Older Persons and the Post-Covid-19 Agenda

A Background Paper for the United Nations DESA[1]

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Summary

- The Covid-19 pandemic has been a multidimensional shock affecting the lives of billions of people. It has exerted a disproportionate impact on the health, lives, rights, and welfare of older people.

- Covid-19 has acted as an accelerant and a stress test concerning how prepared individuals and countries are for an ageing society.

- The rights and needs of older persons need to be protected in a post-pandemic world of fewer resources. With an estimated ninety million people (many of them old) pushed into extreme deprivation the need to protect the vulnerable has increased.

- Post pandemic policies aimed at 'building back better' are an opportunity to bring about the deep-seated social and economic adjustments that a rising number of older people require.

- The pandemic has revealed a number of policy and institutional weaknesses that need to be corrected. The diversity in outcomes for older people across countries creates an opportunity to identify best practice in a range of ageing related issues.

- The pandemic represents an opportunity to change the narrative around ageing by reducing ageism, raising awareness of diversity in ageing, redefining 'old' and informing people of longevity trends and the importance of healthy ageing.

- Governments have adopted policies that have led to substantial falls in economic growth in order to save lives. This reveals how much they value older lives. Consistency requires they continue to invest financially in the needs of older people post-pandemic.

- The pandemic has shown that in the context of an ageing society a healthy economy requires a healthy population. Focusing on a life cycle perspective to ensure that the current young become the healthiest and most productive future old is crucial.

- That requires investing in healthy ageing and tackling the socio-economic inequalities that have been revealed by the crisis.

- Post pandemic governments will need to invest in pro-growth policies to bolster a weakened economy. Given the growing proportion of older people, this will require integrating ageing into economic development.

- Employment policies aimed at older workers are needed in order to produce growth and to minimise the long-term consequences of Covid-19 on older people.

- The contribution of older people extends substantially beyond the economy which needs to be incorporated into responses to rebuild after the crisis.

1. The Pre-COVID-19 Agenda

The development of a specific agenda supporting the rights and needs of older persons emerged over the twentieth century. This agenda arose from a variety of motivations, including:

1. *Protecting the marginalised* - Any focus on supporting the disenfranchised in society has to include older persons. Given the specific needs associated with older persons that require a distinct agenda.
2. *Economic Development* - The global spread of economic development brought social disruption with distinct impacts on older people as work, employment, health, and residential patterns changed. This created a varied agenda for older people depending on the intersection of economic development with existing social practices (Sivaramakrishnan 2018).
3. *An Ageing Society - A* global demographic transition has produced a rising proportion of older people making this an agenda of growing importance with global reach.

As befits an agenda affecting more than one billion people (the current world population of those aged over 60) the range of topics covered is substantial. As with those aged *under* 60, the agenda covers all aspects of life and is marked by considerable diversity. This diversity is making itself ever more apparent globally as the number of older people increases. It manifests itself both within countries across different socio-economic groups, as well as across countries. Importantly, whilst the number of older people as a share of the population is largest in high-income countries, the majority of older persons live outside these nations (see Table 1).

Table 1 Population over the age of 60, 2020 (Millions)

Region	Total	Male	Female	Total %
World	1050	484	566	100.0
High Income	308	140	169	29.4
Low Income	40	18	22	3.8
Lower Middle Income	282	134	149	26.9
Upper Middle Income	419	193	226	39.9

Source: *United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, custom data acquired via website.*

1.1 Three Different Agendas

The agenda for older people is composed of three components. The first concerns the rights of older people and society's obligations to recognise and support them. Irrespective of broader economic consequences, a combination of long-term demographic and social change requires a focus on protecting, supporting and articulating the rights of older people. A focus on such rights is all the more important because of ageism which can lead to prejudice, discrimination and a mistaken belief that rights diminish with age.

Separate to this rights-based approach is a component focusing on the consequences of a demographic transition and the move towards an 'ageing society'. Whilst the average age of nations varies, the demographic transition means every country around the world is 'ageing' – experiencing an increase in its average age and the proportion of population aged over 65 or 80. For high income countries these forces are already making themselves evident whilst for countries with younger populations the challenges will be manifested in the years ahead.

An ageing society is widely seen as having negative future economic implications in the form of lower GDP growth and worsening public finances due to health, pension and care costs (Aksoy et al. 2019; IMF (2019)). Core policy recommendations aimed at mitigating these economic problems include extending working careers and healthy ageing (OECD (2018)).

This ageing society focus reinforces as well as conflicts with the rights-based approach. With its emphasis on supporting health and employment it reinforces the argument that older people have the same right to be active and engaged and the same access to health resources as the rest of the population. Conflicts arise from the prospect of reduced pension and social insurance benefits as a way of containing fiscal pressures. In addition, the ageing society narrative encourages the perception that economic activity in the marketplace is the main way to assess the social contribution of older people. Further, with its focus on old age dependency and frailty, this agenda risks reinforcing age-based stereotypes and failing to reflect the diversity that characterises older people.

If these two components focus on the rights, needs and consequences of a rising proportion of older people a third agenda (a longevity dividend – see Olshansky et al. (2006); Scott (2019)) focuses on changes in how people age. Figure 1 shows a demographic pyramid for the world population. The ageing society approach is to draw a horizontal line at a certain age (say 65) and note the dramatic increase in the number of older people. In doing so it focuses on chronological age as a definition of old and draws a distinction between the 'old' and the rest of the population. The rights based and ageing society agenda tend to focus on the implications of this change in demographic structure and the associated rise in the number of older people.

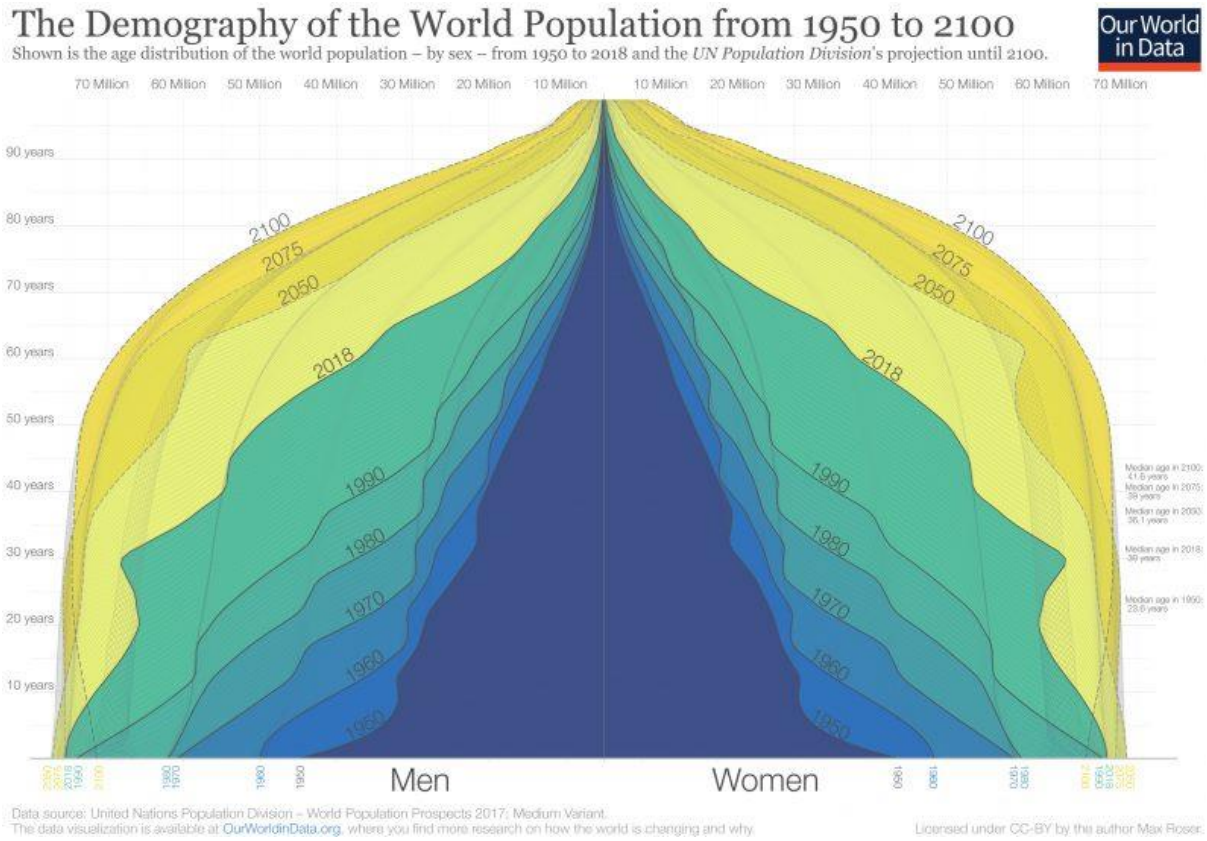


Figure 1 World Population Demographic Pyramid

Source: *Max Roser, Hannah Ritchie and Esteban Ortiz-Ospina (2013) - "World Population Growth". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/world-population-growth' [Online Resource]*

By contrast the longevity agenda draws a vertical line and notes how much longer people are living. As shown in Figure 2, best practice life expectancy (defined as the country with the highest average life expectancy at birth in any year (Oeppen and Vaupel (2002))) has increased at a steady rate over many decades and has broken through the implied limits to life expectancy of many past forecasts.

The length of life has increased such that each generation faces the prospect of more time ahead of them. Key to this longevity agenda is a life course perspective recognising that longer lives have implications not just for end of life but for all of life. That has significant implications for education, healthcare, employment and social activities and the social norms and institutions that support them (Gratton and Scott (2016)).

