Myth Busts









Funded by
the European Union

Grant Agreement n° 101094741

The FutuRes project has received funding from the European Union's Horizon 2022 Research and Innovation Programme under Grant Agreement No 101094741.

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Contents

FACT: MIGRANTS GET OLDER LIKE EVERYONE ELSE 2

FACT: AUTOMATION WILL REPLACE TASKS, NOT ENTIRE JOBS 3

FACT: TECH DEVELOPERS IGNORE OLDER PEOPLE'S NEEDS 5

FACT: PEOPLE OF ALL AGES CONTRIBUTE TO THE ECONOMY 8

FACT: INVESTING IN HEALTHY AGEING SAVES MONEY 10

FACT: FRAILTY CAN BE PREVENTED AND TREATED. 12

FACT: AGEING AFFECTS ALL OF US 14

Myth: Migration will "fix" skill shortages.

Fact: Migrants get older like everyone else

It is true that migrants who move for work are typically young and economically active, so they are indeed able to fill labour market gaps. It is therefore tempting to think that migration can solve many challenges of tomorrow's societies: that it will counter population ageing, reverse labour force decline, and make social security systems more resilient.

However, policies based on this simple assumption would be short-sighted. Migrants who are young and able to work now will also age and might need support later in life. Demographic projections strongly suggest that this would generate an ever-increasing demand for more migration. This fact was acknowledged as early as 2000 in a UN report[1]: Even high-scale migration events are not expected to alter these long-term trends[2].

This means that: while migration can relieve short-term labour market pressures and keep population from declining, it can never be a sustainable long-term approach to managing population ageing.

So, what to do instead? Migration alone cannot change the nature of population dynamics. At least not without any changes to the current trends of falling birth rates. Yet designing effective policies to raise birth rates is notoriously difficult, and results have been shown to be limited[3].

It is instead vital to understand that the challenges of demographic ageing cannot be solved simply by looking at population processes. By coupling demographic projections with insights from other areas, research has already identified promising, more durable solutions: increasing labour force participation, raising productivity through automation, and adjusting retirement age to match gains in longevity, to name just a few[4].

In sum, resilient strategies to manage the effects of populations that are getting older need to include a whole range of social, environmental and economic tools - ideally based on a broad political consensus.

Jakub Bijak, Professor of Statistical Demography at the University of Southampton

[1] The mentioned UN report from 2000 is archived here: https://tinyurl.com/replacement-migration
[2] Try the QuantMig Project's "Migration Scenarios Explorer": https://bit.ly/quantmig-scenarios
[3] See this extensive study of the impact of family policies on fertility in industrialised countries: https://doi.org/10.1007/s11113-007-9033-x
[4] Read about simulated effects of labour market policies here: https://doi.org/10.1007/s11113-007-9065-2

Myth: Robots will take our jobs.

Fact: Automation will replace tasks, not entire jobs

A common perception is that “robots will take our jobs”. While for many this is a very unsettling idea, others predict that the automation of work will solve one of our biggest challenges: the declining workforce in our ageing societies. The reality is, however, that both the worries and the hopes are mostly unfounded.

Automation will not “save” us, and neither will it “take our jobs” any time soon. It will, however, replace certain tasks. Most employers do not appear to expect layoffs because of automation. In a survey published in 2018 by the staffing firm ManpowerGroup, firms in the US were asked how they expect automation and digitisation will affect jobs in the short term. Results indicated that only 4% of firms expect job losses, with 91% planning to maintain or even increase the number of workers[1].

Firms in most countries in Europe, also expected an increase in workforce according to the survey, especially in the continent’s largest economies. However, many stated that digitisation or automation may require re-skilling or on-the-job training to adapt to modifications of the jobs.

Why are all these companies so confident in maintaining or increasing employment levels? Well, how likely it is for a task to be replaced by automation depends on the kind of task – more specifically on the worker’s skill level. Researchers identify three skill levels: high, medium and low.

High-skill tasks require extensive and specific knowledge – think of pilots or surgeons. They have robots to help them, but to programme their very specialised knowledge into robots would be incredibly impractical. Also, people are suspicious of leaving high skilled tasks to robots alone. Would you accept a machine to fly your plane or to operate on you all alone?

