

Goldman Sachs Exchanges

The Surprising Implications of an Aging Population

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Allison Nathan: The world's demographics are changing. Across all countries and particularly developed markets, populations are getting old. So, what will global aging mean for our economic future? I'm Allison Nathan and this is Goldman Sachs Exchanges.

Today I'm sitting down with my colleague, Kevin Daly, co-head of the Economics team covering Central and Eastern Europe, the Middle East, and Africa within Global Macro Research. Kevin, welcome back to Exchanges.

Kevin Daly: Thank you very much, Allison. Good to see

you.

Allison Nathan: So, Kevin, you've done a lot of work around your path to 2075 Series looking at what the global economy could look like 50 years from now. And you recently released a report about global aging. It's no secret that the global population is aging. But first, give us the facts behind that. What measure do you look at to determine this? And what does it show?

Kevin Daly: Allison, however you measure it, the global population is aging. So, if you look at the median ages in developed economies, 50 years ago the median age was 30. Now it's 43. Over the next 50 years, that's expected to rise to 47. For emerging economies, they're significantly younger. But the median age there has also risen from 19 to 30 currently. And it's projected to rise to 40 over the next 50 years.

The other way that economists like to look at it is to look at developments in the working age ratio. So, what is the share of the population that is between the ages of 15 to 64? For developed economies, that peaked just before the turn of the century, around 67 percent. It's currently at 63

percent and is projected, over the next 50 years, to fall to 57 percent. So, however you cut it, the global population is aging.

Allison Nathan: So, what's driving that process of population aging?

Kevin Daly: I mean, there are two developments. There's increased longevity and declining fertility. On increased longevity, life expectancy has risen in the what demographers call the longevity frontier. So, this is the country with the highest longevity in the world. 100 years ago, that was Australia. And the life expectancy was 63. 50 years ago, that country was Iceland with a life expectancy of 75. Currently, the country with the highest life expectancy in the world is Hong Kong with 86 years.

If you look at that trend, over time that's rising very steadily. And for 150 years has been rising steadily at a rate of about a quarter of a year every year. If you look at the global economy as a whole, actually it's been rising even faster than that because there's been some convergence to the frontier. So, countries with the lowest life expectancies have seen the biggest increases. So, on

average, it's risen by about a third of a year every year. So, that longevity is contributing to population aging.

The other factor, as I said, is fertility. So, fertility has fallen pretty significantly globally. It peaked at 5.4 in 1963. So, that's total fertility per woman. And is now fallen to 2.1. In developed economies, it's actually significantly lower than that at 1.5. In emerging economies it's at 2.2.

Allison Nathan: So, let's take those in turn. First of all, longevity. Isn't it a good thing that we are living longer? We're all striving to live longer. In some ways that is the product of innovation and technological advancement and everything else, is to be able to live longer.

Kevin Daly: It's a very basic point. But it's a very good one. And it's one that I think a lot of economists often miss. Is that the fact that we're living longer, and not only longer, but also healthier lives, is a fantastic testament to the scientific progress that we have made over the last couple of centuries. And as I say, it's not just that we're living longer, we're also living healthier lives as well. There was a very comprehensive study done by the IMF recently published which looked at 50-year-olds over the last

quarter of a century. And it found that on average, somebody who's 70 today has the same cognitive abilities as somebody who was 53 in the year 2000. 25 years ago.

When you look at physical ability, somebody who is 70 today has the same physical abilities as somebody who was 56 in the year 2000. In a very real and tangible sense, 70 is the new 53. So, this is a fantastic benefit for us.

Allison Nathan: That's really striking, actually. Even in the year 2000, which is very fresh in our memories, that we have had such a big improvement. Very interesting.

Kevin Daly: I know. People are sometimes surprised at that. But if you look at the TV shows from the 1980s, from the 1990s, you look at some of these actors or even sports stars from that period and you take pictures of these people and you go, you know, that actor was in his 30s when he was doing that role. And often these people are people who today would pass for somebody in their 40s or their 50s. So, it is however you measure it, both physically, both mentally, how people look, we are living significantly longer and healthier lives.

