

Too busy to have babies?

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Most of MSCI EM is past peak working age population

- South Korea's fertility rate fell to an all-time low of 0.72 last year, the lowest globally (and to just 0.55 in Seoul)
- Within forty years, the country's working-age population could have halved from now; over half the population would be over 60, with one dependent for each South Korean of working age, according to UN projections. By the end of the century, the total population could have halved.
- South Korea's falling birthrate is an extreme example of a trend that used to be seen as an issue for developed markets but is increasingly becoming one for emerging markets as well.
- 58% of the MSCI Emerging Markets Index by weight has already passed peak working-age population; by 2050, this is expected to reach 87%, with 58% of the index having seen a 20% fall in the working-age population.
- India's working-age population growth will more than offset China's decline until 2033; from then on, demand for labour from current Frontier and beyond Frontier countries is likely to pick up.
- Demographic change and the response, including AI/automation, offshoring, immigration and government spending and the resulting impact on growth, inflation, interest rates, debt, equality, politics and geopolitics, will be a key theme for markets over the coming decades.

Too busy to have babies?

On my first visit to Seoul as a student in 1994, the greatest surprise was discovering that a six-day working week was the norm. OECD data confirms that South Korea still has the longest working hours in Asia. Last year, the government tried, but failed, to boost them further still. Is South Korea simply too busy to have babies?

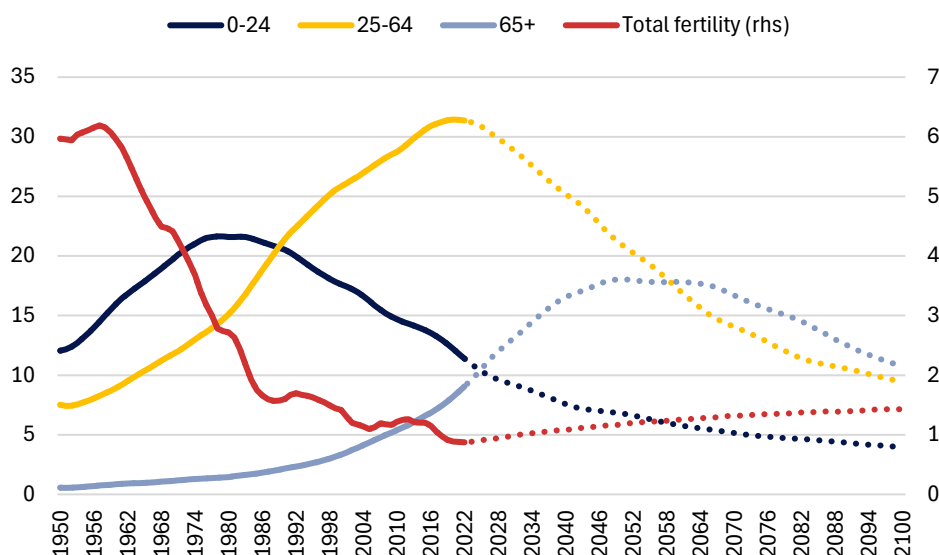
Astonishing preliminary figures recently released by Statistics Korea show that the country's fertility rate (the average number of children born to a woman over her lifetime) fell to an all-time low of just 0.72 last year, the lowest in the world, down from 0.78 in 2022. For Seoulites, the rate was just 0.55. From a total population of 51.7 million, just 230,000 babies were born.

Demographic changes (like COVID transmission and compound interest) tend to start slowly and can accelerate faster than our linear minds expect. As an exercise, imagine South Korea's 0.72 fertility rate sustained over three generations: 100 parents would have 36 children, these children would have 13 grandchildren, and these grandchildren would have five great-grandchildren – resulting in a 95%

collapse within three generations. Such a severe demographic shift would affect a state's ability to sustain infrastructure, industry, pensions, healthcare system, government debt, military, and even borders. It would almost certainly need to be tackled via strong measures to boost fertility and/or immigration and/or greater cooperation with other countries.

Falling birth rate echoes through the generations

South Korean population by age range (millions, lhs) and total fertility rate (rhs)



Note: Future years are based on UN World Population Prospects 2022 Medium Variant
Source: UN Population Division

How bad could it get?

In the sixties, South Korea averaged over a million births a year. By 2002, this had halved to 500,000 and has since halved again to just 230,000 in 2023. This three-quarters fall in the birth rate is now propagating through the population.

Around 580,000 20-25-year-olds currently enter the workforce annually, but approximately 840,000 reach retirement age. In twenty years, by 2044, only around 300,000 are expected to join the workforce annually, roughly half the current level.