Then there are low-skill tasks – equally unlikely to be automated, but for a different reason: they aren't worth the cost of it.

It is the medium-skill jobs which are considered most at risk. These are jobs that require post-secondary school training, but not necessarily a university degree or similarly advanced training. Think construction work or information and support services. Medium-skill workers usually make up the largest of the three groups. Many tasks here could be taken over by machines, especially with the current advances in artificial intelligence.

However, it is important to note that the replacement of certain tasks does not equal the replacement of entire jobs. Here, the retraining and social safety nets are important. Existing examples of automation and digitisation have shown that

maintaining the labour force is important for an economy, for example humans are often needed to operate machines or software.

What we can certainly say: advances in robot technology allow for increases in productivity of labour - whether packing boxes in an Amazon warehouse, helping with car manufacturing or data processing. But automation will not simply put people out of a living – provided the right policies of labour market resilience are implemented. The FutuRes project develops recommendations for such policies, based on data-driven research.

Emily Barker, research fellow with focus on theoretical and empirical macroeconomics, University of Southampton

[1] See the findings of the automation survey by ManpowerGroup (2018): https://www.manpower.com/wcm/connect/ManpowerUSA/076887e5-9c6a-4511-b2a3-9897ec977e88/mpg-skills-revolution-2-report.pdf

Myth; Older people refuse new technologies

Fact: Tech developers ignore older people's needs

here is a common belief that older people are more cautious about new technologies and are therefore less likely to use them. According to statistical studies, it is true that on average people over 60 use technology less frequently - but to assume that this is because they are less open to change is a prejudice.

This prejudice is underpinned by other stereotypes, such as the notion that older people are generally conservative. These assumptions overgeneralise, they do not differentiate between individuals, and they ignore important factors which can ease or obstruct access to technology: older people's individual abilities, education and interests which play an important role in their use of technology.

A brand-new study from 2023 on technology use in old age has analysed the relationships between acceptance, competence, control, interest and social indicators in people over 60 – and concludes that older people's interest in and attitude towards technology are just as diverse as those of younger people.

Older people are at a disadvantage when it comes to using new technologies. Many basic skills which younger people picked up as children, older generations have only become familiar with in the course of their adult lives. Two scientists commissioned by the German government have found that those who design technology often fail to gear it towards groups of older people. A Dutch research group found that applications often rely too much on stereotypical assumptions about older people. Both studies can be found in the reading list below, along with more sources for this article.

An illustrative example was provided by a researcher working in the field of social work in the digitalised society. In 2016 she worked very intensively on the question of how older people are involved in the development processes of technologies. The example of a communication tool that was developed with older people in mind was particularly impressive. The aim of the communication application was to provide older people a digital alternative for their communication needs. To this end, the application had various functions, such as an address book that listed contacts along with a photo of the person, their email address, phone number and date of birth.

The application was designed in a way so that users could call the person directly by touching the phone button, or to write an email to the person by touching the envelope button. While the design of the app worked well for the test users, moving around the app was the biggest problem as they were not familiar with the gesture of scrolling. In most development processes, older people are only involved to test the developed technologies. In a more recent study from 2019, published in a gerontology journal, two researchers again point out that development processes

are often about involving future users to increase their acceptance of the technology, but not about designing the technology to meet users' needs.

In spite of all of this, around a third of people aged 60 and over in Germany use the internet more than once a day, according to a IfD Allensbach survey study from 2023. The same study found that just over half of senior citizens in Germany use a mobile phone or smartphone to access the Internet, and just under 40 per cent use a notebook or laptop.

It is important to consider the diversity of individual interests and not to generalise that all older people are technophobic. Older people's willingness to use and accept new technologies depends very much on the specific benefits and ease of use. If older people do not understand how technology can benefit them, they are less likely to adopt it.

General assumptions should be avoided – instead targeted measures should be taken to support older people in using and adapting to new technologies. To strengthen digital participation in old age, comprehensive technology education programmes for older people are needed, as well as critical and interdisciplinary technology research that consistently challenges stereotypes of older people in research on technology and ageing.

