: The Covid-19 crisis has diminished governments' financial leeway



Source: IMF World Economic Outlook October 2020.



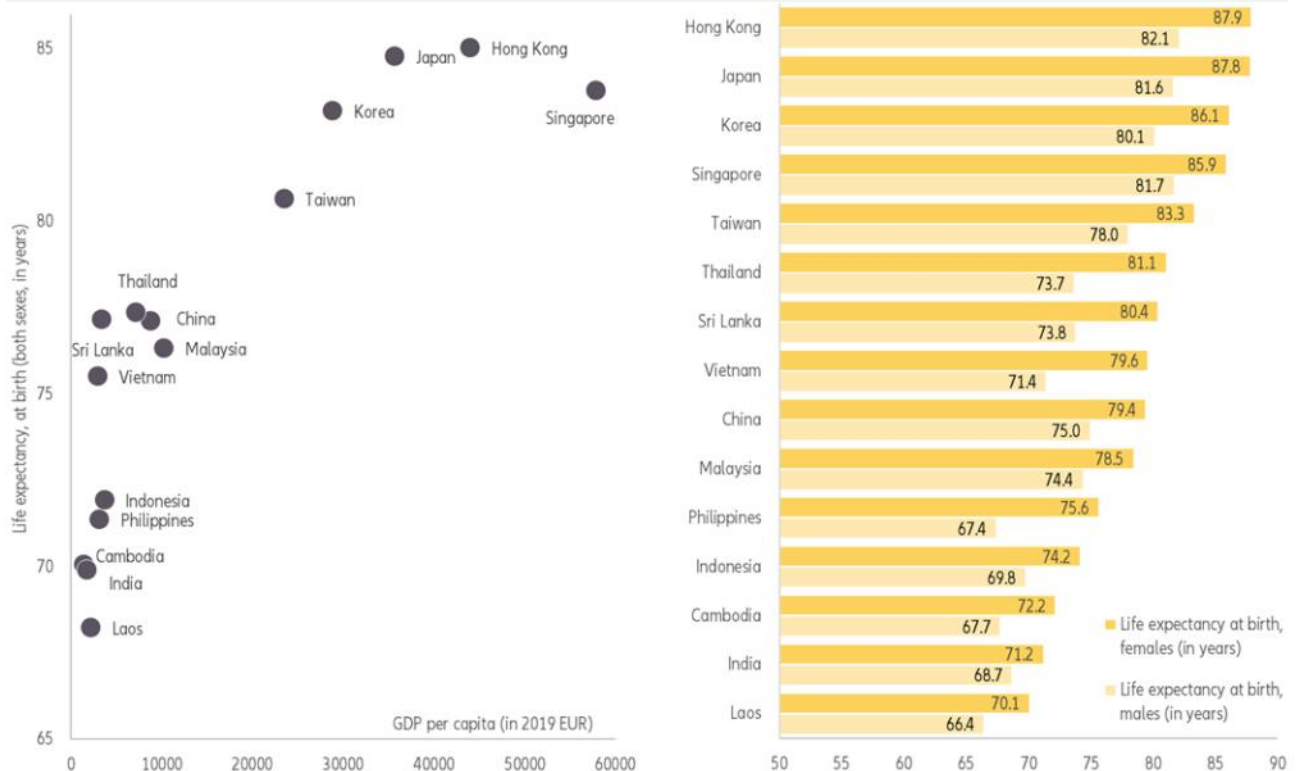
DIFFERENT STARTING POINTS FOR PENSION REFORMS IN ASIA

There are marked differences between the 15 Asian markets that we cover in our report with respect to the overall development stage and prosperity level, as well as the pension system. The GDP per capita and average life expectancy at birth are indicators for the overall development stage of a market. Both factors are positively correlated: The higher the GDP per capita, the higher in general the average life expectancy.

Among the 15 markets we cover in this report are three with the highest average life expectancy worldwide, namely Hong Kong, Japan and Singapore, and one with the lowest in Asia, Laos. According to the latest available UN estimates, the difference in average life expectancy at birth was 16.8 years, ranging from 68.2 years in Laos, where GDP per capita amounted to merely EUR2,290 at the end of 2019, to 85.0 years in Hong Kong, where GDP per

capita was EUR44,060 or almost 20 times that of Laos (Figure 5).

Figure 5: GDP per capita and average life expectancy as indicators for prosperity



Source: UN, Department of Economic and Social Affairs, Population Division (2019).

Babies born in the richer Asian markets can also expect to spend a longer time of their lives in good health than those born in the poorer markets due to higher living standards, including better access to medical services. The healthy life expectancy at birth ranged between an average 60 years in India to more than 74 years in Japan. As a consequence, they also have a markedly higher chance to reach the age of 65 than their peers in poorer markets. While only 65% of newborn boys in the Philippines could expect to celebrate their 65th birthday, this held true for more than 90% of those born in Singapore. The respective shares for newborn girls ranged from 74% to almost 95% in Hong Kong (Figure 6).⁶

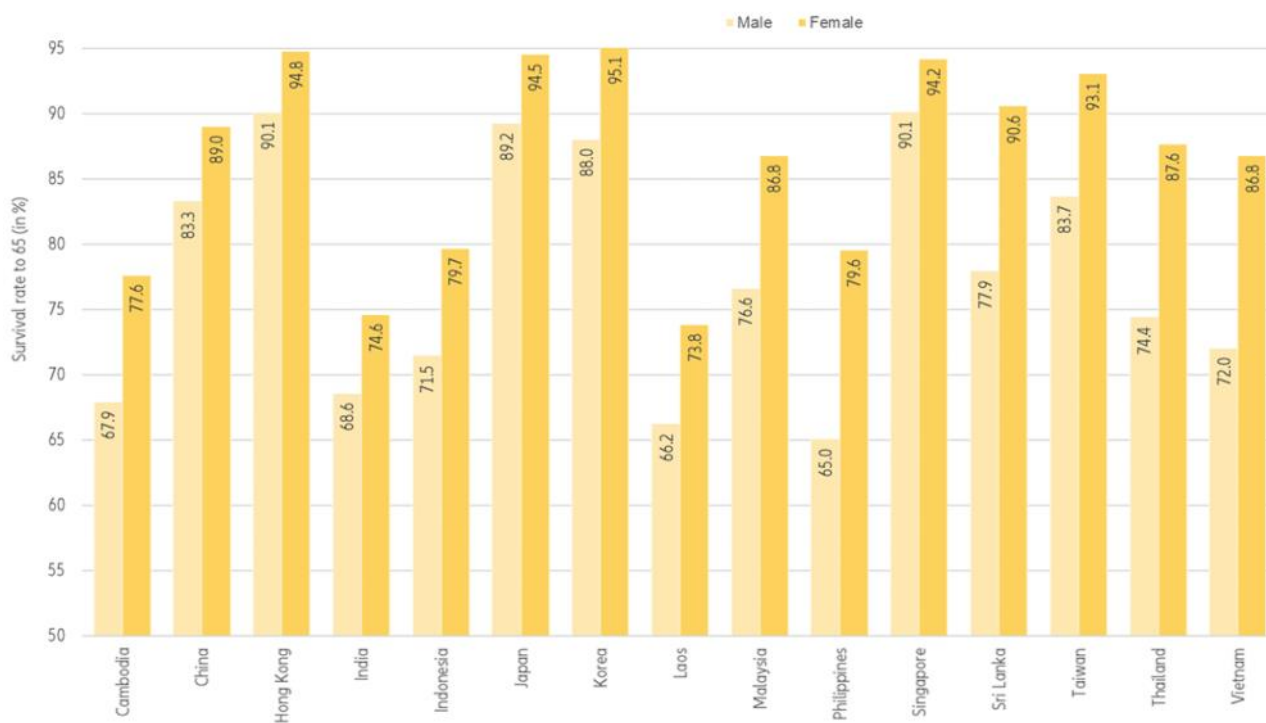
Furthermore, the degree of urbanization, the share of employment in agriculture and the share of internet users

in the population have an impact on the access to pension coverage and financial services. The more people are employed in the formal sector, i.e., the industrial and service sector, the higher is the coverage of (formal) public and occupational pension systems. In markets with a higher degree of urbanization, it is often easier to provide access to financial services than in states where a large part of the population lives in remote areas. And the use of the internet is an indicator for the access to information and online (financial) services. The 15 markets differ markedly in these respects: While Singapore is a city-state with 100% of its population living in urban areas and a mere 0.7% of the labor force still working in agriculture, more than 80% of Sri Lanka's population live in rural areas and almost 62% are employed in agriculture in Laos. The same holds true for internet use: with more than 96%, South

Korea has the highest share of internet users of the markets, in contrast to Laos, where only 25% use the internet⁷.