Allison Nathan: And so, we are seeing a big rise in life expectancy.

Kevin Daly: We are. And actually, the official data, I think, are understanding the true increase in life expectancy because life expectancy data that are commonly quoted are actually not really a measure of life expectancy in the true sense, they're a measure of what are the age of people dying at today. So, when we say in an average developed economy life expectancy is 82 years old, what we're saying in effect is that somebody born 82 years ago in the 1940s would live to 82.

Now the measure, the official life expectancy in the 1940s was actually in the 61,62. So, if somebody's born today, their true life expectancy is only 82 if we assume that there isn't some improvement in mortality rates and longevity rates over the coming 82 years.

Allison Nathan: And in that context, Kevin, when you say mortality rates, how do you define that?

Kevin Daly: Mortality rates can be defined many different ways. But it is the average number of people in a

population. And often that's defined under a specific age category. So, how many 20-year-olds are dying? How many 30-year-olds are dying in a specific year? And what we're seeing, what is driving the increases in life expectancy is that there've been reduced numbers of deaths or mortalities for every age group going up until now into the eighties and nineties.

Allison Nathan: And so, the assumption that mortality rates will remain constant is not bearing out. You're actually seeing mortality rates-- less death.

Kevin Daly: Not only is it not bearing out now, but it hasn't born out for the past 150 years. Now, that's not true for every country. There are some countries where you are seeing, actually, the life expectancy is declining. In the US, for instance, since COVID, there has been a decline in life expectancy. So, it's not good news everywhere in every country. But on average across the world, there's been this consistent increase in life expectancy that has been taking place for more than 150 years.

Allison Nathan: Let's talk about the other factor you mentioned, declining fertility. How worried should we be

about that?

Kevin Daly: It's clear that this isn't an unambiguous positive in the way that increased longevity will be. I'm long enough in this business to remember until a few years ago that people were really worried about exploding population growth and very excessively rapid population growth. And we have to remind ourselves that even with the falls in fertility we have had, is that the global population is still projected to continue to rise.

So, the UN on its latest projections expect global population to rise from 8 billion currently to 10 billion in 50 years. So, to peak around 2075. And to gradually decline thereafter. They previously projected it would rise to 11 billion by the end of the century and be continuing to rise. So, the projected peak in population has declined. But we're still seeing quite significant population growth over time.

I think one of the other factors that gives rise to some confusion over this is that the magic number of 2.1 of the replacement rate. So, this is the rate that demographers typically think of if fertility falls below 2.1, the global

population in a country or the globe, it will fall. And importantly, we're at that 2.1 percent threshold globally.

But actually, that 2.1 percent figure isn't set in stone. That is only the replacement rate that stabilizes the population if you have mortality fixed at current levels. If you have life expectancy increasing over time, that replacement rate is significantly lower. Around 1.5, 1.6. So, actually, we're still at a global level, at a level of fertility that implies increased population growth over time.

Allison Nathan: So, if I'm putting this all together, population aging is a consequence, as you said, of increased longevity and declining fertility. Those are the two major factors. But if we think about population aging itself, how big of a problem is that really?

Kevin Daly: I mean, it is a problem. And the reason why economists fret about it so much is because if you have a fall in the share of the population that is of working age, and if that follows, you know, one for one to a decline in employment rates, then that will reduce employment in populations, will reduce GDP, and will increase dependency ratios. So, that the number of dependents in

the population dependent on those who are in employment.

So, if you go back to those figures that we quoted at the start of the podcast, the working age ratio in developed ecosystem falling from 67 at a peak in just before 2000 to 57, that's a 15 percent decline. If it is matched one for one for a fall in employment, that will reduce employment and GDP by a similar amount.

The only solution, really in the long term to that increased longevity, increased aging is for us also to work longer. Other factors may provide temporary fixes. But the only long-term solution is that if we're living longer, we also have to extend our working lives as well.