Mona Hille, Scientific consultant, VDI/VDE Innovation + Technik

Further reading ...

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... about how ageing changes the use of technology: Czaja, Sara & Lee, Chin. (2007). The impact of aging on access to technology. Universal Access in the Information Society. 5. 341-349. 10.1145/1102187.1102189.

... about the design of technologies and applications, which is often not geared towards groups of older people (in German): Wanka, A. und Gallistl, V. (2020): Ältere Menschen und Digitalisierung aus der Sicht der kritischen Gerontologie. Expertise

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… about applications, wich are often rely too much on stereotypical assumptions about older people: Neven, L. und Peine, A. (2017): From Triple Win to Triple Sin: How a Problematic Future Discourse is Shaping the Way People Age with Technology. In: Societies 7 (3), 26. doi: 10.3390/soc7030026.

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… about the main reason for involving future users to increase their acceptance of the technology: Merkel, S. und Kucharski, A. (2019): Participatory Design in Gerontechnology: A Systematic Literature Review. In: The Gerontologist 59 (1), e16-e25. doi: 10.1093/geront/gny034

… about Internet use of people over 60 in 2023, IfD Allensbach provides this graph. In Statista. As of 12 December 2023,
see: https://de.statista.com/statistik/daten/studie/1100774/umfrage/umfrage-unter-senioren-zu-endgeraeten-der-internetnutzung/

Myth: "Productivity" goes down with age

Fact: People of all ages contribute to the economy

When economists construct their macro- and micro-economic models, they usually assume that productivity is something which decreases as we age. This is based on prejudices about age and productivity which are deeply engrained in our understanding of the economy. Time to challenge this stereotype, using scientific evidence.

In the idealised life course which economists and policymakers assume, a person becomes "productive" (in the sense of paid work) when they enter adulthood, some sooner, some later. They then "contribute" for around four decades – after which they turn from an active contributing member of society into a mere consumer for the rest of their life.

While many people look forward to retiring and kicking up their feet, many others find it insulting to be no longer perceived as valuable contributors. Recently, the entrepreneurial ambitions of people in later ages have been rising: according to the Kaufmann Foundation1, in recent decades, one-fifth of new US entrepreneurs were between 55 and 64 years old.

As demography shifts, assumptions about what a person can or cannot do at a certain age, are challenged. People today live longer, healthier lives. This increases the health span, meaning the amount of time we spend in good health through our lives. This is in itself very good news, because wellbeing is a value in itself. But the extended health span is of interest to science and policy also for a more specific reason: Some hope that if people over 60 are healthier, maybe they can participate in the labour market a bit longer. This re-entry into the workforce of traditionally inactive cohorts could give rise to a real new "demographic dividend", capable of substantially increasing GDP, as many economists believe. The idea goes as follows: if today in Italy, 65-80-year-olds worked at least part-time, GDP could increase by 15% per year, other conditions being equal.

This is very good news for everyone who wants to keep working in their profession. However, there are a few problems with this thinking.

First problem: Some people who are healthy enough to work may have good reasons to want to stop. Spending time with family for example, travelling, hobbies, political engagement, education – all these things can take a back seat during "working age" and many will be looking forward to it. This of course, is healthy to society as a whole, but also to the individuals: education especially impacts the quality of life and work positively, and it is associated to higher life expectancy.

Second problem: "Retired" people are already a pillar of the economy. This is often overlooked. Many older people volunteer in social work. They help out in the family

business or assist with homework, take care of other older people or watch small children. This contribution saves everybody else time and money. Unfortunately, this added value by retired people is almost never part of economic calculations. What happens with social work, care work and the like when more and more people over 65 are asked to remain in their paid jobs?

To recognise our human potential past the age of 65 as more than just consumption, means to respect people of all ages. Part of the question, however, is to ask not only what the labour market needs right now, but to a certain extent: what would people like to contribute.