Thus, the preconditions and prosperity levels differ markedly between the analyzed markets. While Hong Kong, Singapore and Japan are among the markets with the highest living standards in the world, boasting well-developed – though not necessarily long-term sustainable – pension systems, there is still marked backlog demand for old-age protection in Cambodia, Laos and India, where living standards are generally lower. Thus, the differences with respect to the urgency of and the reason for pension reforms between the markets in Asia are huge.

Figure 6: Chance of reaching the age of 65



Source: World Bank, World Development Indicators.

6. Data referring to 2018. See World Bank (2020). World Development Indicators.

7. Data referring to 2020. See World Bank (2020). World Development Indicators.

Though there is broad consensus about the need of a sustainable and adequate pension system and ongoing discussions in many markets about necessary increases of the retirement age with respect to rising life expectancy, there are still marked differences in the development stages of the region's pension systems. These become most obvious when comparing the coverage ratios and the public spending for old age, with low levels of the latter in some markets not only reflecting the favorable age structure of the population but rather the low development stage of the pension system.

According to latest available ILO data, the pension coverage of the working age population ranges between a mere 3% in Cambodia to 100% in Japan. And while in China, Japan and South

Korea every inhabitant aged 65 and older is covered, only 7% of Lao's elderly population receives a pension (Figure 7).

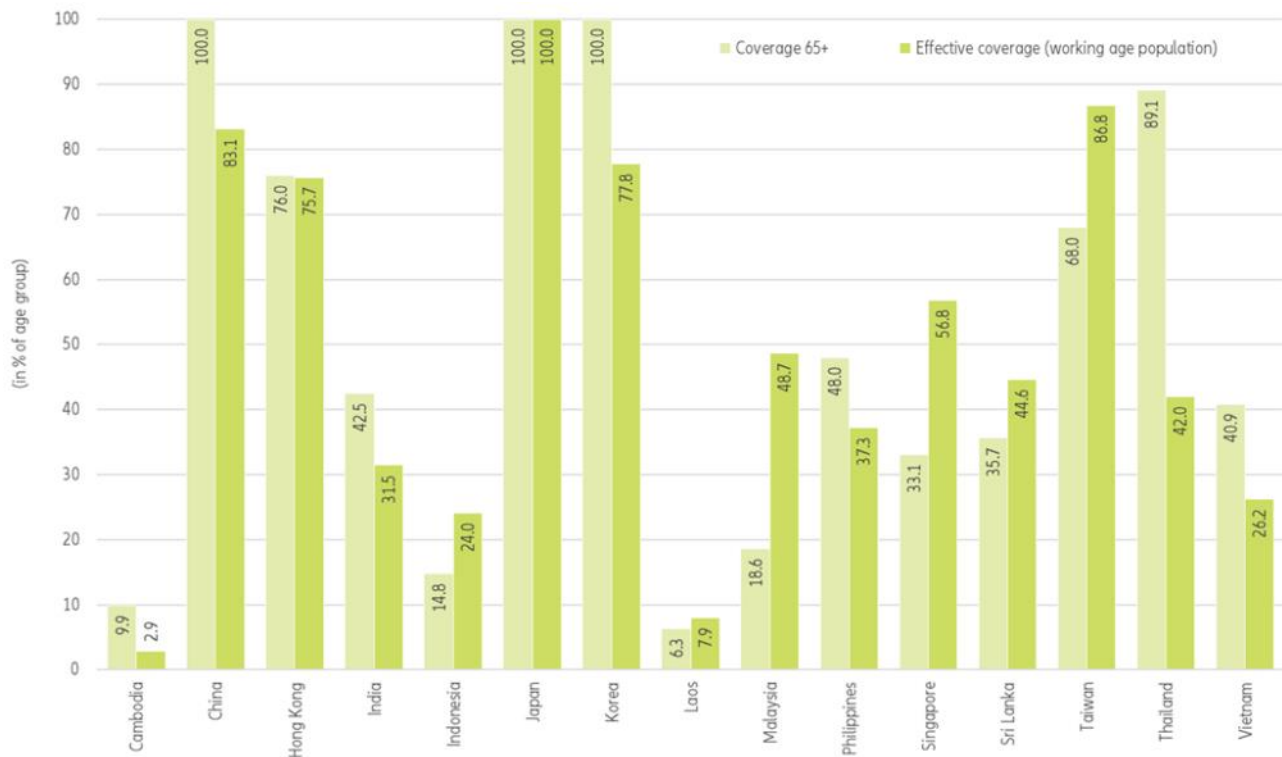
In some countries, like Laos, India and Cambodia, it is mainly public sector employees who are covered by pension systems, while workers who are often employed in the informal sector have no access to the public pension system⁸. However, universal pension coverage does not automatically imply an equal distribution of pension income: A recently published survey found marked inequalities between rural and urban pensions in China⁹, for example.

Unfortunately, the markets with low pension coverage rates are in most cases also those where the financial system and thus the means for private

pension provision are still rather underdeveloped. The indicators for this are the share of the population with an account at a financial institution, private households' asset structure and the sum of private households' net financial assets compared to GDP.

In Cambodia, Laos, the Philippines and Vietnam, less than a third of the population aged 15 and older had an account at a financial institution, while in the rich city states Hong Kong and Singapore, as well as in Japan, Taiwan and South Korea, close to 100% of the population had their own account¹⁰. In the remaining markets there is still backlog demand, but due to government efforts the accessibility of financial services has already improved markedly in recent years (Figure 8, on page 11).

Figure 7: Marked differences in pension coverage



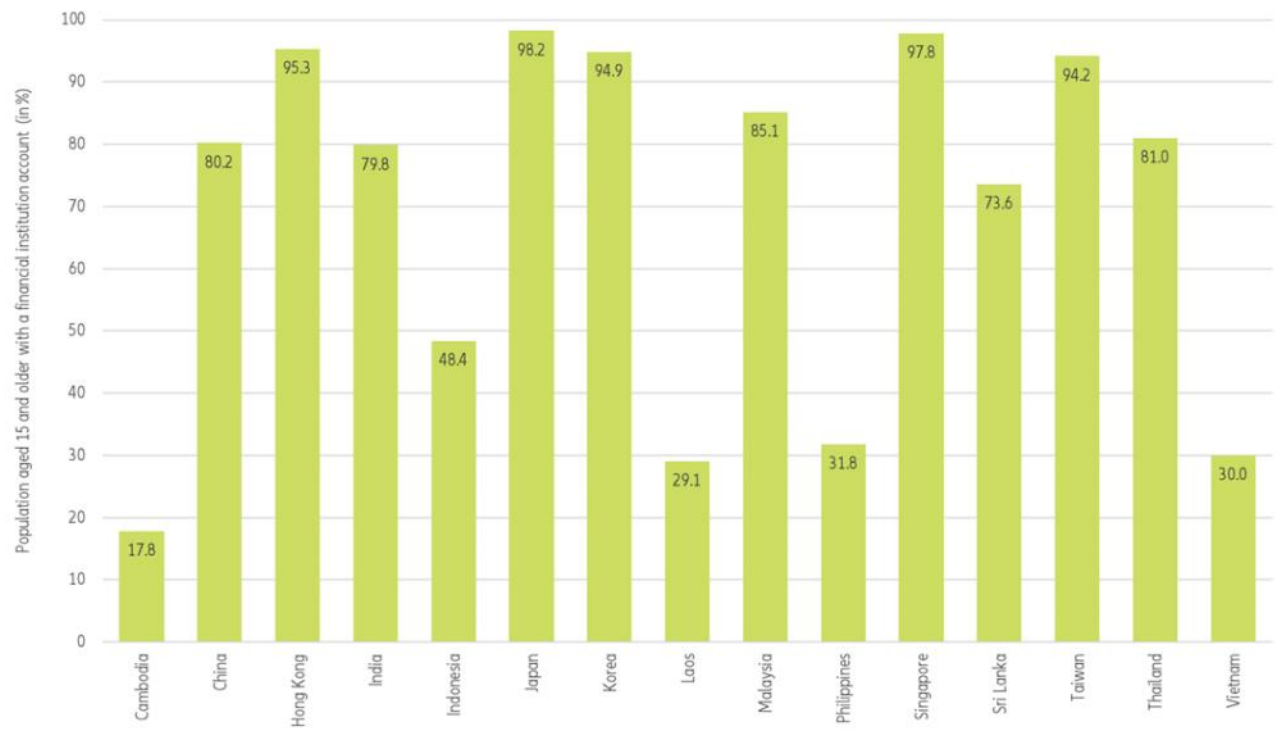
Source: ILO.