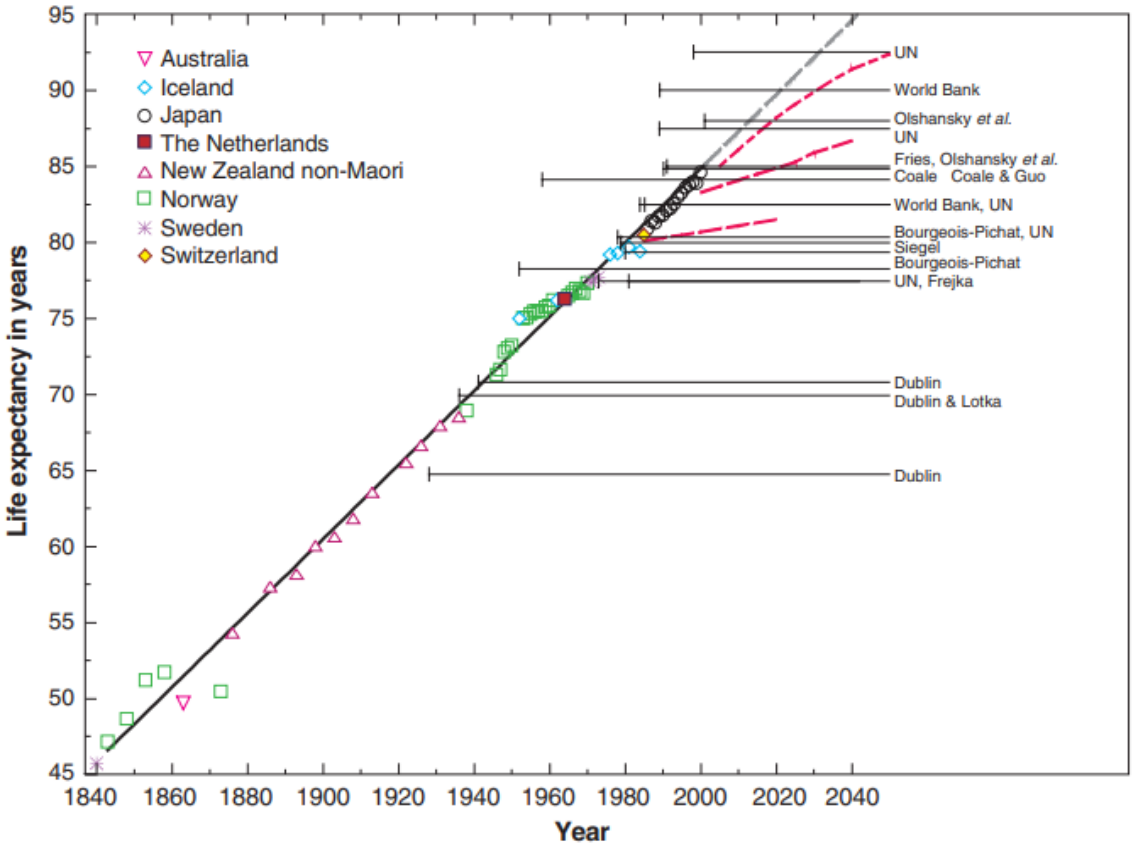
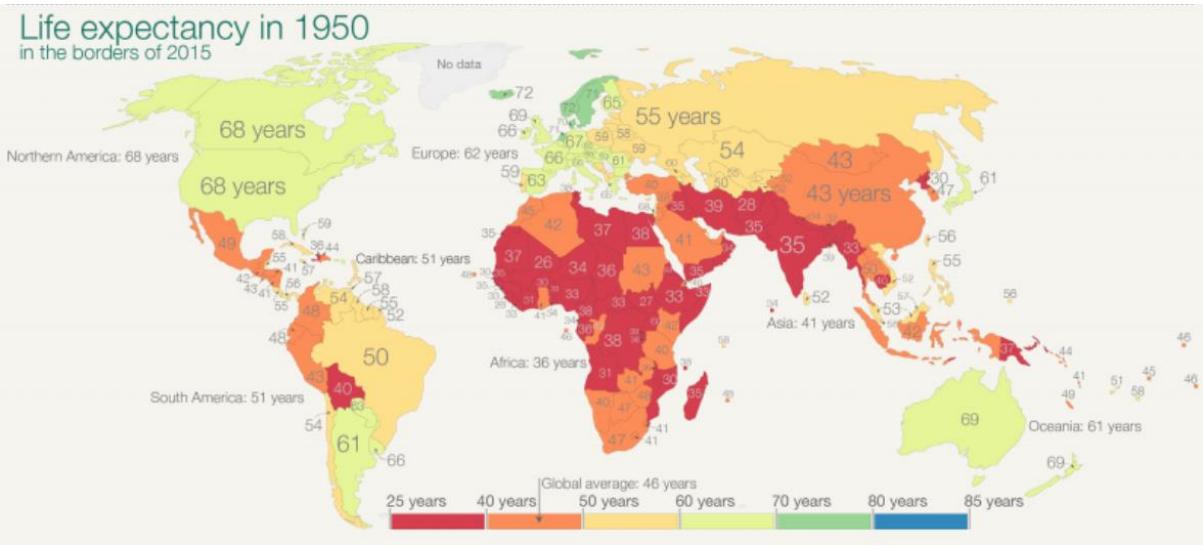


Figure 2 Best Practice Life Expectancy

Source *– Oeppen and Vaupel (2002)*

Whilst best practice life expectancy is defined by high income countries, rising life expectancy is a global phenomenon. As shown in Figure 3, there is a general convergence across countries towards best practice such that life expectancy has grown *fastest* in those countries with initial low life expectancy. Adapting to longer lives is a global challenge.



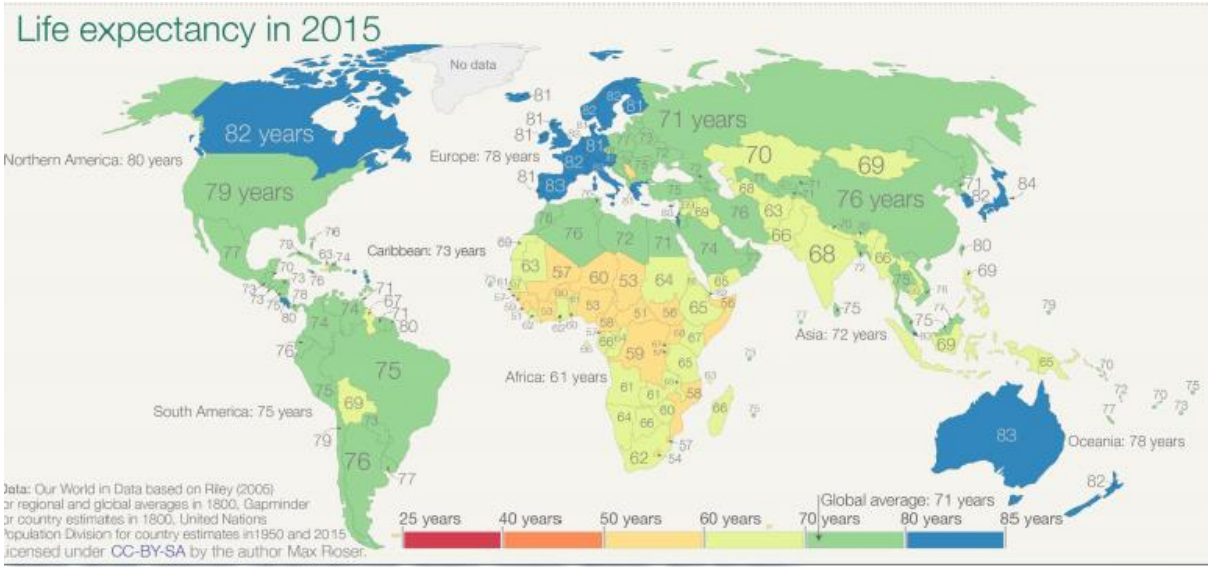


Figure 3 Life Expectancy 1950 and 2015 Compared

Source: Max Roser, Esteban Ortiz-Ospina and Hannah Ritchie (2013) - "Life Expectancy". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/life-expectancy' [Online Resource]

According to the Global Burden of Disease Demographics Collaborators (2020) healthy life expectancy has also been rising (albeit not as fast as life expectancy itself). This combination suggests that ageing is occurring differently now and draws attention to a key aspect of the longevity agenda – the notion that age is malleable. The malleability of age also explains why any agenda for older persons' is a diverse one due to the inadequacy of chronological measures of age to fully capture the context and process of ageing.

Focusing on making the most of these longer lives and exploiting the malleability of age constitutes the longevity agenda. The consequence is that as well as there being more older people (an 'ageing society'), how people are ageing is changing. The longevity agenda has implications for both the rights-based perspective and an ageing society. Respecting the rights of older people includes ensuring that everyone has access to opportunities for 'successful ageing'. The malleability of age also suggests that as well as an ageing society there is a 'longevity' dividend to be seized. If people are living for longer and in good health for longer this should be good news for the economy and GDP so long as appropriate policies are followed.

1.2 Implications of the Longevity Agenda

The longevity agenda has a number of important implications for discussions of ageing and older people. Firstly, it suggests a redefinition of what constitutes 'old'. In particular it suggests a focus not on chronological age but what Sanderson and Scherbov (2019) call 'prospective age'. Rather than defining 'older people' by years since birth an alternative definition is based on expected years of life remaining. As illustrated by the United Nations (2019) this leads to substantially different conclusions regarding concepts such as the 'old age dependency ratio' and whether there is an 'ageing society'.

Secondly, it provides a link between young and old through its life course perspective. Given mortality trends today's young have never had a greater chance of becoming old. That

requires a more recursive approach to ageing and recognising the importance of early life stages in supporting older people in the future.

Table 2 Median Population Age

Country	2020	2050	2100
High Income	41	46	47.7
Upper Middle Income	35.4	43.5	48.1
Lower Middle Income	26.6	33.5	40.9
Lower Income	19	24.8	35.8
South Africa	27.6	33.9	41.2
Egypt	24.6	29.7	40.4
Bangladesh	27.6	40	51.2
China	38.4	47.6	49.7
Japan	48.4	54.7	53.8
Cambodia	25.6	34	45.2
Peru	31	39.4	49.4
U.S.A	38.3	42.7	45.5

Source *– United Nations*

As **Table 2** shows the media population age varies substantially across countries. High income countries tend to have higher median ages and low-income countries young populations. However, the logic of the demographic transition means this large younger cohort will over time raise the average age of society, as shown in the projections for 2050 and 2100. Those aged 65 in 2050 are today's 35-year olds. Given the malleability of age that lies at the heart of the longevity agenda investing in making sure that the current young age well is a crucial agenda.

The longevity agenda both reinforces as well as conflicts with other agendas concerning older people. For instance, in focusing on changes in how people age it intersects with an ageism agenda fighting the stereotyping and marginalisation of older people that often leads to their rights not being respected. In focusing on a longevity dividend, it both proposes a way of tackling the economic challenges associated with an ageing society as well as conflicts with the economic pessimism of that narrative (Scott (2020a))

There are also areas of potential conflict with the rights-based agenda if a longevity agenda/healthy ageing approach stigmatizes the opposite of successful ageing. Individual rights exist independently of how an individual has aged. With its life cycle perspective, the longevity agenda also dilutes the emphasis on the current old and places an equal emphasis on the future old e.g. the current young.

1.3 Policy Commitments

Each of these three different components have influenced the three main UN commitments around older people – namely

1.3.1 The Madrid Action plan

1. Linking ageing issues to other socio-economic development and human rights frameworks and mainstreaming ageing into the global agendas
2. Full realization of all human rights and fundamental freedoms of all older person
3. Participation of the older population in the development process and other socio-economic-political processes of our society
4. Ensuring gender equality among older person
5. Recognising importance of intergenerational family dependence and solidarity along with reciprocity for social development
6. Harnessing the potential of technology to mitigate the consequences of an ageing society particularly in the developing nations
7. Changes in attitudes reflected in country policies and practices to capture the enormous potential of ageing in the 21st century

1.3.2 The 2030 Sustainability Agenda

Goals focusing both on the role older people can have in achieving them as well as ensuring that their rights and needs are reflected in the target outcomes

Goal 1: No poverty
Goal 2: End Hunger
Goal 3: Ensure Healthy Lives
Goal 4: Ensure inclusive and quality education
Goal 5: Achieve gender equality
Goal 9: Build Resilient infrastructure and innovation
Goal 10: Reduce inequality
Goal 11: Make human settlements safe, resilient and sustainable
Goal 16: Promote Just and peaceful inclusive societies

1.3.3 The Decade of Healthy Ageing

1.Change how we think, feel, and act towards age and ageing
2.Ensure communities foster abilities of older people
3.Deliver person centred integrated care and primary health services responsive to older population
4.Provide access to long-term care for older people who need it.

1.4 The Post-COVID-19 Agenda

As shown in Figure 4, one of the striking features of Covid-19 is the way in which its mortality rate increases dramatically with age, in a way that mimics all cause mortality. Thus, at the heart of this pandemic there is a very direct link with older people which has interacted with these three components of the agenda in very distinct ways.