Nonetheless, the idea that we should overcome the traditional retirement system is reasonable. The question is what this will look like. It is likely that the fixed retirement age will soon be replaced by a series of individual retirement tracks. People will have the option to alternate between periods of work with periods of rest, until gradually exiting the workforce. This will require profound changes in the private and the public sector. According to the IMF, it will be necessary to envisage transferring entire segments of the pension system to the market, should they become unsustainable for the state's finances. And finally, educational institutions will have to adapt to serve people of all ages, rather than only younger people.

In a recent paper born out of a collaboration between economists and health scientists, Andrew Scott, David Sinclair and Martin Ellison have calculated that targeting aging through increased health spans offers potentially larger economic gains than eradicating individual diseases. They compute that a slowdown in ageing that increases life expectancy by 1 year is worth US $38 trillion, and by 10 years, US $367 trillion.

Ultimately, the more progress that is made in improving how we age, the greater the value of further improvements.

Nicolò Cavalli, Assistant Professor for economic and social sciences at Bocconi University (with a focus on technological and demographic change)

[1] You can read a summary of the report here: https://www.kauffman.org/entrepreneurship/reports/who-is-the-entrepreneur-united-states-1996-2021/

Myth: Healthcare gets more expensive in ageing societies.

Fact: Investing in healthy ageing saves money

Increased public spending on health can be good news, because it can point to the immense innovation which we have seen in medicine and in medical systems. It can mean that we are able to treat health issues that we formerly couldn't - or that we are now aware of diseases about which we did not previously know. Still, rising health expenditure worries many.

Public spending on health has been rising in all OECD countries. Some argue that the demographic trend of societal ageing is its main driver. Besides the fact that this sentiment can easily result in the discriminatory view that older people are "the problem", there is also not clear evidence to support this claim.

The popularity of this idea comes from older and outdated economic models which relied on a fairly simple formula: they presume that people aged 65 years or older are more expensive in terms of healthcare costs than younger people, and that the number of people over 65 will increase over time. This leads to the conclusion that ageing drives public spending. It's simple math – isn't it?

Not quite! This very superficial mathematical projection falls apart as soon as one accounts for other factors. Health economists now use much more accurate models to reflect how the relationship between health and public spending actually works.

Yes, as we age we tend to have more health problems. But this statistical relationship is not a fixed one. Older people today are healthier than older people of the past. One cannot assume that the health costs associated with, say, the age of 72, will be the same forever. [1]

Therefore, it is not age per se which generates higher health expenditure. Rather, it is related to health status – whether a person is in good or bad health. The older model also does not account for the fact that people often continue to provide significant economic and societal benefits into their older age, particularly if they are healthy and active.

Another example of why expenditure on healthcare is determined by more than just age: if we look at statistics, we find that "proximity to death" is a more important driver of hospital costs than age. A person approaching death accounts for more spending – no matter if they happen to die younger or older.

The story is a different one, of course, if we look at long-term care instead of hospitals. Costs such as care homes will undoubtably rise as there are more people in need of such care. However, it is not unthinkable that this trend could be reversed if the care system was rethought and redesigned.

The idea that ageing is driving the rise in healthcare expenditure is superficial and inaccurate. It also generates panic and can result in the discrimination of older people. Instead, policymakers should identify precisely where investments and reforms are needed in order to make health care systems resilient for European populations of all ages. The COVID-19 pandemic made clear how essential investments in public health are. This after austerity politics in Europe had already shown how harmful it can be to neglect them. FutuRes research will build a rigorous and reliable evidence base to inform policies to build more resilient healthcare systems and societies.

Aleksandra Torbica, Associate Professor for health economics and healthcare, Bocconi University

[1]For a research overview see "The effect of population aging on health expenditure growth: a critical review", by Meijer C, Wouterse B, Polder J, Koopmanschap M.

Myth: All older people are frail.

Fact: Frailty can be prevented and treated.

Becoming *frail* means having less physiological strength, declining cognitive function or a reduced ability to bounce back from illness or injury. Many people worry about ageing because they associate it with increasing frailty. Let us examine this notion from the perspective of research.