8. See for example Hilamo Heikki, Audrius Bitinas and Narith Chan (2020): Extending pension coverage in Cambodia [...], p. 101.

9. Shen, Ce et al. (2020): Does a universal non-contributory social pension make sense for rural China, p. 9.

10. See Worldbank (2018): Global Findex Database 2017.

Figure 8: Access to financial services – crucial for private old age provision



Source: World Bank, Global Findex Database.



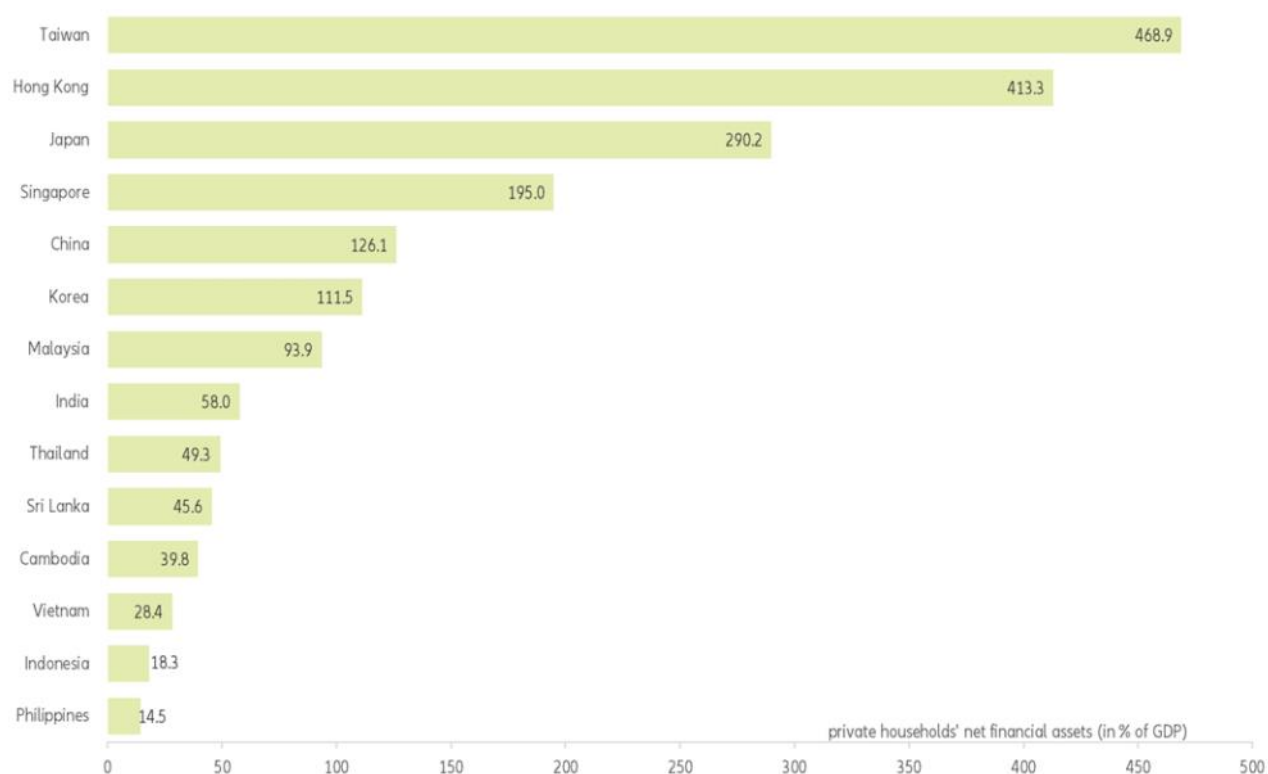
The access to financial services corresponds with the size of private households' financial assets and the portfolio structure. Of course, the richest markets in the region, measured in GDP per capita, are also the markets with the highest financial assets. In Taiwan, net financial assets accounted for more than 450% of total GDP, while in Sri Lanka, Cambodia, Vietnam, Indonesia and the Philippines they amounted to less than 50% of the respective GDP (Figure 9).

In some markets, the indebtedness of private households is a cause for concern. At the end of 2019, the debt-to-GDP ratios in Thailand, South Korea and Malaysia were already above 80% (Figure 10).

The latest available data indicate that in the course of the crisis, the debt-to-GDP has increased further in some markets. In Malaysia, for example, it increased to 87.5% at the end of the third quarter of 2020, especially due to

a rise in car loans that was triggered by a government stimulus programs cutting the sales taxes on cars¹¹. In contrast, we observe a consolidation in Singapore, for example, where credit card loans in particular decreased markedly. However as the GDP downturn has probably outpaced the decline in loans, even here the indebtedness ratio is expected to increase despite households' discipline¹².

Figure 9: Marked differences in private households' net financial assets (2019)

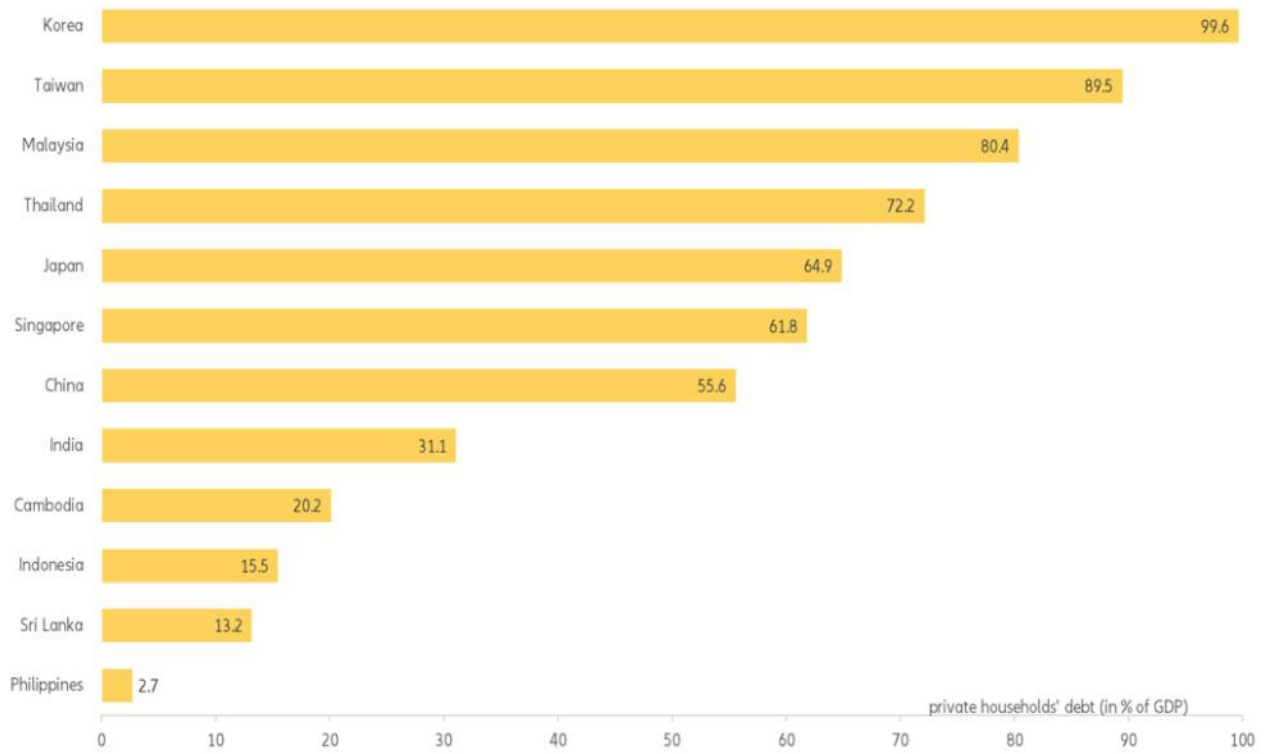


Source: Allianz Global Wealth Report 2020.