The UN's projections.ⁱⁱ for South Korea are pretty dramatic:

- By 2050, the working age population (25-64-year-olds.ⁱⁱⁱ) could fall by 10mn from current levels (31.2mn to 21.0mn).
- By 2064, the working age population could halve from current levels to 15.6 million.
- By 2056, half the population could be over 60.
- By 2059, each member of the working age population (25-64) could be responsible for one retiree (65+), compared with 0.3 at present.
- By the end of the century, the total population could halve from current levels.

Weighhouse

So, while nightclubs might not be a great business, the grey economy might be, given that life expectancy has risen from just 54 in 1960 to 84 today; the country's median age increased from just 18 in 1970 (similar to sub-Saharan Africa today) to a still youthful 25 in 1987 (helping fuel pro-democracy protests) and has now reached 45. Half the population is projected to be 60 or over by 2056, and the over-60 population is expected to grow 50% by 2042, from 14 million to 21 million.

Aside from increasing the birth rate (of which more below), the obvious potential mitigant is immigration, which has started to rise, albeit from very low levels. South Korea now has 2.5 million foreign residents (of which 1.9 million are long-term), or 5% of the population, up by 1 million over the last decade, mainly from Asia. The UN's projections of a 10 million decline in the working-age population by 2050 already include a roughly 700,000 boost from future immigration.

By 2060, an additional 14 million 25-64-year-olds would be needed to keep the working-age population flat. Interestingly, North Korea's current population of 25-64-year-olds is 14.6 million.

Why so few children?

From 6 to 2 children

From 2 children in 1974 to one child in 1980

Family planning campaigns



Note: Left-hand image: 1974 "The path to a Gross National Income of \$1000 in 1981; Right-hand image: Sons or daughters, let's have two children and raise them well", 1980 "Two children are too many"

Source: Ministry of Health, Welfare, and Family Affairs

In the fifties following the Korean War, women in South Korea had, on average, more than six children during their lifetimes. At the time of the 1961 military coup which brought Major General Park Chung-Hee to power (Park would remain President until his assassination in 1979), the country had sub-\$100 GDP per capita (below that of Sub-Saharan Africa at the time), unemployment above 23%, food

shortages and 40% of the population living in absolute poverty. The country's first five-year plan of 1962-66 targeted growth of 7.1%, and cutting the birthrate was seen as essential to modernising the economy and boosting the growth rate.

By the 1970s, the fertility rate had fallen to 4.5, and South Koreans were encouraged to have just two children. 2.8 was reached at the start of the 1980s, and the government's two-child 'replacement' level was achieved in 1983, five years early.

Unsuccessful attempts to reverse the decline

By 2009, the best gift for a child is a younger brother
Childbirth Promotion Campaign



하나는 외롭습니다

당신의 아이에게 무엇을 들려주시겠습니까? 어릴 때는 인형이나 장난감 하나면 충분할지도 모릅니다. 하지만 아이가 커가면서 외로움도 커집니다. 먼 인생길을 의지하고 함께 살아갈 행적을 들려주세요!

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Note: Childbirth Promotion Campaign 2009, "One is lonely. The best gift for a child is a younger brother"
Source: Ministry of Health, Welfare, and Family Affairs

But births continued to fall, and it took until 1996, with a fertility rate of 1.6, for policies to be reversed, and until 2006, with a rate of just 1.1, for it to become a national priority, with the announcement of the Vision 2020 Plan to raise fertility via a programme of housing benefits, childcare allowances, and infertility treatment subsidies. Despite spending more than 360tn won (\$270bn) to date, the fertility rate has failed to pick up.

Why so few children?

A recent [survey](#) by the Bank of Korea has pointed to the high cost of housing, particularly in greater Seoul (home to half the population), as the most important driver of the low birth rate, alongside challenges related to maintaining parental careers, long working hours and childcare. Other important factors are believed to be the hyper-competitive and expensive education system (where 78% of school