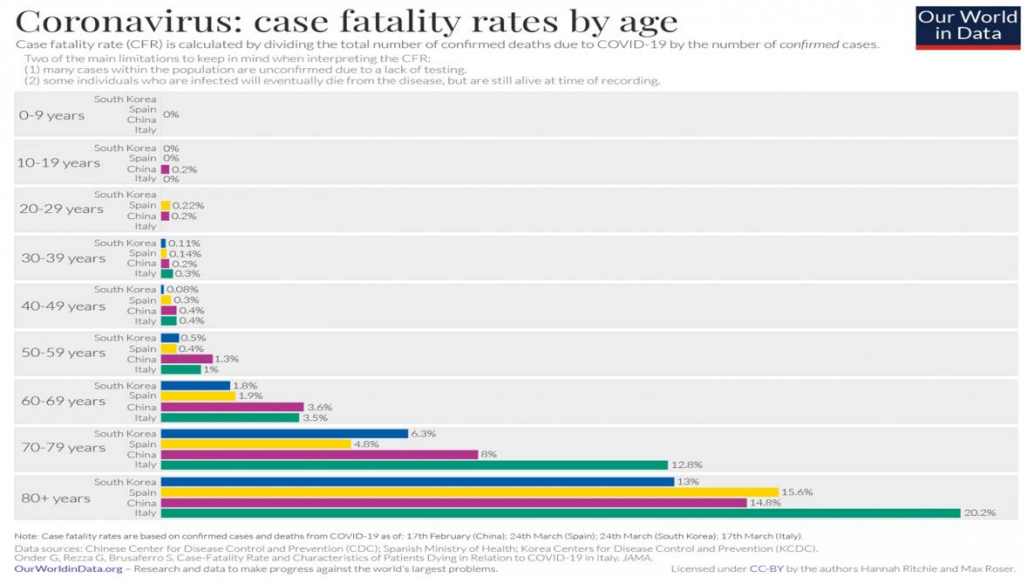


Figure 4 Case Fatality Rates of Coronavirus by Age
Source – Our World in Data Redo using underlying data

In the face of any major shock, it is usually the marginalised and disenfranchised, the poor and the vulnerable that are most exposed. That makes the rights-based agenda for older people all the more important both during the course of the pandemic but also in focusing on 'building back better' from the crisis. In a post-pandemic world of fewer resources, it will be important that the rights of older persons are respected. Further allowance needs to be made for the contribution they can make to any rebuilding along with ensuring that they also benefit from any such rebuilding.

Given that Covid-19 is the first pandemic to occur since globally the number of people aged over 65 exceeds the number aged under 5 the response to this pandemic has been shaped by an ageing society (Scott (2020b)). It has revealed substantial differences across countries in the ability to support older people during the crisis as well as revealed the impossibility of achieving a healthy economy without a healthy population. Just as protecting the health of older people has led to economic shutdowns, a failure to support healthy ageing will lead to higher health and pensions costs and lower GDP. These provide key learnings for the future.

The longevity agenda has also been highlighted by COVID-19. Although age is a key determinant of risk from COVID-19 the role of other underlying health factors is important. The need to focus on healthy ageing is crucial. Further in a world which will be searching for economic growth in order to rebuild from the crisis, the need to support positive economic contributions from older workers through a longevity dividend will be paramount.

In other words, the pandemic has highlighted the current importance of the older persons agenda but also in many areas made the need for supporting this agenda even stronger. In the remainder of this paper, we provide more analysis as to how this has happened and what lessons can be learnt, and policy measures taken.

2. The Impact of Covid-19

As of November 26th, 1.42 million people have died of COVID-19 (worldindata.org). Comparing with 2017 that would place Covid-19 amongst the top 10 causes of death.

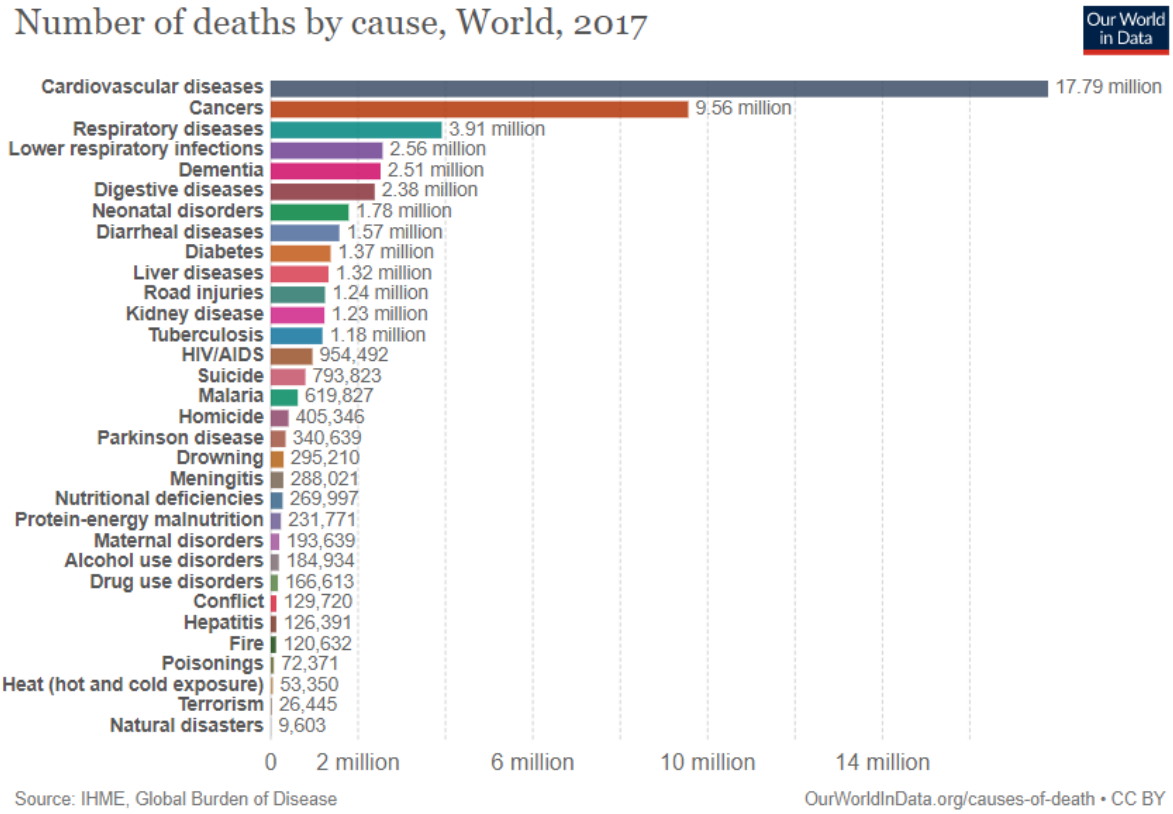


Figure 5 Number of Deaths by Cause (2017)

Source – Our World in Data Redo using underlying data

Because the fatality rate from the disease is so strongly linked with age the majority of deaths from Covid-19 have occurred amongst older people. However, the proportion of deaths by age is not just shaped by the case fatality rate but also by the age distribution of the population. For lower-income countries, who tend to have larger young populations, Covid-19 will also be leading to high numbers of deaths of younger ages – as can be seen from Figure 6.

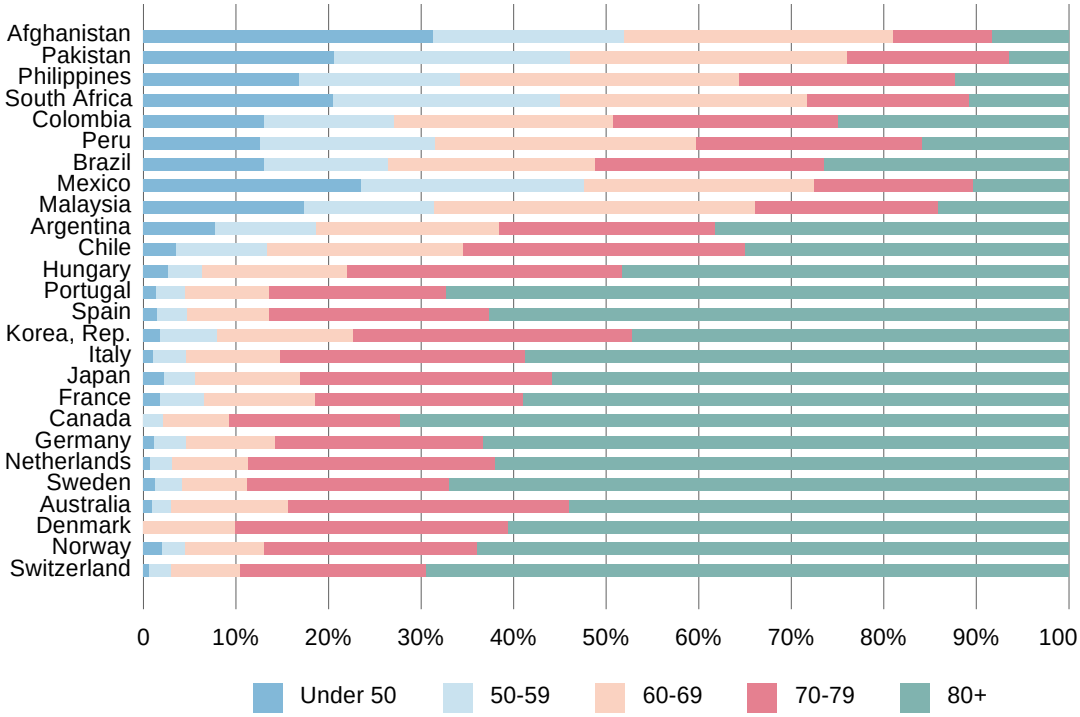


Figure 6 Distribution of COVID-19 Deaths by Age Groups for Various Countries
Source – Demombynes (2020)

This effect is also reinforced as, according to Demombynes (2020), lower income countries also have a lower age gradient attached to Covid-19 mortality.

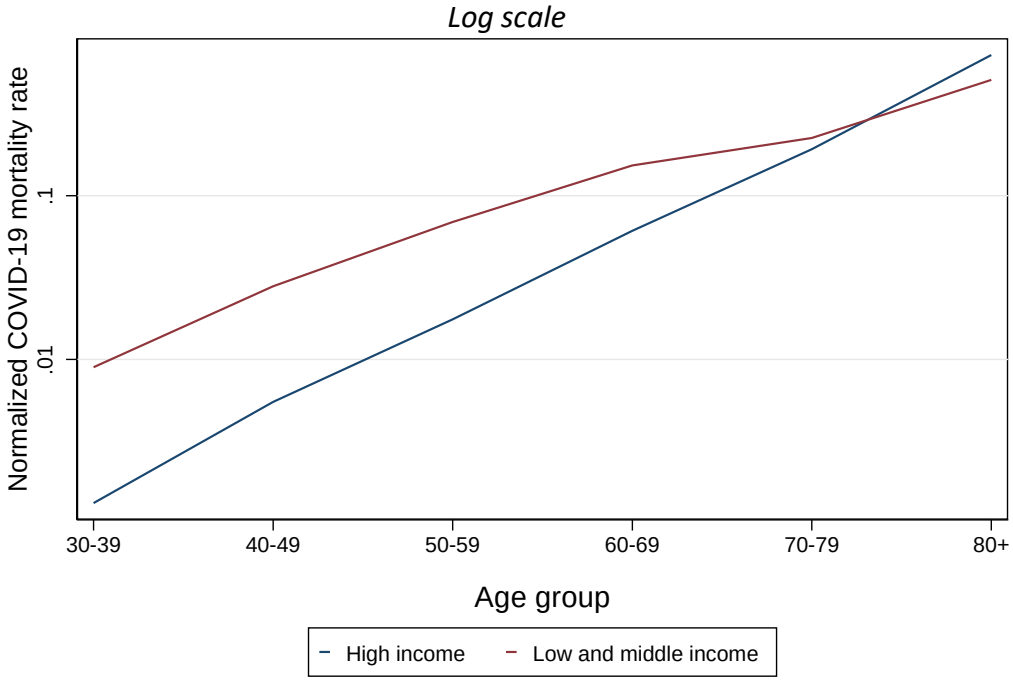


Figure 7 – Mortality Curves from COVID-19 Deaths by Age Group
Source – Covid-19 Age Mortality Curves are Flatter in Developing Countries G.Demombynes World Bank Group Policy Research Working Paper 9313

Combining the age distribution (with more older people in high income countries) with the mortality curves from Covid-19 (older people more likely to die from Covid-19 especially in high income countries) gives the global breakdown of deaths from Covid-19 in Figure 8. There is considerable variation across countries with fatalities being highest in the richer countries, making Figure 8 an unusual chart for an infectious disease.