11. Bank Negara Malaysia (2020): Quarterly Bulletin 3Q 2020.

12. Statistical Office of Singapore (2020): Household Sector Balance Sheet and Monetary Authority of Singapore (2020): Financial Stability Review 2020, p. 27.

Figure 10: Marked differences in households' indebtedness (2019)



Source: Allianz Global Wealth Report 2020.



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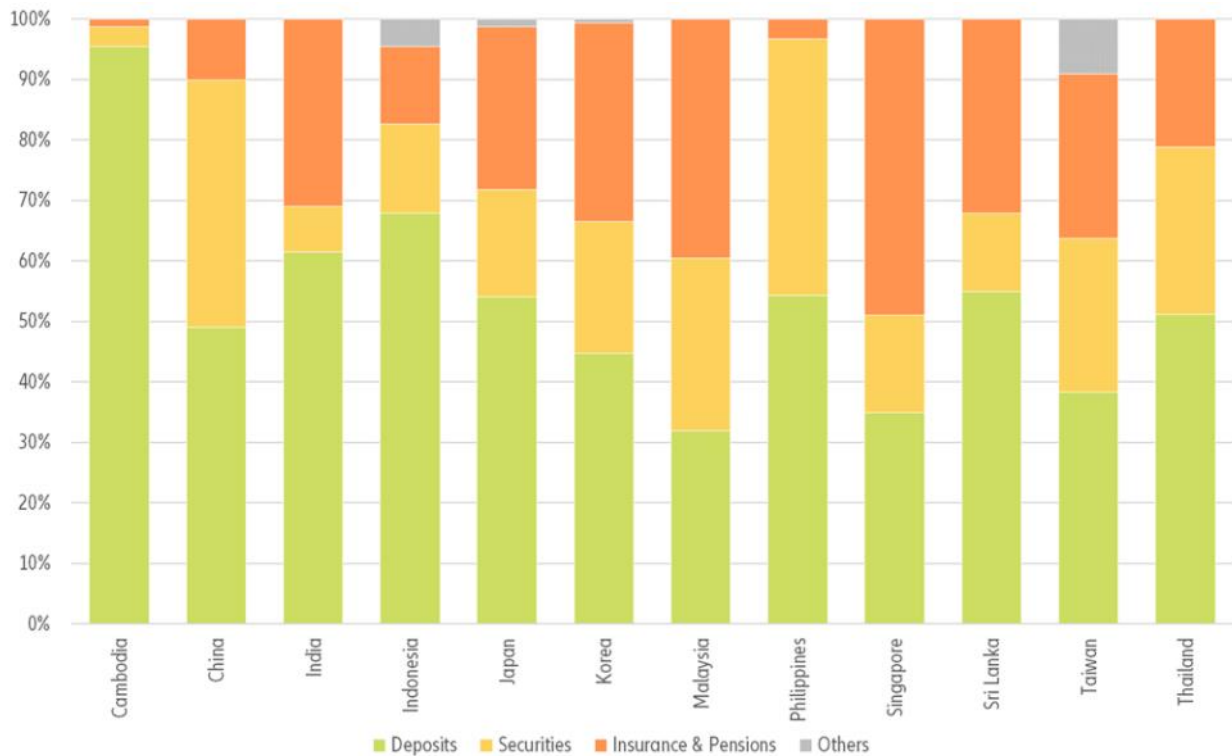
Furthermore, we also observe differences in the asset structure of private households, which reflects not only the overall development stage of the financial system and the accessibility of financial services but also the awareness of the need for old-age provision. In markets with less-developed financial systems such as Cambodia, India, Indonesia, the Philippines, Sri Lanka, and Thailand, bank deposits are still the dominating asset class, with shares in total assets markedly above 50%. In the other markets, life insurance and pension products as well

as securities play a more important role. The only exception is Japan, where the subdued development of the stock market – the Nikkei only picked up in recent years and reached a value close that seen in 1991 for the first time at the end of 2017 – and some distortions on the life insurance market, bank deposits are the first choice asset class (Figure 11).

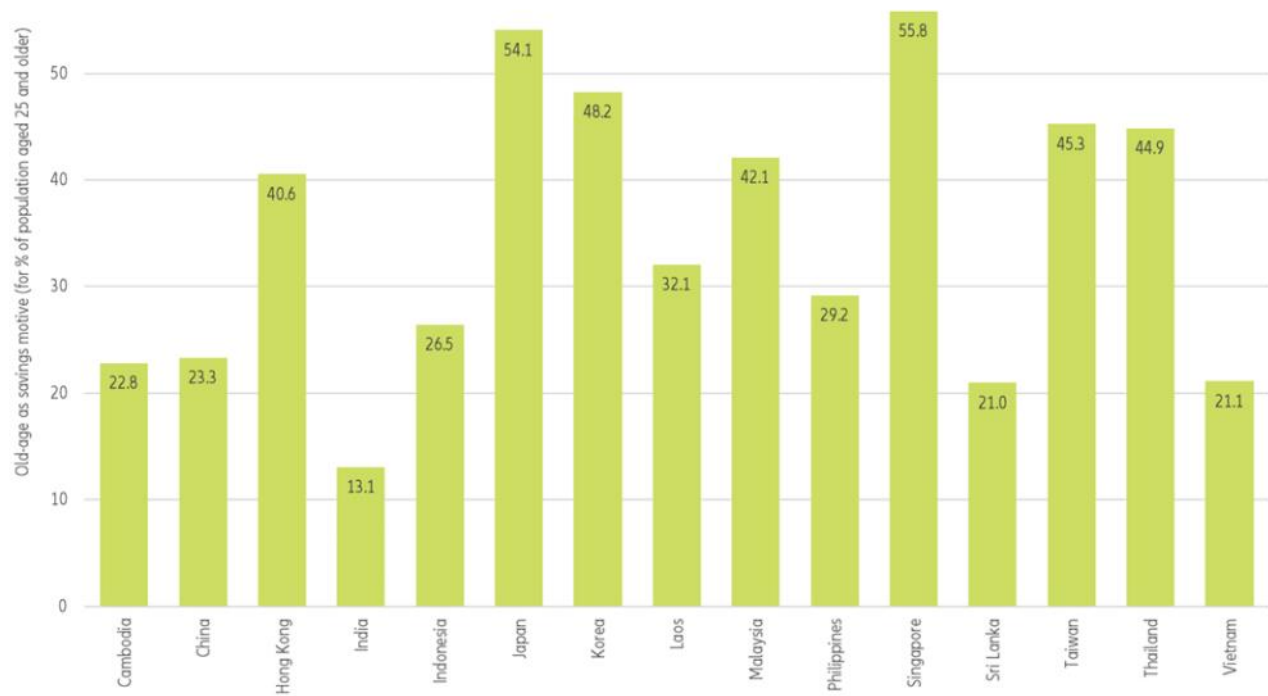
The continued lack of awareness of the need to make a private pension provision becomes evident in the responses to the question about the

savings motive in the World Bank's Global Findex Database. The awareness of the need to save for old age was highest in the rapidly aging markets, such as Japan, Singapore, South Korea, Taiwan, Thailand and Hong Kong. In contrast, in those markets with younger populations – and less developed financial systems – old age played only a minor role as a savings motive (Figure 12).

Figure 11: Asset structure of households (2019)



Source: Allianz Global Wealth Report 2020.