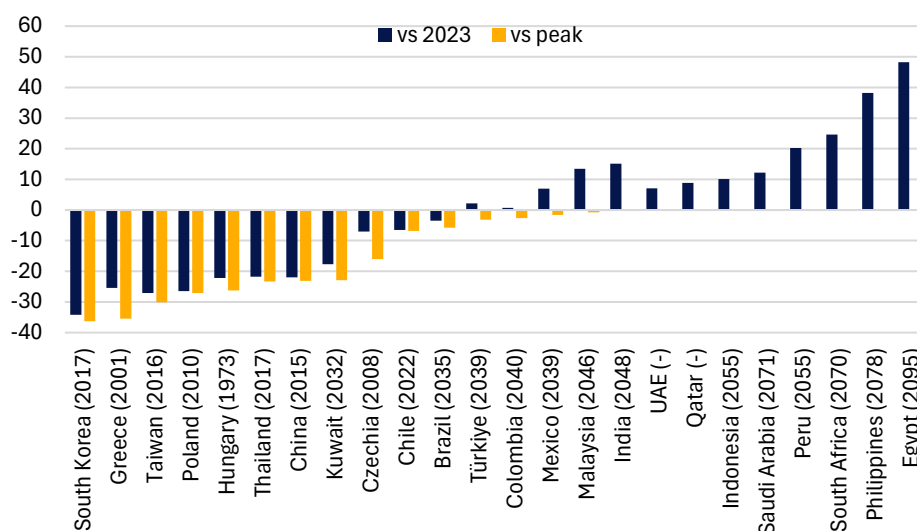
children receive private tuition), an aversion to births outside of marriage (just 3.9% in 2022, but which has doubled in five years) and a strong reliance on women for childcare.

Where Korea leads...

Ageing populations and falling working-age populations have mainly been seen as issues for developed markets but are now increasingly common in emerging markets as well.

What do things look like in 2050? – Emerging Markets

Change in working age population (%), MSCI Emerging Markets countries in 2050



Note: Date of peak working age population in parentheses, dash = no peak working-age population forecast by the UN before 2100; orange change vs peak bar is only shown for countries past peak working age population by 2050. Medium variant of UN World Population Prospects 2022. Working age population = 15–64-year age group. Source: UN Population Division

For the 24 countries in the MSCI Emerging Markets Index (and, for comparability purposes, using the standard 15-64 age range for the working age population), we find that:

- Nine of the twenty-four countries in the MSCI Emerging Markets index have already passed peak working age population: Chile, China, Czechia, Greece, Hungary, South Korea, Poland, Taiwan and Thailand. Together, these countries comprise 58% of the current index by weight.
- Fast forward to 2040, and five more are expected to join the club: Brazil, Colombia, Kuwait, Mexico, and Türkiye, boosting the total to 68% of the current index by weight.
- By 2050, India and Malaysia are both expected to have passed their respective peak working-age populations, bringing the total to 87% of the current index by weight.
- By 2050, eight countries—China, Greece, Hungary, South Korea, Kuwait, Poland, Taiwan, and Thailand—will all have experienced 20%+ declines in

their working age populations from peak levels. These countries make up 58% of the current index by weight.

What can be done to cushion the impact?

Increasing retirement ages; incentivising women, retirees and those economically inactive (back) into the workforce, including cheap-or-free education, childcare and healthcare; ensuring the elimination of gender pay gaps; providing subsidised housing (which might be easier if a population is shrinking); and direct [cash transfers](#) can help offset or delay the trends. However, South Korea's attempts to boost the birth rate since 2006 have yet to succeed.

Immigration can fill in the gaps, too, but at the risk of raising social tensions. Technology, automation, robots, and the offshoring of domestic industry all have important roles to play. Meanwhile, some argue that falling populations could be a good thing for the planet.

Does it matter?

Gradual declines in the fertility rate and working age population are manageable. However, a falling [share](#) of workers within the population acts as a headwind to overall GDP per capita.

Parts of the economy depend on [total](#) GDP, with infrastructure and military spending (important for South Korea) being most important; there are also questions as to what happens to surplus real estate, who will look after older people, how pensions and healthcare can be funded as the dependency ratio deteriorates, what will happen to budget deficits, inflation and government debt sustainability, who will innovate and do R&D, and how attractive will a shrinking workforce and domestic market be to inwards investment? The level of immigration that populations are willing to absorb to offset a declining birth rate can drive domestic politics. And does a declining/ageing population erode the confidence and animal spirits that can help innovation, investment, entrepreneurship and competitiveness? There is also the global question of whether automation and AI lead to more equitable societies or exacerbate inequalities.

Demographics also drive geopolitics. 2023 saw India take over from China as the world's most populous country; China's population is expected to fall by a quarter between 2020 and 2070. Do countries with falling working-age populations tend to cooperate more (the EU could be a good example) or fall into conflict (Russia)? Could the search for more workers one day catalyse South Korea to intensify efforts to reunify with the North? Meanwhile, the still substantial population growth in many African countries is driving migration both within and from the continent (Europe's population was twice that of Africa in 1960; by 2060, Africa's will be four times that of Europe).