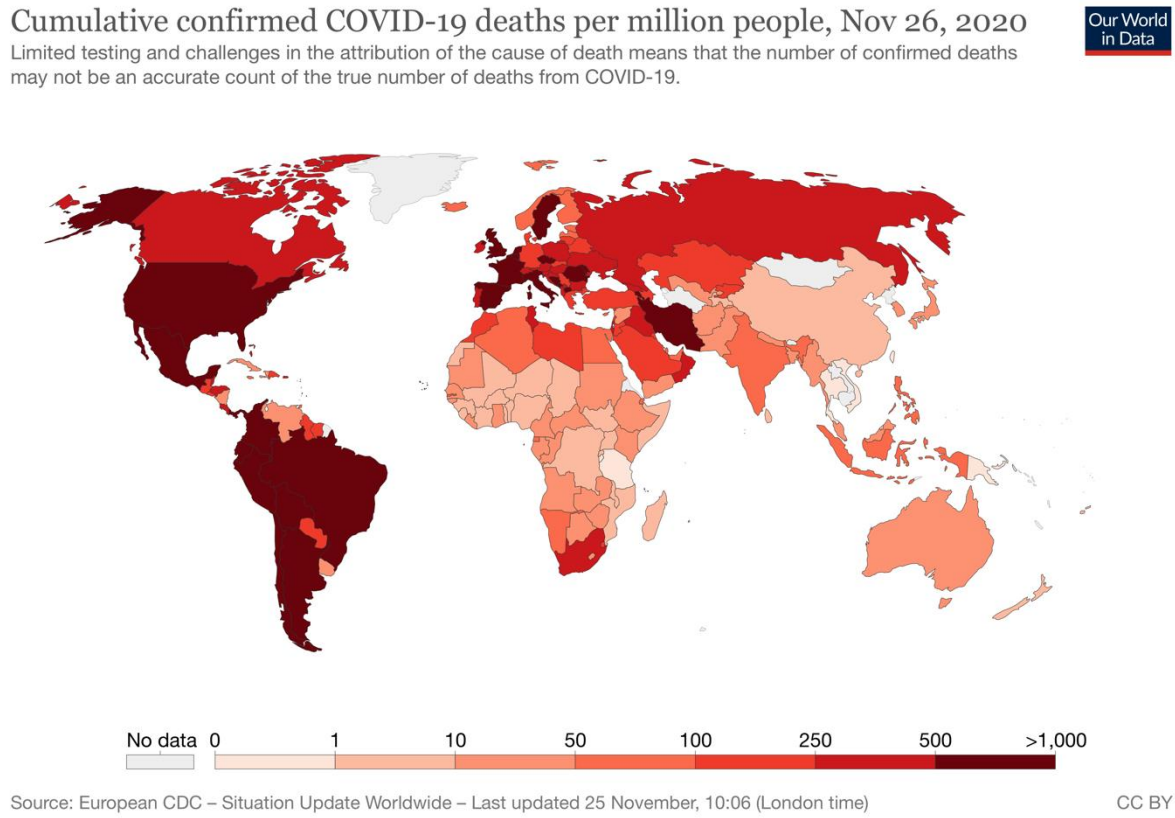


Figure 8 – Cumulative Confirmed Covid-19 Deaths per million people

Figure 8 broadly confirms the notion that higher income countries have been hardest hit due to their larger older populations. However, as is usually the case with ageing and longevity, this simple story also conceals a great deal of diversity. It isn't just high-income countries that have seen large numbers of fatalities and the proportion of fatalities from Covid-19 in high income countries shows considerable variation (Figure 9) pointing to the role of myriad other factors in determining the impact of Covid-19.

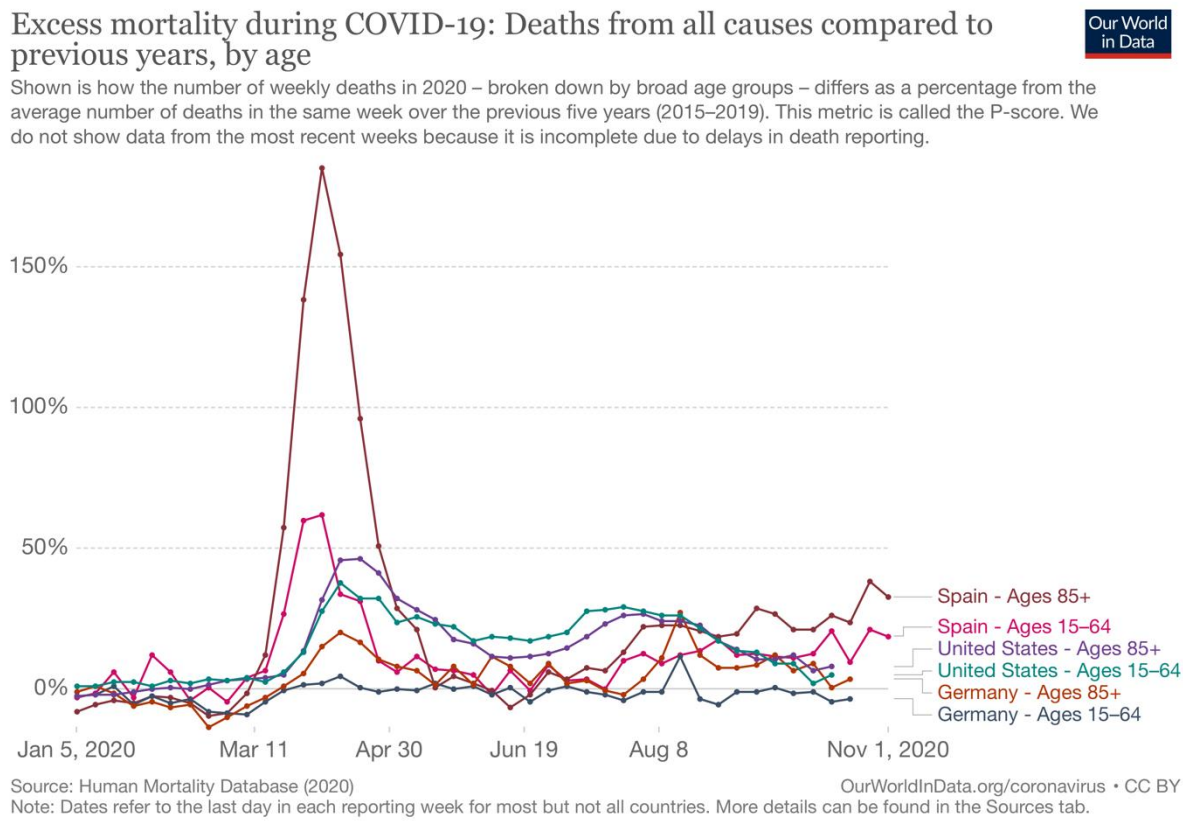


Figure 9 – Excess Mortality During Covid-19 by Age in Germany, Spain and United States
Source – Our World in Data

As shown in Figures 10a-c the impact of Covid-19 cannot simply be explained by differences in GDP per capita, proportion of older people or inequality.

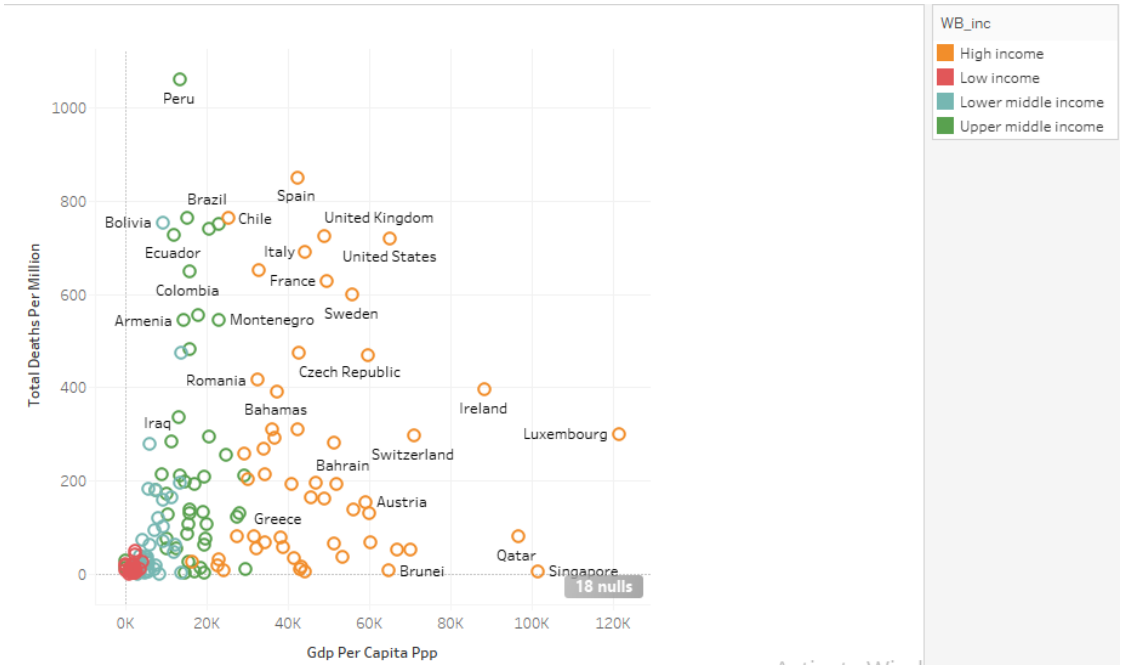


Figure 10a – Deaths per million from Covid-19 vs GDP Per capita

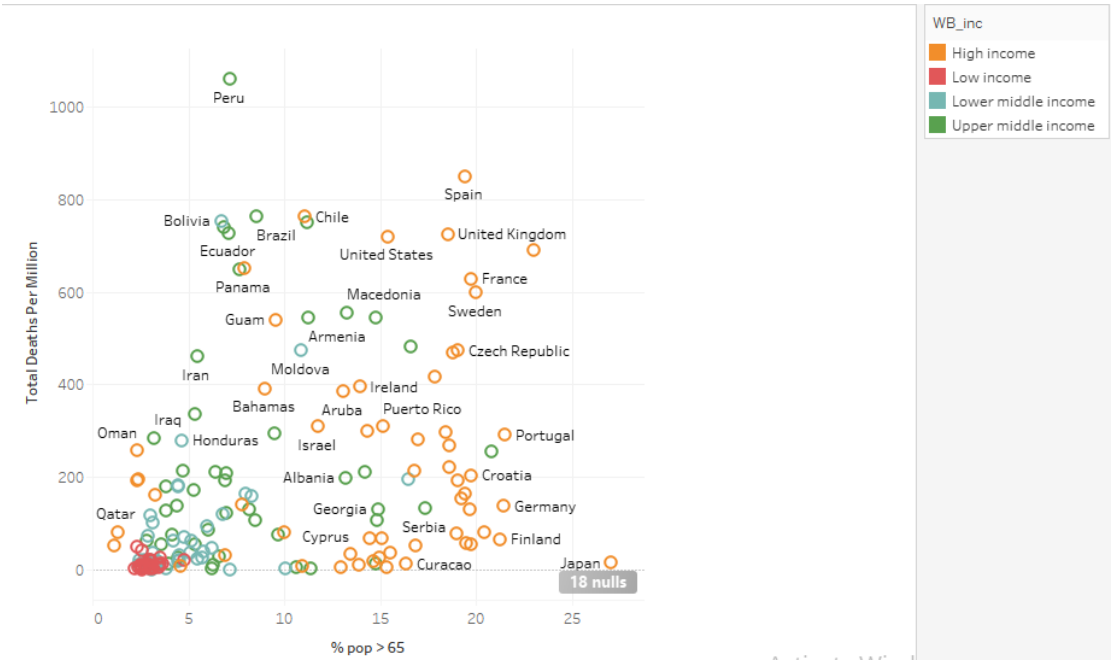


Figure 10b – Deaths per million from COVID-19 vs Proportion of Population Aged Over 65