Figure 12: Old-age saving plays a minor role in emerging markets

Sources: World Bank, Global Findex Database.

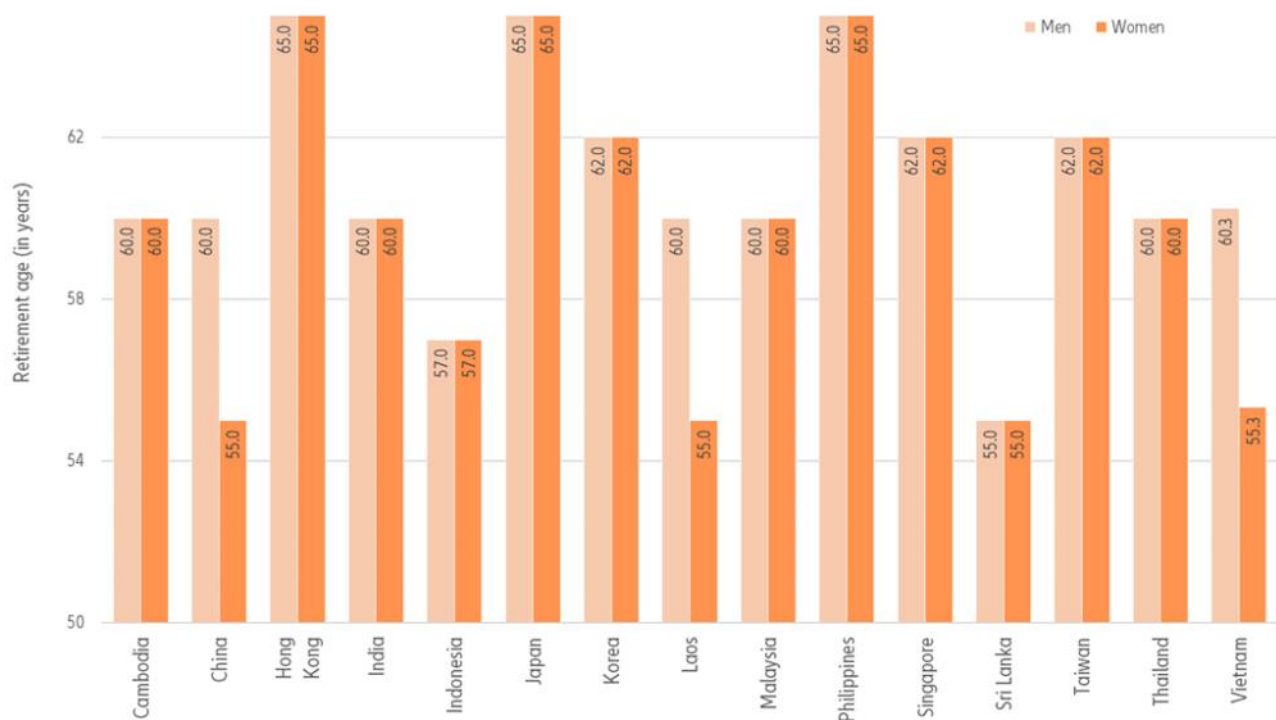
THE ELEPHANT IN THE ROOM OF PENSION REFORM: RETIREMENT AGE

The main cause of concern with respect to long-term sustainability is the pension age in many markets, which does not reflect the gains in life expectancy over the last decades. We observe ongoing discussions in many markets in the region, but only a few have already decided to implement pension reforms in this respect. However, it is rather questionable whether the planned increases in retirement age are sufficient to offset the expected increases in further life expectancy, which is unlikely to change despite the Covid-19 pandemic.

The agreed upon or statutory retirement ages range between 55 and 65 years. Yet, in some markets, such as Singapore and Thailand, the retirement age only marks the age limit until which an employer is not allowed to cancel a contract because of age reasons. In both markets, many employees choose to work until the age of 65 or longer if possible. In Singapore, the so-called re-employment age is currently 67 and set to be increased to 70 until 2028. (Figure 13).

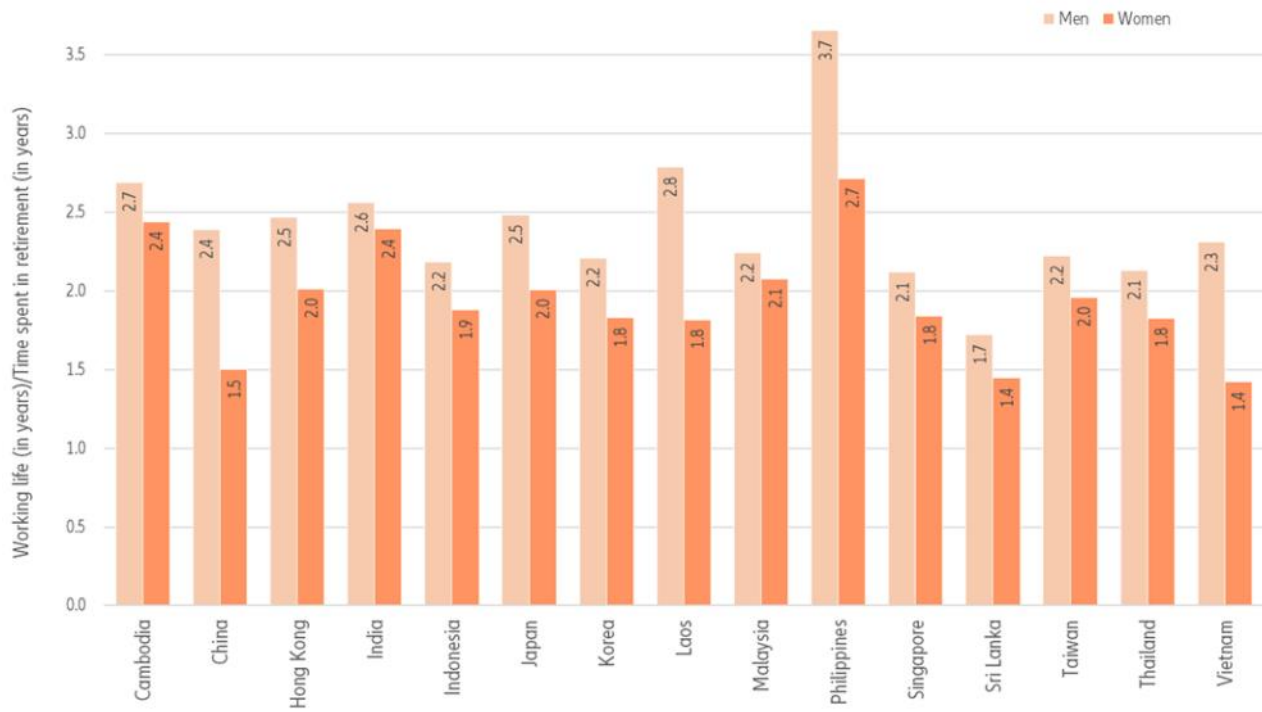
But in most markets the time period that will be spent in retirement is relatively long compared to the working life, even if we assume that the latter starts at age 15. This holds especially true for Hong Kong, Japan, Singapore, South Korea and Taiwan, which are among the markets with the highest further life expectancies in the world (Figure 14).

Figure 13: Retirement ages differ markedly



Sources: National ministries of finance, national ministries of social affairs, national pension providers, OECD, ISSA.

Figure 14: Low work-life-to-retirement balances* in wealthy Asian markets



*Assumption: Working life begins at the age of 15 and ends with the statutory retirement age

Sources: National ministries of finance, national ministries of social affairs, national pension providers, OECD, ISSA, UN, Department of Economic and Social Affairs, Population Division (2019).