Which sectors could benefit from ageing populations?

- Corporate AI and automation, robotics - to replace declining working-age populations.
- Financial services – including life insurance, real estate equity release and retirement solutions.
- Healthcare, including pharmaceuticals, dental, ophthalmic, and medical devices, robot-assisted surgery, private hospitals and healthcare service providers.
- Smart home technology, including robots for household chores, telemedicine, wearable devices, smart hearing aids, automatic/remote health monitoring and enabling independent living.
- Care for older people, including care homes and independent living service providers.

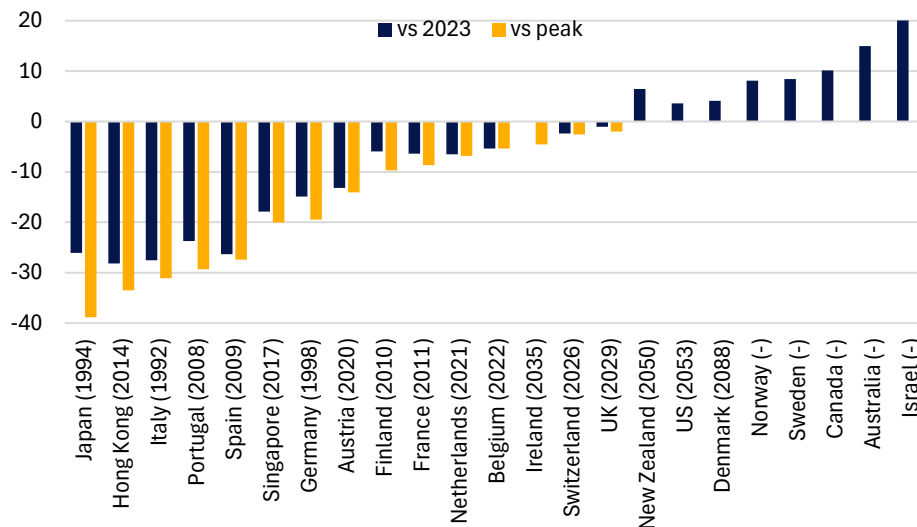
Not obvious beneficiaries:

- Education, tutoring providers, consumer durables, bars and entertainment.
- Commercial, industrial real estate, logistics.

Elsewhere – Frontier Markets, Developed Markets and Beyond Frontier

What do things look like in 2050? – Developed Markets

Change in working age population (%), MSCI World countries in 2050 (y-axis capped at 20%)

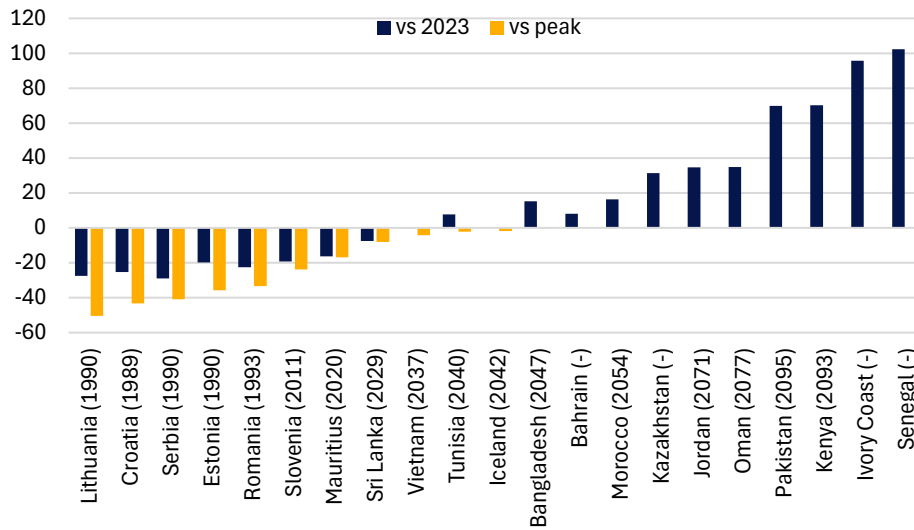


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Source: UN Population Division