Allison Nathan: So, do we see any evidence that's actually happening at this point? Are we working longer as we're getting healthier and staying healthier for longer?

Kevin Daly: We are. That's the good news story to this as well is that this is a problem if we weren't also working longer. But the good news is that we are also working longer. From 2000 in developed economies, longevity has increased on average from 78 years to 82 years. That's a 5

percent increase in longevity. Whereas, effective working lives, so the amount using data that we ourselves have calculated, have actually increased by 12 percent over that period from 34 to 38.

So, much as economists treat the working age ratio as being from 15 to 64, the reality is that people typically don't enter the workplace at 15 because they're in education. And they in many cases don't leave at the age of 64. And what we're seeing is in their effective work lives, the number of years they actually work, they have increased significantly since 2000.

Allison Nathan: By the way, I'm not sure everyone would agree that's good news, Kevin. I think we do aspire to not be working for a very lengthy amount of time in our lives and have some enjoyment at the end there. But if you think about why people are working longer, have you done any work in terms of why that is?

Kevin Daly: Yeah. Well, I mean, it's good news in the sense that it's an adjustment we have already made. We're already well in the process to making. So, it's not an adjustment we have yet to make.

And if you look at the factors that have caused the increase in effective working lives, I think they are predominantly good factors or positive factors. So, one has been an increase in female participation after childbirth. So, there's been a significant increase in women extending their working lives, particularly through improvements in childcare provision and so forth, being able to continue in the workforce after they have started having children.

And then the second key factor has been the reduced importance of manual labor. So, manual labor, we think of things like construction, but also manufacturing jobs. A lot of manufacturing jobs in particular, these are tough jobs that people typically retire from relatively early. As you've seen a reduced share of the workforce in manual jobs, you're seeing an increase in the effective working hours as a result of that as more and more people are doing office-type jobs.

Allison Nathan: So, Kevin, we began talking about this, the underlying concern is that we're in this demographic time bomb and that's going to ultimately have negative consequences for economic growth. But what I'm hearing

from you is perhaps we don't need to be as concerned about the implications on growth from all of this.

Kevin Daly: I agree. I think one of the factors that contributes to these concerns is that people find it difficult to separate the process of getting older, which we all face, which is inherently worrying, with the process of economic aging, which is actually less of a concern for society as a whole. Economic transitions are always difficult, but this is one that we're managing relatively well.

Allison Nathan: Are there specific investment implications of the work you've done?

Kevin Daly: I think there are. So, a lot of the analysis on aging and the implication of aging makes the, in my mind, mistaken assumption that as our lives increase, we can hold everything else fixed. And so, what that implies in practice is that we're extending the amount of our lives that we are in, quote/unquote, "old age." I don't think that's an accurate description as the IMF work that I had mentioned earlier on highlights. Actually, a more accurate description is that we're extending each of the parts of our lives. So, we're younger for longer. We're middle aged for longer.

We're older for longer.

And so, one implication of that is that there's not naturally going to be a shift from aging necessarily into increased demand for goods and services that, quote unquote, "old people" desire because we're extending all stages of our lives in proportion.

Allison Nathan: So, Kevin, what is the bottom line here when we think about the implications of global aging on the economy? It seems like it's not the concern that people may think it is.

Kevin Daly: Yeah. First point is to say it's to a large sense been driven by increased life expectancy, which is a good thing in its own right, regardless of the economic implications. But even on the economic implications, it's that population aging is only a problem, increased longevity is only an issue, if we're not also extending our working lives in proportion.

Now, the good news is not good news for everyone, but the reality is that actually across most countries, we have already extended our working lives quite significantly. And

as a result, employment rates have risen, not fallen. And dependency ratios have actually declined rather than risen.

Allison Nathan: Interesting. I think there's a lot of food for thought there, Kevin. Thank you for joining us and sharing your insights. Really interesting work you're doing.

Kevin Daly: Thank you, Allison.

Allison Nathan: This episode of Goldman Sachs Exchanges was recorded on Thursday, May 29th, 2025. I'm Allison Nathan. Thanks for listening.

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