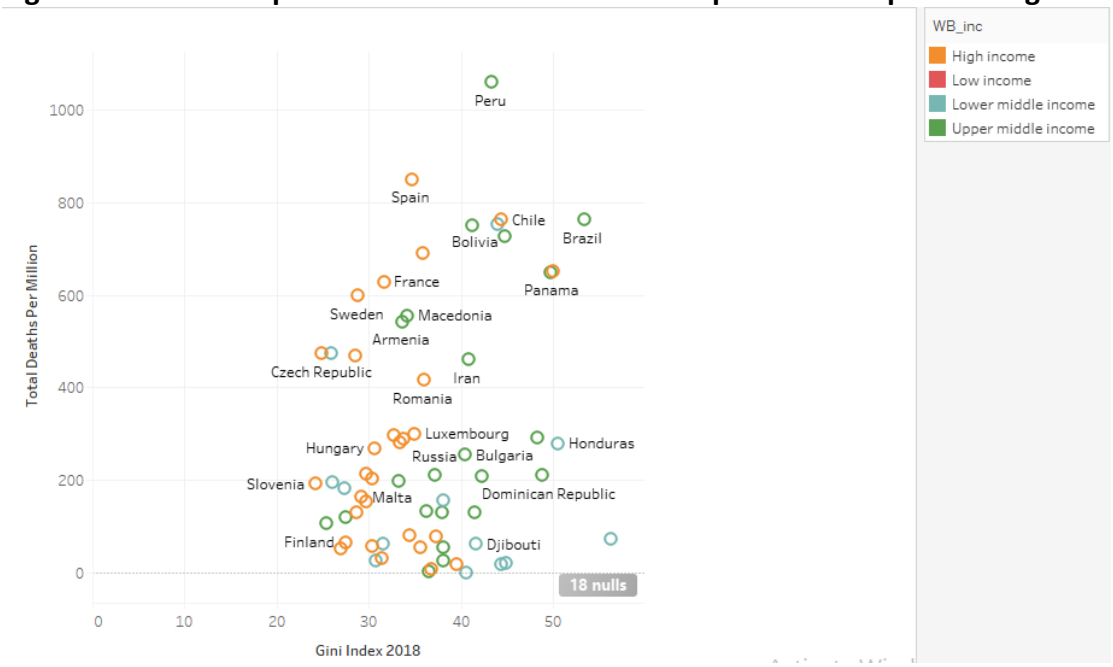


Figure 10c – Deaths per million from COVID-19 vs Inequality
Source: Our World in data

It is also important to note that while high income countries have the highest proportion of the population who are aged over 60 the majority (69%) of over 60-year olds live in low- and middle-income countries.

Detailed data is missing across countries as to deaths by age but if we use the fatality rates for high and middle income countries estimated in (Demombynes (2020) we can perform illustrative calculations on what the potential fatalities by age are in terms of numbers by age groups. The results are shown in Table 3 and reveal that whilst higher income countries may have more deaths per million in terms of numbers of deaths by age it is likely that middle income (and probably lower income countries) will experience the highest toll.

Table 3 Estimated Deaths by Age from COVID-19 for High- and Middle-Income Countries
Source – Fatality Rates by Age Calculated in Demombynes (2020) applied to UN population data

Age-Groups	High Income	Middle Income
0 to 9	30 (0.02%)	1637 (0.3%)
10 to 19	26 (0.01%)	3052 (0.6%)
20 to 29	198 (0.1%)	5620 (1.1%)
30 to 39	651 (0.3%)	18466 (3.6%)
40 to 49	2247 (1.1%)	44493 (8.8%)
50 to 59	8082 (4.1%)	89534 (17.6%)
60 to 69	22499 (11.5%)	131840 (25.9%)
70 to 79	48890 (25.0%)	115963 (22.8%)
80+	112868 (57.7%)	99401 (19.6%)

2.1 The Impact of Different Age Distributions

Differences in the age distribution of populations across countries means that the mortality threat of Covid-19 varies substantially. This in turn means substantial variations in the policies that governments implement so that the experience of older people during the pandemic will vary substantially across the world.

For instance, in many countries social distancing measures have been implemented to save lives even at the cost of significant falls in GDP. In economics one approach to evaluating the value of gains to health/life is to use the Value of Statistical Life (VSL – Murphy and Topel (2006)). Under the assumptions of this approach it is possible to place a monetary value on gains to lives saved from various policy measures.

The VSL approach looks at the economic decisions of individuals and how much they are prepared to pay/receive in order to reduce/increase mortality risk. It then uses these decisions to arrive at an estimate for the Value of Statistical Life e.g. if an individual is prepared to pay $1000 to avoid a 1% increase in mortality risk then the VSL would be 100 x $1000 = $100,000. Crucially the VSL is the value of a statistical life rather than an actual life i.e. it is based around changes in the probability of dying rather than life or death decisions. It is also, of course, firmly grounded in the economic notion of trade-offs whereby ‘everything has a price’.

This approach has the disadvantage that because income differs across countries, the VSL will vary across countries as people make different decisions based on their income. This has the

consequence that the VSL is highest in richer countries (Viscusi and Masterman (2017)). The advantage of this approach is it offers a within country consistent approach to the risk attitudes people display on a daily basis.

Using this methodology and the Imperial College model of the spread of Covid-19, Barnett-Howell and Mobarak (2020) estimate the gains available to different countries from social distancing/economic lockdowns in terms of the estimated value of lives saved from such measures (see Figure 11).

FIGURE 4: Estimated Value of COVID-19 Intervention by Income Group

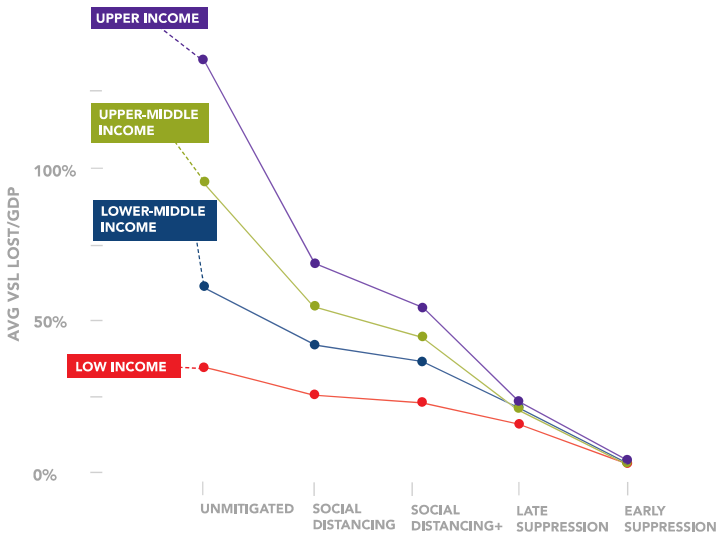


Figure 11 – Estimated Value of Covid-19 Intervention by Income Status
Source : Barnett-Howell and Mobarak (2020)

Their estimates suggest that gains from social distancing as measured by the economic value of lives saved are largest relative to GDP for the high-income countries (although see (Rashid 2020) for criticisms of this conclusion). Whilst part of the difference in gains is due to high-income countries having higher VSLs a substantial part of the difference is linked to variations in the proportion of older people. In other words, ageing plays a crucial role in defining how countries respond to the pandemic. This also implies that as low-income countries see the average age of their society increase in the years ahead, they will find the impact of pandemics with similar properties such as Covid-19 gets larger. That in turn suggests they should take measures now to ensure that their 'future old' are as healthy as possible which requires investing in the current young.

Whilst Figure 11 focuses on estimates of the economic value of lives saved from social distancing it is also the case that the costs of social distancing are likely to be larger outside of high-income countries due to weaker social insurance frameworks. High income nations have responded to social distancing policies by providing wage subsidies to employers or direct payments to unemployed or furloughed workers. This makes social distancing policies easier to implement. As Figure 12 shows the proportion of workers in low-income countries who are informally or self-employed is much higher and so they face less protection in response to economic shutdowns. Thus, whilst high income countries may have seen some

of the largest declines in GDP the existence of social insurance schemes will have also helped mitigate the impact on the most vulnerable.

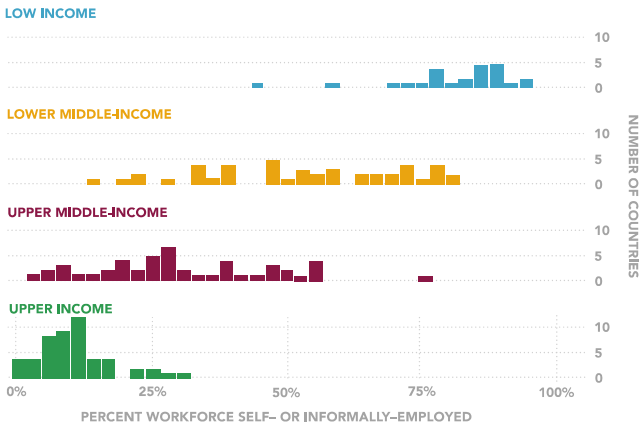


Figure 12 – Percentage of Workforce Self or Informally Employed
Source: (Barnett-Howell and Mobarak 2020)

This lack of explicit social insurance schemes is also important in understanding how older people will be affected not just directly by COVID-19 (i.e. higher mortality risks and economic impact) but also indirectly. The large declines in GDP that have occurred in high income nations have contributed to a global recession and led to poor economic performance globally. This will lead to additional effects on the vulnerable even if they weren't directly impacted by Covid-19.

According to the IMF's October 2020 World Economic Outlook, 90 million people have been pushed into extreme deprivation as a result of COVID-19 and "Not only will the incidence of extreme poverty rise for the first time in over two decades, but inequality is set to increase because the crisis has disproportionately affected women, the informally employed, and those with relatively lower educational attainment".

In Summary:

- The impact of Covid-19 in terms of fatality has been felt most heavily by the old
- Higher income countries have tended to see the greatest loss of life due to their higher proportion of older people
- That has made social distancing policies more attractive in richer countries leading to larger falls in GDP which have in turn lowered world GDP and worsened the economic environment for all
- The value from saving lives, especially older lives, is very large based on VSL approaches
- Social distancing policies are also easier to implement in richer countries where there are more extensive formal social insurance programs

- There is considerable heterogeneity in how countries have been impacted by Covid-19 even within income groups. This suggests important lessons to be learnt as to why some countries helped protect older people better than others.
- Whilst richer countries will have seen the largest falls in GDP more limited social insurance in other countries will have meant considerable vulnerability for the aged poor in lower income nations

3. The Post-Pandemic Economic Environment

Figure 13 shows the latest IMF forecast for the world economy through to 2025. The deep impact of Covid-19 is visible in the form of the worst global recession for at least 40 years. The forecast is for high growth in 2022 as recovery kicks in and the economy claws back some of the losses from Covid-19. Growth is then expected to slow before reaching similar levels as to those observed before 2020.