What do things look like in 2050? – Frontier Markets

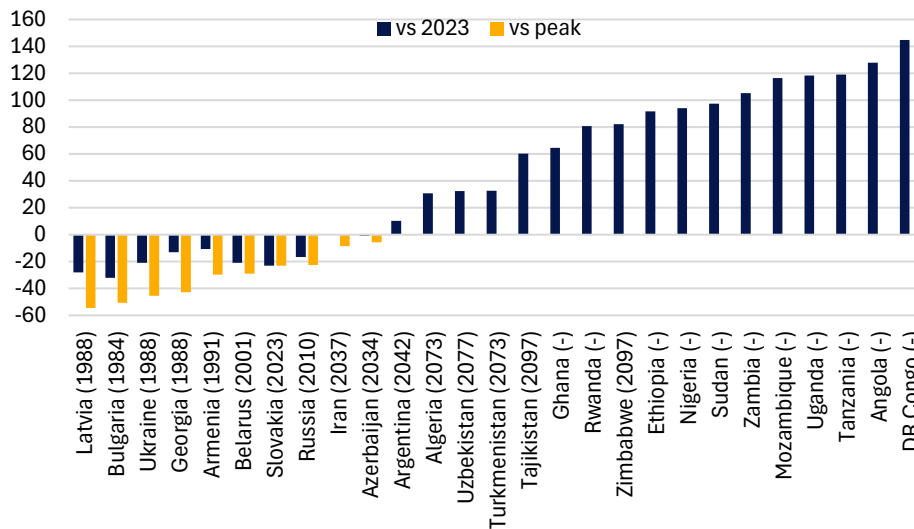
Change in working age population (%), MSCI Frontier Markets countries in 2050



Note: Date of peak working age population in parentheses, dash = no peak working-age population forecast by the UN before 2100; orange change vs peak bar is only shown for countries past peak working age population by 2050. Medium variant of UN World Population Prospects 2022. Working age population = 15–64-year age group. Source: UN Population Division

What do things look like in 2050? – Beyond Frontier

Change in working age population (%), selected Beyond Frontier countries in 2050



Note: Date of peak working age population in parentheses, dash = no peak working-age population forecast by the UN before 2100; orange change vs peak bar is only shown for countries past peak working age population by 2050. Medium variant of UN World Population Prospects 2022. Working age population = 15–64-year age group. Source: UN Population Division

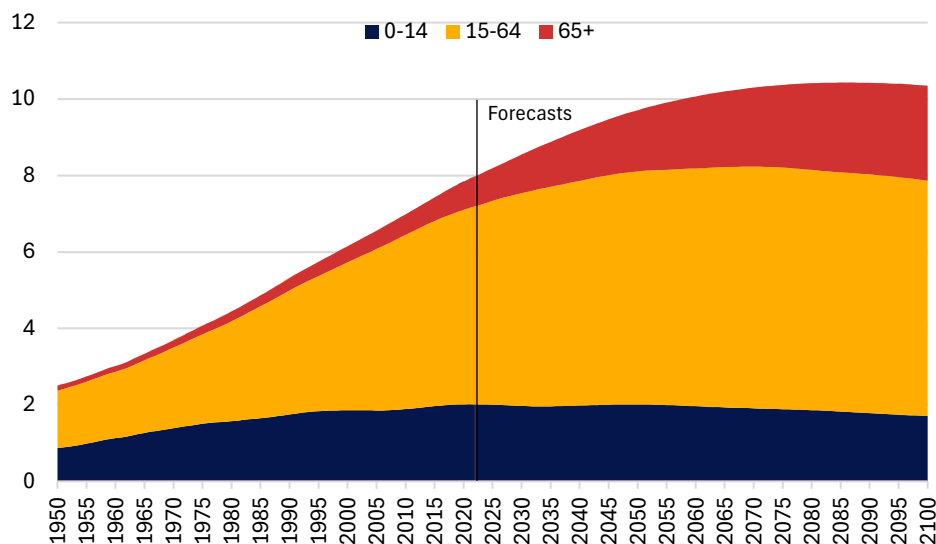
The global picture

The peak is in sight

- According to the UN, the global population of 0-14s peaked in 2021 and should decline very gradually from here, which should feed through to other age groups over time. In the longer term, the UN sees the world's 15-64-year-old population peaking in the early 2070s, at around 20% above current levels, and the total global population peaking in the mid-2080s at around 10.4 billion, 30% above current levels.
- India's working-age population growth should more than offset China's decline until 2033 (with an additional buffer as more women enter the workforce in India). Beyond this, demand for labour from the current Frontier and beyond Frontier countries may pick up.

Only another couple of billion to go...