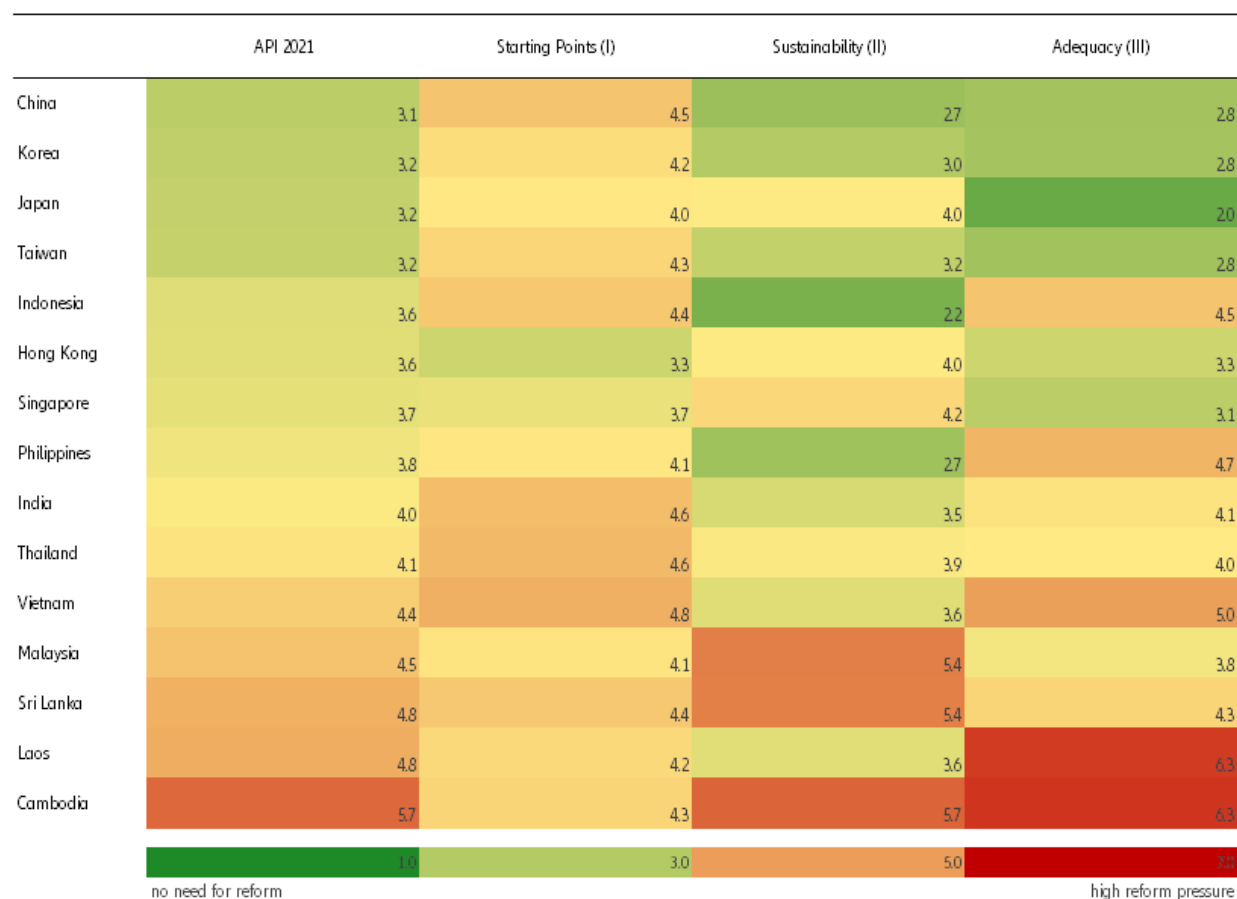


This mismatch not only poses a problem for pay-as-you-go financed pension systems, where a shrinking number of people of working age has to finance the pensions of an increasing number of people in retirement age, but also for merely capital-funded systems. If the pension age is not adjusted accordingly, the contributions must increase markedly to make sure that savers build enough capital to guarantee a decent living standard in

old age, otherwise they have to face lower benefit levels. If a tax-financed welfare program is in place that grants means-tested subsidies for pensioners with pension income below a certain threshold, like the Silver Support scheme in Singapore, neglected adjustments might inevitably lead to higher welfare expenditures in the long run. In this context, pension and financial system reforms should not be put on the back burner for too long

in order to make sure that there is still enough time to build up demography-proof pension systems and adequate old-age savings. In this respect, nearly all markets in the region still need reforms (Figure 15).

Figure 15: Allianz Pension Indicator (API)¹³ points at need for pension reforms



Source: Allianz Research.

13. For the Allianz Pension Index methodology see appendix.

Appendix I: Pension systems and reform needs by market

Cambodia

Starting Points (Sub-Index I)			Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	1,312		Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	9.9
				13.4	14.7		
Life expectancy at birth (in years)	70.1		Retirement age (in years)	male	female	Effective coverage (in % working age population)	2.9
				60.0	60.0		
Gross budget deficit (in % of GDP)	31.5		Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	17.8
				2.7	2.4		
Public expenditure on old-age benefits (in % of GDP)	0.2		Financing method	-		Private HH net financial assets (in % of GDP)	39.8
Old-age dependency ratio (in %)	2020	2050	Contribution rate (in %)	-		Old-age as savings motive (in % of population aged 25+)	22.8
	7.6	17.6					
			4.3	6.7		6.7	

Assessment:

Currently the pension system covers only civil servants. Against the background of demographic change there is an urgent need for the introduction of an adequate and sustainable pension system and the improvement of the access to financial services.

China

Starting Points (Sub-Index I)			Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	8,899		Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	100.0
				14.9	18.0		
Life expectancy at birth (in years)	77.1		Retirement age (in years)	male	female	Effective coverage (in % working age population)	83.1
				60.0	55.0		
Gross budget deficit (in % of GDP)	61.7		Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	80.2
				2.4	1.5		
Public expenditure on old-age benefits (in % of GDP)	3.7		Financing method	partly-funded		Private HH net financial assets (in % of GDP)	126.1
Old-age dependency ratio (in %)	2020	2050	Contribution rate (in %)	24.0		Old-age as savings motive (in % of population aged 25+)	23.3
	17.0	43.6					
			4.1			4.1	

Assessment:

Having introduced one of the most sustainable pension systems in Asia, there is still some backlog demand with respect to its adequacy. This concerns not only reported inequalities within the pension system but also the accessibility of financial services.

Hong Kong

Starting Points (Sub-Index I)			Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	37,280		Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	76.0
				20.3	24.8		
Life expectancy at birth (in years)	85.0		Retirement age (in years)	male	female	Effective coverage (in % working age population)	75.7
				65.0	65.0		
Gross budget deficit (in % of GDP)	61.7		Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	95.3
				2.5	2.0		
Public expenditure on old-age benefits (in % of GDP)	1.6		Financing method	funded		Private HH net financial assets (in % of GDP)	413.3
Old-age dependency ratio (in %)	2020	2050	Contribution rate (in %)	10.0		Old-age as savings motive (in % of population aged 25+)	40.6
	26.3	64.7					
			3.7	4.0		3.7	

Assessment:

Being one of the wealthiest countries in the region, a weak spot of Hong Kong's retirement system is the still comparatively low retirement age that does not reflect the developments in life expectancy.

Appendix I: Pension systems and reform needs by market

India

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	1,544	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	42.5
			14.2	15.2		
Life expectancy at birth (in years)	69.9	Retirement age (in years)	male	female	Effective coverage (in % working age population)	31.5
			60.0	60.0		
Gross budget deficit (in % of GDP)	89.3	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	79.8
			2.6	2.4		
Public expenditure on old-age benefits (in % of GDP)	4.3	Financing method	funded		Private HH net financial assets (in % of GDP)	58.0
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	10.0		Old-age as savings motive (in % of population aged 25+)	13.1
	2050					
			4.0	3.5	4.1	

Assessment:

India is one of the countries with the lowest degree of urbanization and the highest share of the population still employed in agriculture. Both factors hamper the build up of an effective public pension system, which is reflected in the still comparatively low coverage rates.

Indonesia

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	3,386	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	14.8
			13.6	16.1		
Life expectancy at birth (in years)	71.9	Retirement age (in years)	male	female	Effective coverage (in % working age population)	24.0
			57.0	57.0		
Gross budget deficit (in % of GDP)	38.5	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	48.4
			2.2	1.9		
Public expenditure on old-age benefits (in % of GDP)	1.0	Financing method	PAYG		Private HH net financial assets (in % of GDP)	18.3
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	8.7		Old-age as savings motive (in % of population aged 25+)	26.5
	2050					
			4.4		4.1	

Assessment:

The gradual increase of the retirement age supports the long-term sustainability of the pension system. However, main reasons for concern are still relatively low coverage ratios and the lack of access to financial services.