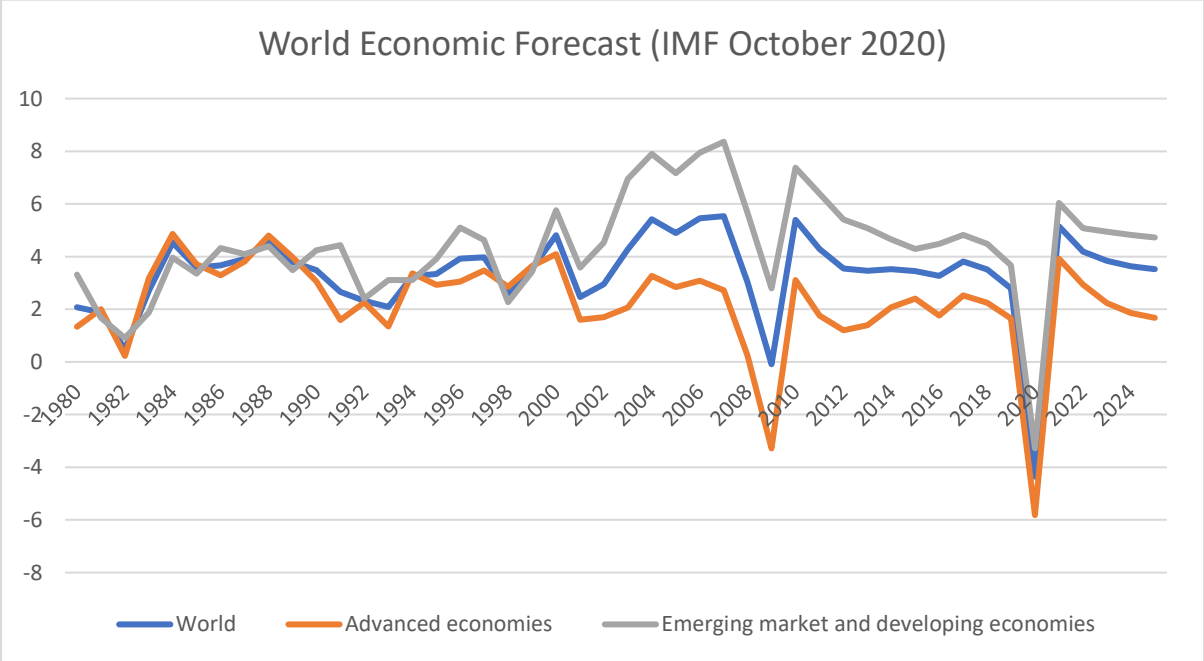


Figure 13 – World Economic Forecast IMF October 2020
Source World Economic Outlook, IMF

It is important to recognise that whilst growth recovers the level of output throughout the forecast period remains lower than what was expected before Covid-19 hit. In other words, the pandemic has led to a permanent loss of resources.

Figure 14 shows that the deep recession of 2020 is expected to lead to substantially less cumulative growth over the IMF forecast period than was expected pre-COVID. All countries experience lost growth but the impact on low income and emerging markets is greatest and equivalent to around 7% loss growth.

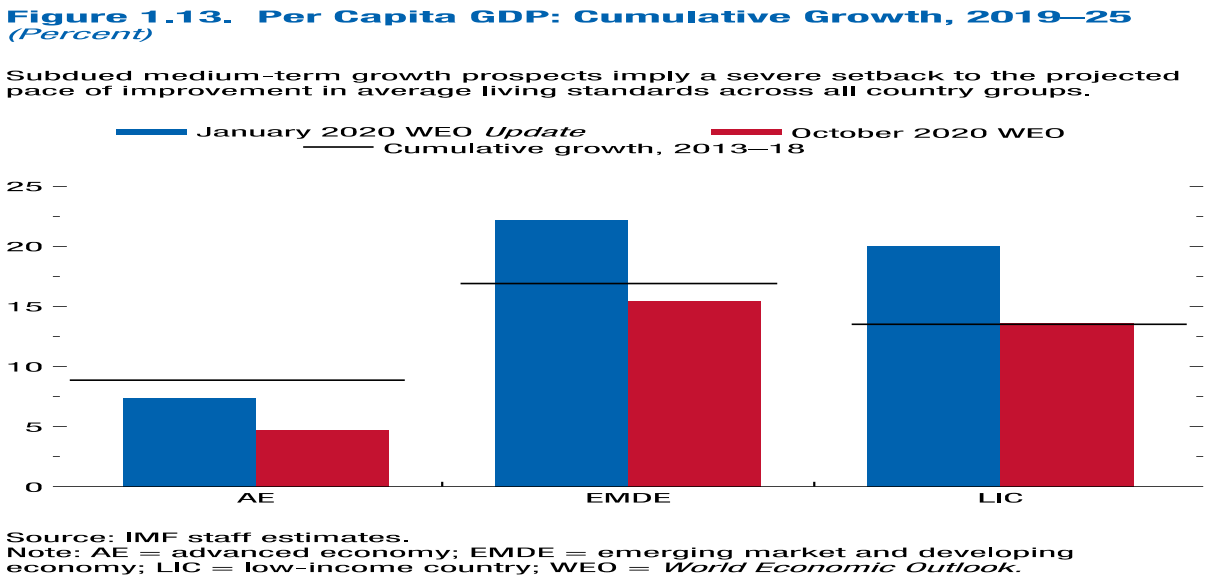


Figure 14 – Forecast Per Capita GDP growth 2019-25 before and after Covid-19
Source: IMF World Economic Outlook

The fact lower income countries have seen a substantial impact on GDP growth even though they have been less impacted in terms of Covid-19 deaths is a result of the indirect impact of Covid-19. As Figure 15 shows, whilst in general countries with high mortality from Covid-19 have seen dramatic declines in GDP the relationship is not robust. Many countries have seen sharp falls in GDP even though they have been relatively unaffected from Covid-19 due to their exposure to advanced economies. For instance, Mauritius and Maldives have both suffered from losses of tourism and so seen major GDP slowdowns. The impact of Covid-19 on the economy goes well beyond the impact of Covid-19 in terms of health.

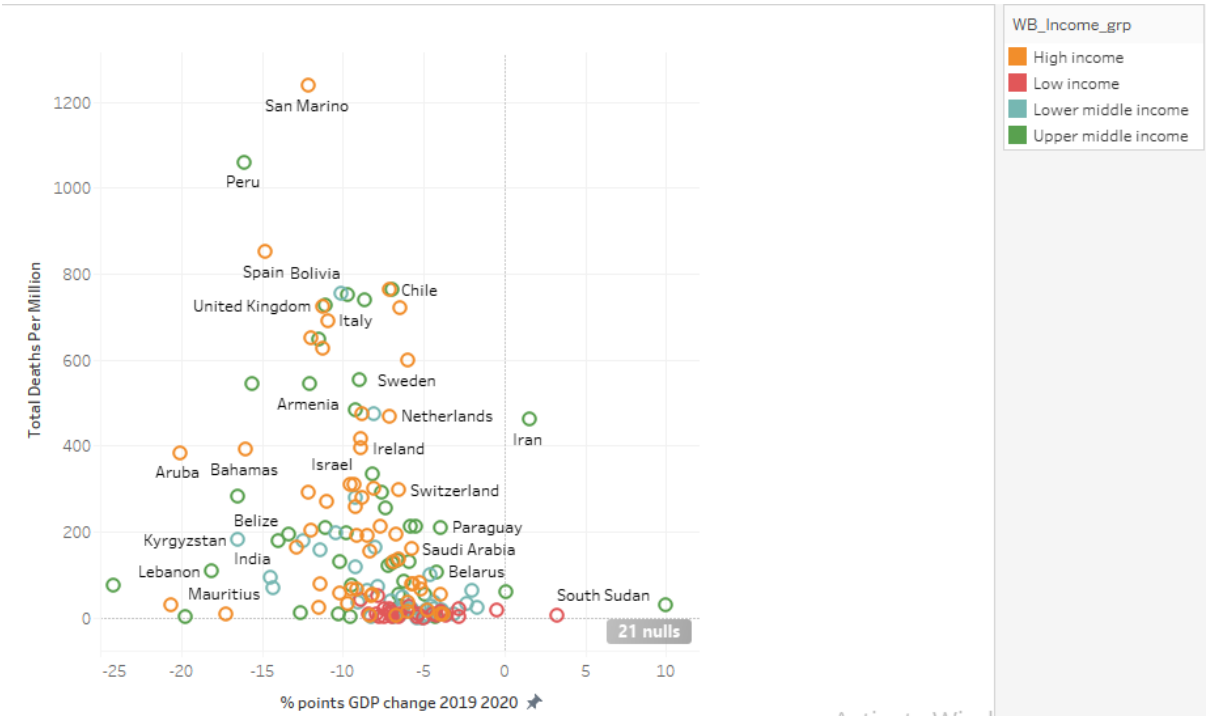


Figure 15 – Deaths per Million vs Change in GDP Growth 2019-20
Source: Our World in data; IMF WEO 2020

This lost growth and the additional government expenditure triggered by the pandemic will also lead to higher levels of public debt (see Figure 16). Given the shock absorber role of government debt, government debt will remain elevated for longer than the other economic variables affected by the crisis.

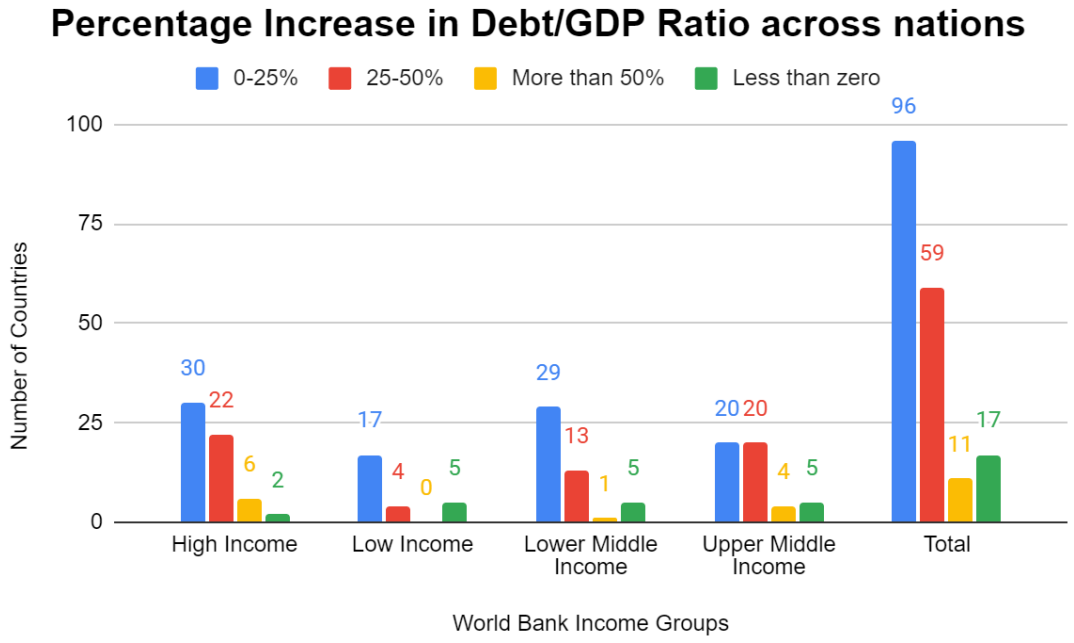


Figure 16 – Number of countries experiencing Increase in Government Debt/GDP Ratios as a result of Covid-19
Source *– IMF World Economic Outlook October 2020*

Whilst government debt has increased, global interest rates have declined which has helped ease the interest burden in some countries. However, for countries who have seen large increases in debt or who have seen the risk premia on their debt rise the opposite has happened. As shown in Figure 17, this is particularly the case for low income and emerging markets with higher levels of debt.