Frailty refers to a state of vulnerability often associated with ageing or chronic illness. This state of increased vulnerability can further affect the physical, mental and social well-being of the person affected, leading to an increased risk of hospitalisation, poor surgical outcomes and earlier death in older adults.

The median age in the European Union as last recorded by Eurostat in 2022 was 44.4 years. This means that half of the population living in the EU has reached at least their mid-forties. Although people are living longer lives all around Europe, many are at risk of developing long-standing illness, multiple health conditions or mobility problems in their later years. Unfortunately, data show that this trend has been increasing over the past two decades.

However, growing old does not necessarily have to also mean becoming more and more frail. Not all older people are frail and, even more importantly, frailty is not irreversible. It can be prevented and treated to enable a healthier life.

More and more evidence finds that lifestyle modifications can play a significant role in managing frailty, for example: regular exercise, balanced nutrition, and proper medical care as well as age-friendly environments.

More specifically, one study from Japan found that pre-frail older women aged 70 to 84 living in community dwellings can recover locomotor functions such as handgrip strength, balance and walking speed. This can be achieved via programmes that target nutrition and physical activity in old age [1].

Another study found that older adults with low care needs, typically aged 65 to 85, can delay the onset of frailty by using community-based day services (such as recreational activities and functional training) or home-based personal assistance services (like housekeeping) [2]. Together, both studies show the value of adult day services and healthy ageing habits in preventing frailty.

People have different capacities during the life course. Developing right care environments can build on these capacities. This way, ageing can be an opportunity for both individuals and policymakers to sustain physical, mental and social wellbeing in older age.

Being ready to cope with demographic challenges is the responsibility of every one of us. The FutuRes Project examines how policymakers can ensure that health and social care is geared to the needs of older persons in a coordinated and meaningful way.

Andreea Piriu, Assistant Professor with focus on Health, Labour and Education Economics
Aleksandra Torbica, Associate Professor for Health Economics and Healthcare
Bocconi University

[1] Find the Japanese study on improving the physical abilities of older women here: https://doi.org/10.1016/j.jamda.2014.12.005

[2] Find the study about delaying the onset of frailty here: https://doi.org/10.1016/j.jamda.2023.05.036

Myth: Older and younger people are categorically different.

Fact: Ageing affects all of us

When asked to point at someone who is ageing, many people will intuitively look around for a person over 60. Yet of course, everyone is ageing. We often think of different generations almost as different species. This narrative is amplified by media who popularise ever-present labels, like "boomers", generations X, Y, Z, and so on.

This view amplifies differences between younger and older people, when of course individuals differ, for example, in their distinct needs, priorities and political preferences. This "generational view" also exacerbates the idea that older and younger people are in inherent conflict and cannot understand each other.

To talk about ageing, demographers instead use the expression "life course perspective"[1]. The life course perspective looks at younger and older people as the same people, only at different stages of their lives, and with their different needs, priorities, and capabilities which change and develop over time. Rather than "us vs them" generations, it is more useful to think of "us at different moments in our lives".

The World Health Organization notes: "Adopting a life-course approach involves taking action early [and] appropriately during life's transitions."[2] The life course perspective still recognises that access to resources varies throughout people's lives. Young people may not have much money nor assets, whereas middle-aged people may have more money and assets, but lack time, and those at pension-age might have more time and assets, but their health and finances may be worse. As we all age, we also all move between these different stages.

The main challenge for policy is not how to support one age group at the expense of another, but rather how to make key resources – time, money and assets – more equitably distributed across the life course. This is a challenge both for state policies and for the private sector, and may require re-thinking how credit and insurance currently work in our societies, among other aspects. Regardless, levelling the field requires thinking in the long-term - and recognising that the policies which impact us today also have impacts on how we live tomorrow.

Jakub Bijak, Professor of Statistical Demography, University of Southampton

[1] See the "Handbook on Demographic Change and the Lifecourse" for the newest scientific perspectives on Ageing: https://www.e-elgar.com/shop/gbp/handbook-on-demographic-change-and-the-lifecourse-9781788974868.html

[2] About the WHO's Life Course Approach: https://www.who.int/europe/publications/i/item/9789289053266