Japan

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	32,945	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	100.0
			20.1	24.9		
Life expectancy at birth (in years)	84.8	Retirement age (in years)	male	female	Effective coverage (in % working age population)	100.0
			65.0	65.0		
Gross budget deficit (in % of GDP)	266.2	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	98.2
			2.5	2.0		
Public expenditure on old-age benefits (in % of GDP)	12.1	Financing method	PAYG		Private HH net financial assets (in % of GDP)	290.2
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	18.3		Old-age as savings motive (in % of population aged 25+)	54.1
	2050					
			4.0	4.0	4.0	

Assessment:

Next to the Netherlands, Japan's retirement system guarantees its pensioners one of the highest living standards worldwide. However, the retirement age does not reflect the developments in life expectancy, thus endangering the long-term sustainability of the pension system.

Appendix I: Pension systems and reform needs by market

Laos

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	2,138	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	6.3
			12.9	14.3		
Life expectancy at birth (in years)	68.2	Retirement age (in years)	male	female	Effective coverage (in % working age population)	7.9
			60.0	55.0		
Gross budget deficit (in % of GDP)	70.9	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	29.1
			2.8	1.8		
Public expenditure on old-age benefits (in % of GDP)	0.2	Financing method	PAYG		Private HH net financial assets (in % of GDP)	n.a.
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	5.0		Old-age as savings motive (in % of population aged 25+)	32.1
	2050					
		4.2			6.3	

Assessment:

Against the background of demographic change, increasing the coverage of the pension system and improving the access to financial services gain in importance.

Malaysia

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	8,843	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	18.6
			16.5	17.5		
Life expectancy at birth (in years)	76.3	Retirement age (in years)	male	female	Effective coverage (in % working age population)	48.7
			60.0	60.0		
Gross budget deficit (in % of GDP)	67.6	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	85.1
			2.2	2.1		
Public expenditure on old-age benefits (in % of GDP)	0.9	Financing method	PAYG		Private HH net financial assets (in % of GDP)	93.9
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	25.0		Old-age as savings motive (in % of population aged 25+)	42.1
	2050					
		4.1			3.8	

Assessment:

Ranging lower midfield in terms of adequacy due to mediocre coverage rates and a net-financial-assets to GDP ratio that is dampened by the comparatively high indebtedness of the private households, Malaysia is one of the countries with the most unsustainable pension systems mainly due to the fact that the still relatively low retirement age does not reflect the developments in life expectancy at all.

Philippines

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	3,641	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	48.0
			13.7	18.4		
Life expectancy at birth (in years)	71.4	Retirement age (in years)	male	female	Effective coverage (in % working age population)	37.3
			65.0	65.0		
Gross budget deficit (in % of GDP)	48.9	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	31.8
			3.7	2.7		
Public expenditure on old-age benefits (in % of GDP)	0.6	Financing method	PAYG		Private HH net financial assets (in % of GDP)	14.5
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	4.1		Old-age as savings motive (in % of population aged 25+)	29.2
	2050					
		4.1			4.1	

Assessment:

Due to the relatively high retirement age the Philippines have one of the most sustainable pension systems in the region. However, there is still a marked gap with regards to coverage and access to financial services.

Appendix I: Pension systems and reform needs by market

Singapore

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	49,424	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	84.1
			19.7	22.8		
Life expectancy at birth (in years)	83.8	Retirement age (in years)	male	female	Effective coverage (in % working age population)	56.8
			62.0	62.0		
Gross budget deficit (in % of GDP)	131.2	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	97.8
			2.1	1.8		
Public expenditure on old-age benefits (in % of GDP)	0.7	Financing method	funded		Private HH net financial assets (in % of GDP)	195.0
Old-age dependency ratio (in %)	2020	2050	Contribution rate* (in %)	28.0	Old-age as savings motive (in % of population aged 25+)	55.8
	18.0					
			3.7	4.2		

* less average contribution allocated to the Medisave account

Assessment:

Singapore is one of the countries with the highest living standards worldwide, but also one of the most rapidly aging. Main reason for concern is the still relatively low retirement age compared to the life expectancy. Even the agreed upon increases of the retirement age and the re-employment age will not completely reflect the expected increase in further life expectancy.

South Korea

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	27,882	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	100.0
			18.8	22.9		
Life expectancy at birth (in years)	83.2	Retirement age (in years)	male	female	Effective coverage (in % working age population)	77.8
			62.0	62.0		
Gross budget deficit (in % of GDP)	48.4	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	94.9
			2.2	1.8		
Public expenditure on old-age benefits (in % of GDP)	2.7	Financing method	PAYG		Private HH net financial assets (in % of GDP)	111.5
Old-age dependency ratio (in %)	2020	2050	Contribution rate (in %)	9.0	Old-age as savings motive (in % of population aged 25+)	48.2
	22.0					
			4.2	5.0		

Assessment:

South Korea is among the most rapidly aging societies in the world. Thus, the gradual increase of the retirement age has a positive effect on the long-term sustainability of the pension system. However, the high indebtedness of South Korea's private households dampens the rating in our adequacy sub-index by lowering the net financial assets-to-GDP ratio markedly.

Sri Lanka

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	3,092	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	35.7
			15.6	18.8		
Life expectancy at birth (in years)	77.1	Retirement age (in years)	male	female	Effective coverage (in % working age population)	44.6
			55.0	55.0		
Gross budget deficit (in % of GDP)	98.3	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	73.6
			1.7	1.4		
Public expenditure on old-age benefits (in % of GDP)	1.4	Financing method	funded		Private HH net financial assets (in % of GDP)	45.6
Old-age dependency ratio (in %)	2020	2050	Contribution rate (in %)	23.0	Old-age as savings motive (in % of population aged 25+)	21.0
	17.3					
			4.1	5.0		

Assessment:

Main reason for concern is the long-term sustainability of Sri Lanka's pension system; the discussed increase of the retirement age would improve it markedly.

Appendix I: Pension systems and reform needs by market

Taiwan

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	23,023	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	68.0
			18.8	21.4		
Life expectancy at birth (in years)	80.6	Retirement age (in years)	male	female	Effective coverage (in % working age population)	86.8
			62.0	62.0		
Gross budget deficit (in % of GDP)	35.6	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	94.2
			2.2	2.0		
Public expenditure on old-age benefits (in % of GDP)	4.7	Financing method	PAYG		Private HH net financial assets (in % of GDP)	468.9
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	19.0		Old-age as savings motive (in % of population aged 25+)	45.3
	2050					
		4.3		3.2		

Assessment:

Ranging solid mid-field with respect to sustainability and adequacy thanks to the implemented pension reforms, the major challenge will be to cope with the rapid aging of society. It is questionable, if the agreed upon increase in retirement will be sufficient to cushion the effects of further increases in life expectancy.

Thailand

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	6,090	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	89.1
			17.5	20.5		
Life expectancy at birth (in years)	77.3	Retirement age (in years)	male	female	Effective coverage (in % working age population)	42.0
			60.0	60.0		
Gross budget deficit (in % of GDP)	50.4	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	81.0
			2.1	1.8		
Public expenditure on old-age benefits (in % of GDP)	2.2	Financing method	PAYG		Private HH net financial assets (in % of GDP)	49.3
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	6.0		Old-age as savings motive (in % of population aged 25+)	44.9
	2050					
		4.1		3.9		4.0

Assessment:

Given the rapid aging of the population, the still comparatively low retirement age endangers the long-term sustainability of the pension system. Furthermore, there is an urgent need to broaden the pension system coverage of the work force population.