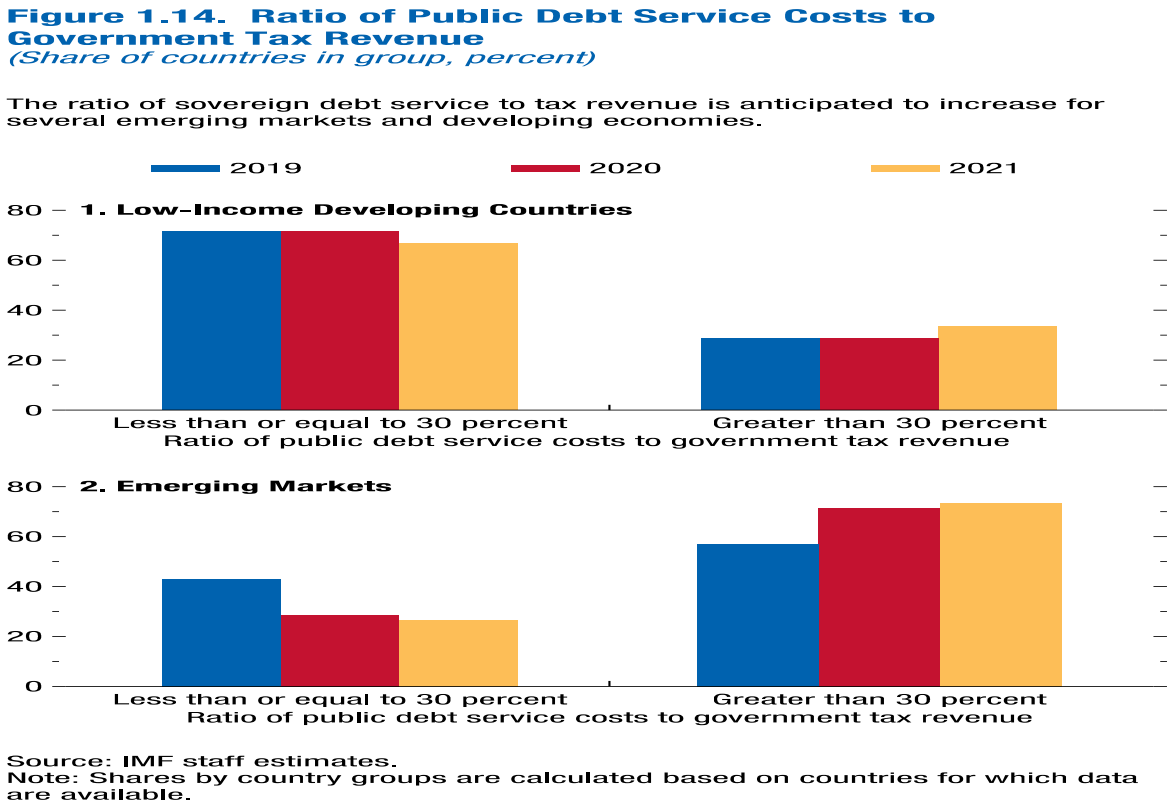


Figure 17 – Ratio of Public Debt Service Costs to Government Tax Revenue
Source IMF World Economic Outlook October 2020

Not surprisingly given the magnitude of these GDP declines, unemployment has risen sharply (Figure 18), especially in advanced economies, and given usual labour market dynamics is expected to be a lagging indicator during any recovery.

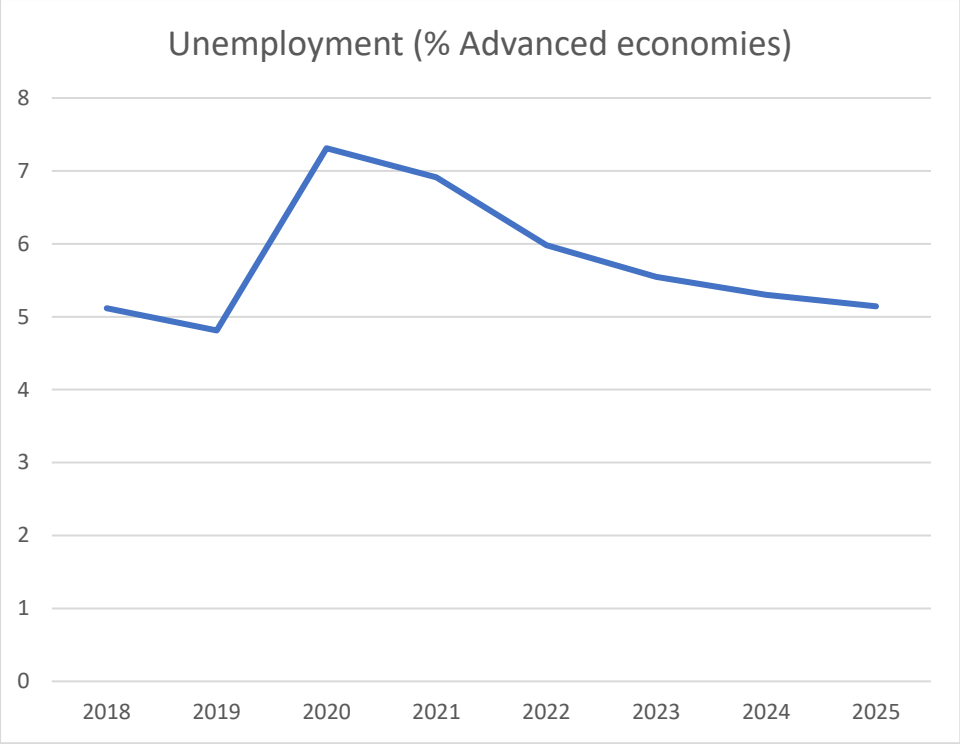


Figure 18 – Unemployment (%) In Advanced Economies
Source: IMF World Economic Outlook October 2020

The overall global economic picture then is of a substantial rebound in 2021 after an enormous negative shock in 2020 but a future that contains less growth than previously expected and an ascent back that is "long, uneven and uncertain". According to the IMF "Most economies will experience lasting damage to supply potential, reflecting scars from the deep recession this year and the need for structural change. The persistent output losses imply a major setback to living standards relative to what was expected before the pandemic".

Therefore, over the next few years the impact of Covid-19 on the global economy is

- A permanent loss of output providing fewer resources to support policy measures including the older person agenda
- A strong need to focus on pro-growth policies to aid recovery
- Higher government debt which in turn will place pressure on government budgets and future spending commitments
- Elevated unemployment providing a less supportive environment for older workers given ageism in the workplace

4. Lessons Learnt from the Crisis

Given how the mortality rate from COVID-19 rises with age in a similar manner to all cause mortality the pandemic can in some ways be considered as a viral form of ageing. Because of this it has acted as an accelerant and a stress test around the older persons, ageing and longevity agendas. As a result of this stress a number of important lessons can be drawn.

4.1 We value older lives

The most important conclusion to be drawn from 2020 is across the world governments have shown the costs they are prepared to incur to save mainly older lives (Scott (2020d)). In order to save lives governments have imposed social distancing policies that have directly produces substantial declines in GDP growth. The IMF expects a 4.4% fall in world GDP in 2020 with some countries (Italy, Spain, UK, France and India) experiencing double digit declines. Governments clearly place a high value on saving lives. Given the way COVID-19 mortality risks rise with age most of the lives saved are older lives. Therefore, in terms of revealed preference, 2020 has documented clearly that governments value older lives (as well as other ages) and that lives, and health are more important than GDP. If these policies are not to be implicitly accepted as mistaken, future policy actions have to reveal the same values and consistency.

4.2 A healthy economy requires a healthy population

The policy response to COVID-19 has also revealed that with so many older people the costs of protecting them is very large. However, it is a mistake to see the response to the pandemic in 2020 as revealing a trade-off between health and the economy. Until the threat of infection from COVID-19 is removed the economy cannot recover. What 2020 is revealing is that you cannot have a healthy economy without a healthy population.

To show how the increased proportion of older people has impacted lockdown policies consider again the VSL analysis of Section 2. Using the US as an example, Figure 19 shows how shifts in the age distribution have influenced the gains from social distancing. Greenstone and Nigam (2020) use the Imperial College model to calculate the total gains in terms of lives saved from social distancing measures based on the US age distribution in 2020. They calculate that social lockdowns save lives worth the equivalent of a 4.5-month shutdown in GDP (equivalent to a 38% fall in GDP – 4.5/12).

The same exercise can be performed using different age distributions. For instance, using the age distribution for the US in 1920, when the Great Influenza pandemic occurred, results in much smaller gains because there were far fewer older people. Based on the 1920 age distribution the gains from social discounting would only support 1.5 months of lost GDP (12.5%). However, based on the projected 2050 US age distribution social distancing would save lives worth the equivalent of 6 months GDP.

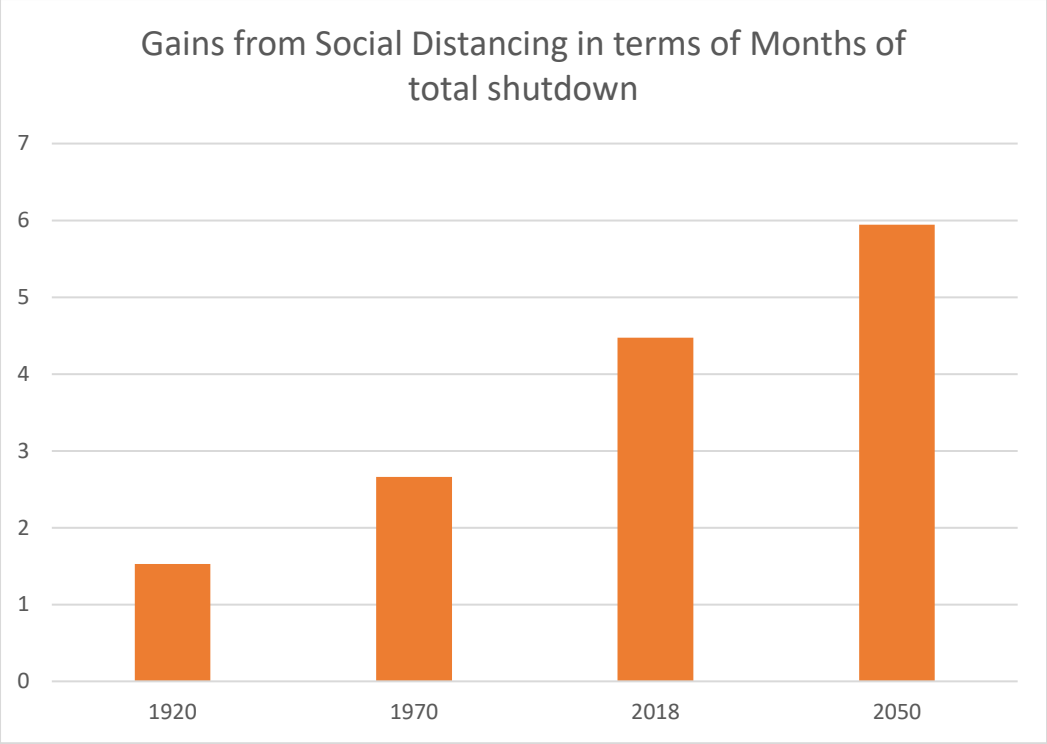


Figure 19 – Gains from Social Distancing in the US based on Population Age Distribution
Source – Greenstone and Nigam (2020) and author's calculations

Covid-19 is therefore a striking example of how a healthy population and a healthy economy support one another. Ensuring that people are healthy and can contribute to society and the economy is crucial. With more and more of the population made up of older people the need to do so and how to achieve it has become both more important and shifted in how it is to be achieved

4.3 Focus on healthy life expectancy and not just GDP

The revealed preference by policymakers for saving lives over GDP implies that the success of policies should be assessed not just by reference to what happens to GDP growth but to lives saved. In the face of an ageing society this implies increasing focus on other measures than GDP with healthy life expectancy being an obvious indicator.