World population by age (billions)

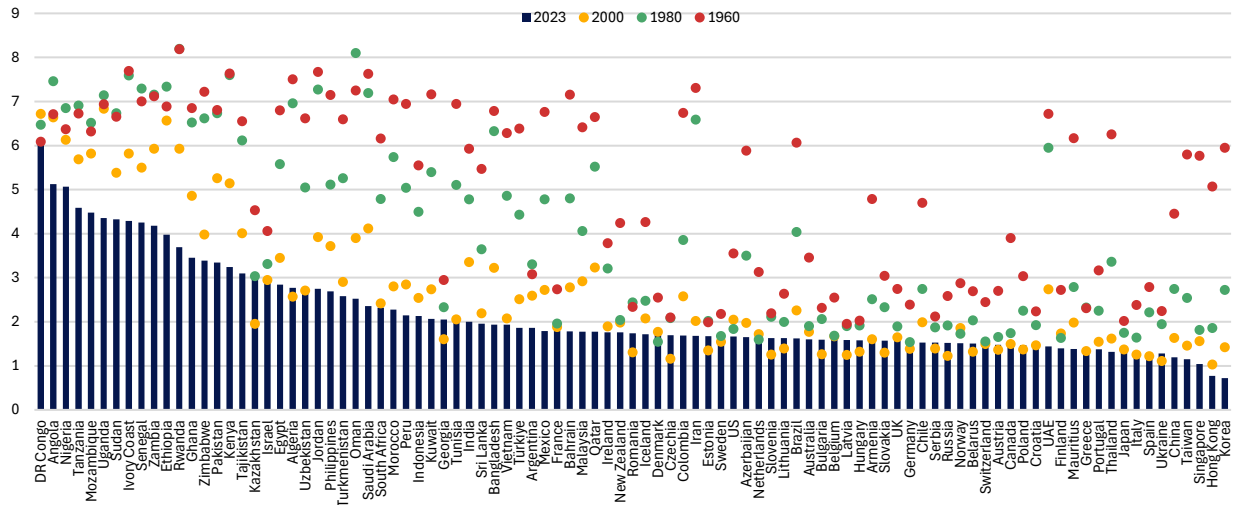


Note: Medium variant of UN World Population Prospects 2022

Source: UN Population Division

Going down

Total Fertility Ratio

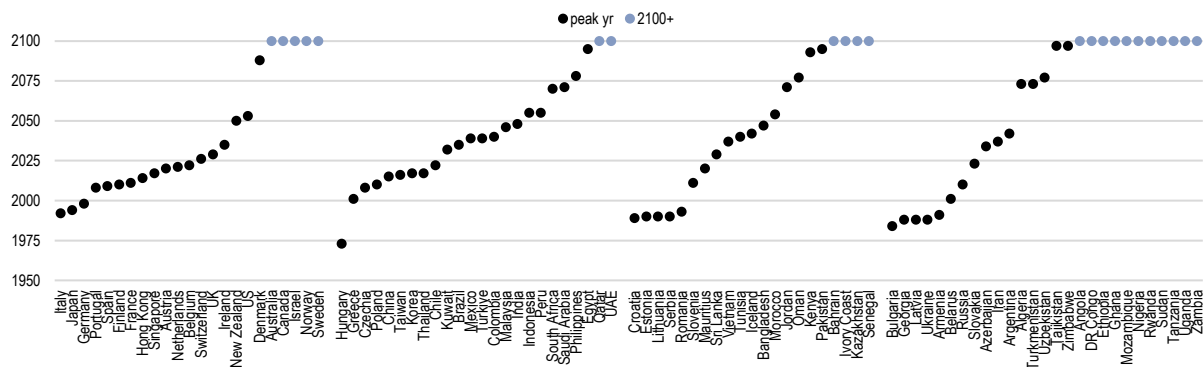


Note: Medium variant of UN World Population Prospects 2022

Source: UN Population Division

Going down

Year of working age population peak



Note: Medium variant of UN World Population Prospects 2022. Working age population = 15-64 year age group.

Source: UN Population Division

ⁱ Assuming a 50:50 male:female mix in existing and future generations and zero mortality.

ⁱⁱ Based on the UN World Population Prospects 2022 Medium Variant, which bases fertility and mortality on the median probabilistic projection and 'medium' levels of migration. The UN states that making projections to 2100 is subject to high uncertainty, especially at the country level, and in predicting migration numbers, particularly for countries that might see significant and/or changing flows.

ⁱⁱⁱ We use the 25-64 age range here as a proxy for the working-age population (rather than the standard 15-64 range) given South Koreans' propensity for university study and military service, which means that only one-quarter of 15–24-year-olds are employed.

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