Vietnam

Starting Points (Sub-Index I)		Sustainability (Sub_Index II)			Adequacy (Sub-Index III)	
GDP per capita (in EUR)	2,900	Further life expectancy at age 65 (in years)	male	female	Coverage 65+ (in % of age group)	40.9
			16.2	19.9		
Life expectancy at birth (in years)	75.5	Retirement age (in years)	male	female	Effective coverage (in % working age population)	26.2
			60.3	55.3		
Gross budget deficit (in % of GDP)	46.6	Work Life - Retirement Period Balance*	male	female	Access to financial services (in % of population aged 15+)	30.0
			2.3	1.4		
Public expenditure on old-age benefits (in % of GDP)	5.5	Financing method	PAYG		Private HH net financial assets (in % of GDP)	28.4
Old-age dependency ratio (in %)	2020	Contribution rate (in %)	22.0		Old-age as savings motive (in % of population aged 25+)	21.1
	2050					
		4.5		3.6		

Assessment:

While the agreed upon increase of the retirement age will help to stabilize the finances of the pension system, it needs further efforts to increase the pension system coverage and to improve the access to financial services.

Appendix II: Methodology of the Allianz Pension Indicator (API)

The Allianz Pension Indicator (API) consists of 3 pillars, which are differently weighted (*see respective weightings in brackets*)

- *Basic Conditions* (20%)
- *Sustainability* (40%)
- *Adequacy* (40%)

These three pillars are based on five categories and eleven sub-categories taking into account in total 30 parameters. Each parameter value is rated on a scale of 1 to 7, with 1 being the best grade. The bands defining each parameter's grade are chosen in a way that the grading results of all markets are normal distributed. This implies a relative judgement. By adding up all weighted subtotals, the API assigns each market a grade between 1 and 7, thus providing a comprehensive view of the sustainability and adequacy of the pension system of a respective market compared to other markets.

The pillars in detail

The pillar *Basic Conditions* takes into account the living standards as well as the financial and demographic starting points which are two major exogenous factors determining the framework and effecting the need for further pension reforms:

- *The living standards (40%)*
The living standard is mainly determined by the overall prosperity level (50%), the access to health services (30%) and the level of progress (20%) of a society.
- *Finances and Demographics (60%)*
The financial leeway (40%) and the demographic change (60%) determine the need for pension reforms.

General government gross debt and nominal GDP data are extracted from the IMF World Economic Outlook database, source of the public spending for old age data is mainly the International Labor Organization supplemented with data from national statistical offices and public pension insurance providers. All population data is derived from the UN World Population Prospects database and the main data source to determine the living standards are the World Bank World Development Indicators.

The pillar *Sustainability* assesses, if there are built-in mechanisms that cushion the pension system against the impacts of demographic change, based on the categories

- *Preconditions (60%)*
The category *Preconditions* is split into the sub-categories *Retirement age (80%)*, in order to assess if adopted increases of the retirement age are high enough to compensate for the expected improvements in further life expectancy, and *Minimum contribution period (20%)*.
- *Finances (40%)*
This category consists of the sub-categories *Financing (70%)* and *Pension Formula (30%)*.

Data sources are the European Commission, the OECD and the respective national social security administrations and providers.

The pillar *Adequacy* is based on two categories *First Pillar* and *Other Pension* income, which are also split up in further sub-categories:

- *First Pillar (50%)*
This category takes into account the *Coverage (70%)* and the *Benefit level (30%)* of the pension system.
- *Other pension income (50%)*
This category is based on the sub-categories *Second Pillar (20%)*, *Financial Assets (70%)* and *Gainful Employment (10%)*.

The indicator is based on publicly available information of national social security administrations, ministries of finance and ministries of social affairs as well as on including publications of the European Commission, OECD, ILO, UN and World Bank.

Appendix II: Methodology of the Allianz Pension Indicator (API)

API 2021

Source: Allianz Research

Starting Points	20%									
Starting Points	20%	Living Standards	40%	Prosperity	60%	GDP p.c.	LE at birth			
						50%	50%			
					Health	25%	Health exp. OOPs	HALE	Share of population reaching age of 65 (male)	Share of population reaching age of 65 (women)
						35%	35%	15%	15%	
				Progress	15%	Urbanization	Internet users	Employment in Agriculture		
						40%	40%	20%		
		Finances and Demography	60%	Financial Leeway	30%	Budget Deficit	Public Spending for Old Age			
						30%	70%			
					Demographic change	70%	OADR 2020	OADR 2050	Change 2020-2050	
						10%	40%	50%		
Sustainability	40%	Preconditions	60%	Retirement Age (Men)	40%	MC/TSiR (2020)	MC/TSiR (2050)	Change MC/TSiR (2020 - 2050)		
							10%	40%	50%	
				Retirement Age (Women)	40%	MC/TSiR (2020)	MC/TSiR (2050)	Change MC/TSiR (2020 - 2050)		
						10%	40%	50%		
		Finances	40%	70%	Financing		Financing Method	Contribution rates		
							25%	75%		
		30%	Pension Formula		Early Retirement Deductions	Demographic Factor?				
					50%	50%				
Adequacy	40%	First Pillar	50%	Coverage	70%	Coverage 65+	Legal coverage (working age population)	Effective coverage (working age population)	Obligation?	
						30%	0%	60%	10%	
				30%	Benefits		Gross Benefit Ratio	Minimum Pension		
							80%	20%		
		Other Pension Income	50%	20%	Second Pillar		Financing Method	Obligation?		
							80%	20%		
70%	Financial Assets				Access to Financial Services	Old-age as Savings Motive	Private HH Net Financial Assets	Gini Coefficient		
				30%	10%	30%	30%			
		10%	Gainful Employment		Activity ratio 65+ (M)	Activity Ratio 65+ (W)				
					50%	50%				

Sources

Bank Negara Malaysia (2020): Quarterly Bulletin 3Q 2020, Kuala Lumpur, November 2020.

Hilamo Heikki, Audrius Bitinas and Narith Chan (2020): Extending pension coverage in Cambodia: The governance and investment challenges of the Social Security Investment Fund, in: *International Social Security Review*, ed. International Social Security Association, Vol. 73, no. 4, 2020, p. 97-116.

ILO (2020): *Asia-Pacific Employment and Social Outlook 2020. Navigating the Crisis Towards a Human-Centred future of Work*, Bangkok 2020.

IMF (2020): *Regional Economic Outlook Asia and Pacific. Navigating the Pandemic: A Multispeed Recovery in Asia*, Washington, D. C, October 2020.

IMF (2020): *World Economic Outlook Database*, October 2020, Washington, D.C., 2020.

Monetary Authority of Singapore (2020): *Financial Stability Review December 2020*, Singapore, December 2020.

OECD (2008): *Pensions in Asia/Pacific. Ageing Asia must face its pension problems*, Paris 2008.

Qian, Xiaoyan (2020): China's social security response to Covid-19: Wider lessons learnt for social security's contribution to social cohesion and inclusive economic development, in: *International Social Security Review*, ed. International Social Security Association, Vol. 73, no. 3, 2020, p. 81-100.

Shen, Ce et al. (2020): Does a universal non-contributory social pension make sense for rural China?, in: *International Social Security Review*, ed. International Social Security Association, Vol. 73, no. 2, 2020, p. 3-26.

United Nations, Department of Economic and Social Affairs, Population Division (2019): *World Population Prospects 2019*, Online Edition.

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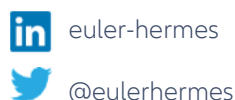
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FORWARD-LOOKING STATEMENTS

The statements contained herein may include prospects, statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those expressed or implied in such forward-looking statements.

Such deviations may arise due to, without limitation, (i) changes of the general economic conditions and competitive situation, particularly in the Allianz Group's core business and core markets, (ii) performance of financial markets (particularly market volatility, liquidity and credit events), (iii) frequency and severity of insured loss events, including from natural catastrophes, and the development of loss expenses, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) particularly in the banking business, the extent of credit defaults, (vii) interest rate levels, (viii) currency exchange rates including the EUR/USD exchange rate, (ix) changes in laws and regulations, including tax regulations, (x) the impact of acquisitions, including related integration issues, and reorganization measures, and (xi) general competitive factors, in each case on a local, regional, national and/or global basis. Many of these factors may be more likely to occur, or more pronounced, as a result of terrorist activities and their consequences.

NO DUTY TO UPDATE

The company assumes no obligation to update any information or forward-looking statement contained herein, save for any information required to be disclosed by law.