Boosting GDP is obviously important as it provides additional resources which both add to the standard of living and are needed for supporting the needs of older people. However, in the face of an ageing society a focus on GDP runs the risk of focusing purely on the narrow economic productivity of older workers and marginalising a host of broader and important non-economic issues.

4.4 Dealing with diversity in ageing

As a growing number of individuals live to older ages what is becoming increasingly apparent is the diversity with which people age – a direct consequence of the malleability of age. It is a mistake to think that chronological age itself is a simple indicator of a person's needs or

circumstances and clearly a host of other factors such as gender and socio-economic circumstances will impact on ageing. That makes any agenda around older people very high dimensional, just as it is for all stages of life. The stress test nature of Covid-19 has further revealed this diversity and highlighted groups and individuals who are most vulnerable.

Across many dimensions, the magnitude of the Covid-19 shock has simply revealed long known inequalities as revealed in many countries by disproportionately high mortality statistics amongst lower socio-economic groups and certain ethnic groups. The high fatality rates in care homes in both high and low income (Lloyd-Sherlock et al. (2020)) suggests also that many older people are politically disenfranchised and as a result their voices are not heard and so suffer from poor care and greater vulnerability.

Whilst these concerns relate to vulnerability to the health impact of Covid-19 the same concerns also hold for the economic consequences. For instance, whilst older men have a substantially greater risk of fatality from Covid-19 than women it is the latter who are most likely to experience the economic consequences - given 65% of people aged over 60 not in receipt of a pension are women.

4.5 A Changing Narrative

The longevity agenda implies that as well as adapting to an ageing society and a rising proportion of older people there is also a need to adapt to longer lives. If the former focuses on the growing importance of the rights and needs of older people, the latter draws attention to the changing nature of being 'old' and ageing. This requires a substantial change in social narrative and one that COVID-19 has helped trigger.

Initially, with fears that health systems could be overwhelmed by patients there have been calls for medical resources not to be provided to the 'old'. That recommendation clearly conflicts with a rights-based approach that would support providing medical resources to all regardless of age. It also conflicts with the longevity agenda which says because of longer lives what constitutes 'old' is changing. As shown in Figure 20, life expectancy at age 60 has increased significantly across the world in past decades. If medical resources are allocated using DALYs then this extension of life expectancy at age 70 supports more resources being allocated to the 'old'.

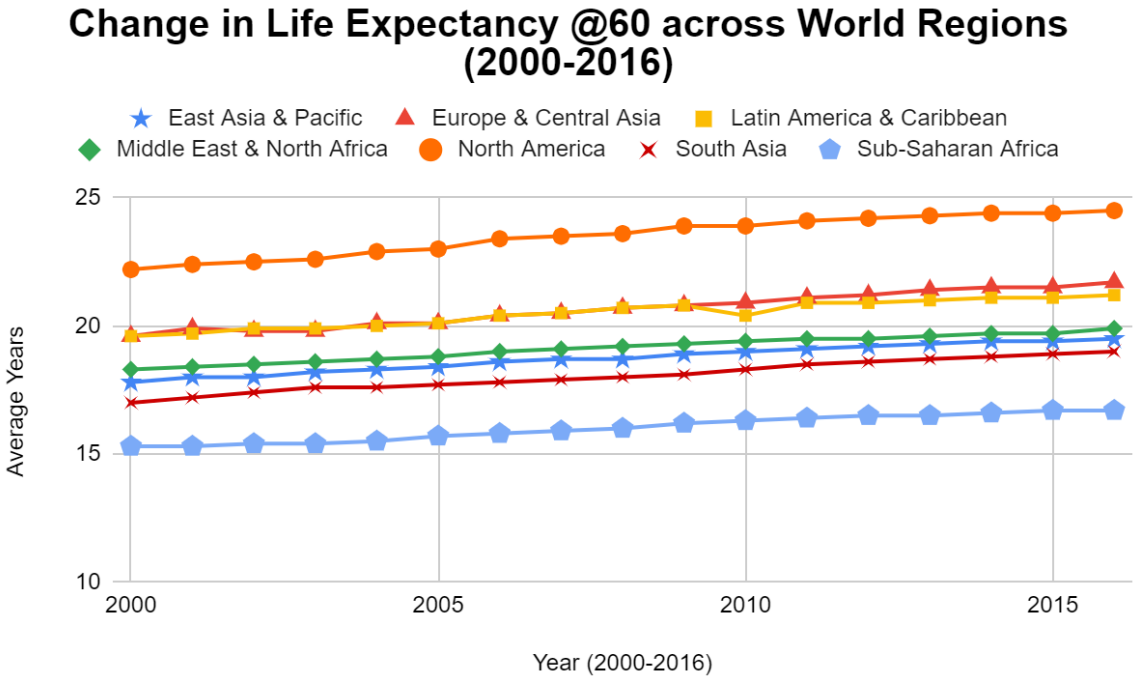


Figure 20 – Life Expectancy at 60
Source – WHO

Using the VSL approach we can also assess the impact that longer lives has had on the gains from social distancing. Figure 21 shows the gains from social distancing in the US and how they have changed over time because of a) a rise in the number of older people and b) an increase in life expectancy. If the US today had the age distribution from the 1970 the gains from social distancing would have been 'only' $5.8trn compared to $8trn based on the number of older people today. However, it isn't just that there are more old people, but they also have longer life expectancy so each live saved save more future years. These longevity gains have added another $1trn to the gains from social distancing today compared to 1970.

If we evaluate the gains from social distancing today using the age distribution in the US in 2050 then it would amount to $9.4trn. Further, projected gains to life expectancy would boost this by a further $2.2trn. As people live for longer any DALY based approach to allocating health expenditure or public health measures supports increasing allocations to older individuals because they have more years of life ahead of them.

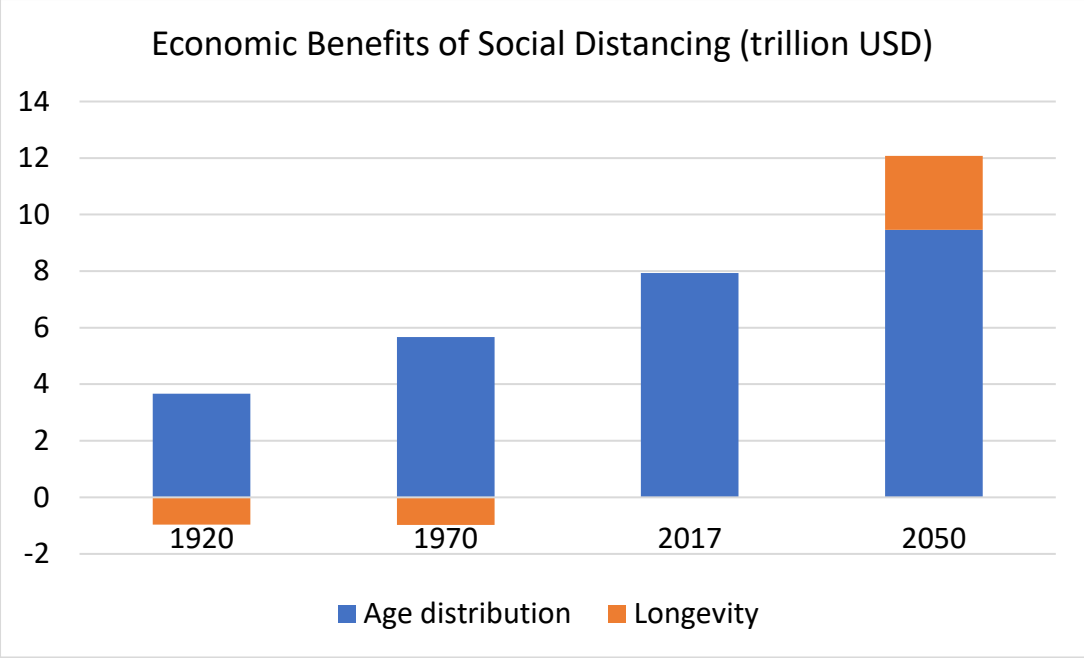


Figure 21 – Economic Benefits of Social Distancing in the US under Different Age Distributions and Life Expectancy Assumptions
Source – Authors calculations based on (Greenstone and Nigam (2020))

As well as raising awareness of how long older now have to live because of past longevity trends the pandemic has also helped identify the valuable contribution of older individuals. In the UK this has been exemplified by the activities of a 100-year-old Colonel Sir Tom Moore who has raised more than $40 million for the health system and recorded a hit single that reach #1 in the charts.

4.6 The Importance of Flattening Mortality Curves

In the early stages of the pandemic, social distancing policies were advocated in order to 'flatten the curve' and slow down the spread of the virus. The hope was that by doing so fewer people would become ill and prevent health systems being swamped.

Interpreting COVID-19 as an accelerant of an ageing society suggests two other curves need to be flattened. The first curve that needs flattening is the way in which mortality and morbidity rise with age (see Figure 7 and Figure 22 below). Health systems need to focus on exploiting the malleability of age and improving the relationship between age and health. As detailed below this will require a shift towards preventative health rather than a current main focus on intervention.

It also requires a shift away from focusing on single specific diseases and focusing on treatments aimed at biological pathways of ageing. As the population ages and the disease burden shifts to age related comorbidities the priority has to be around achieving delayed ageing. As argued in Goldman et al. (2013) and Ellison, Scott and Sinclair (2020) the gains from slowing down ageing exceed those from targeting single specific diseases as the population ages. Delayed ageing is valuable because it both reduces the incidence of multiple

diseases but also improves health across a number of dimensions due to competing risks. In the case of the US this leads for the US to social gains in the range of $7 to $62 trillion in present value terms for relatively modest slowdowns in ageing.

As emphasised by Olshansky and Ault (1986) this focus on delayed ageing is a natural next step in Omran's (1971) epidemiological transition. The value of medical improvements depends on the current disease burden and age structure of society. Previously that has meant a major focus on reducing infant mortality and then the diseases of middle age. It currently supports a major focus on vaccines around cholera and malaria but as the population ages increasingly it will require a focus on treatments aimed at achieving delayed ageing. The impact not just of age but underlying health conditions in influencing the fatality rate from Covid-19 merely emphasises this point.

The other curve that needs flattening is shown in Figure 22 – the role of socioeconomic determinants in influencing ageing – the dark side of age malleability (Bagheri-Nesami and Sorofi (2014), Kollia et al (2018), Lu, Pikhart and Sacker (2018), Abelianksy, Erel and Strulik (2020),Steptoe and Zaninotto (2020)). Once again, the unequal impact of Covid-19 across socio-economic groups has revealed the challenges an ageing society will bring.

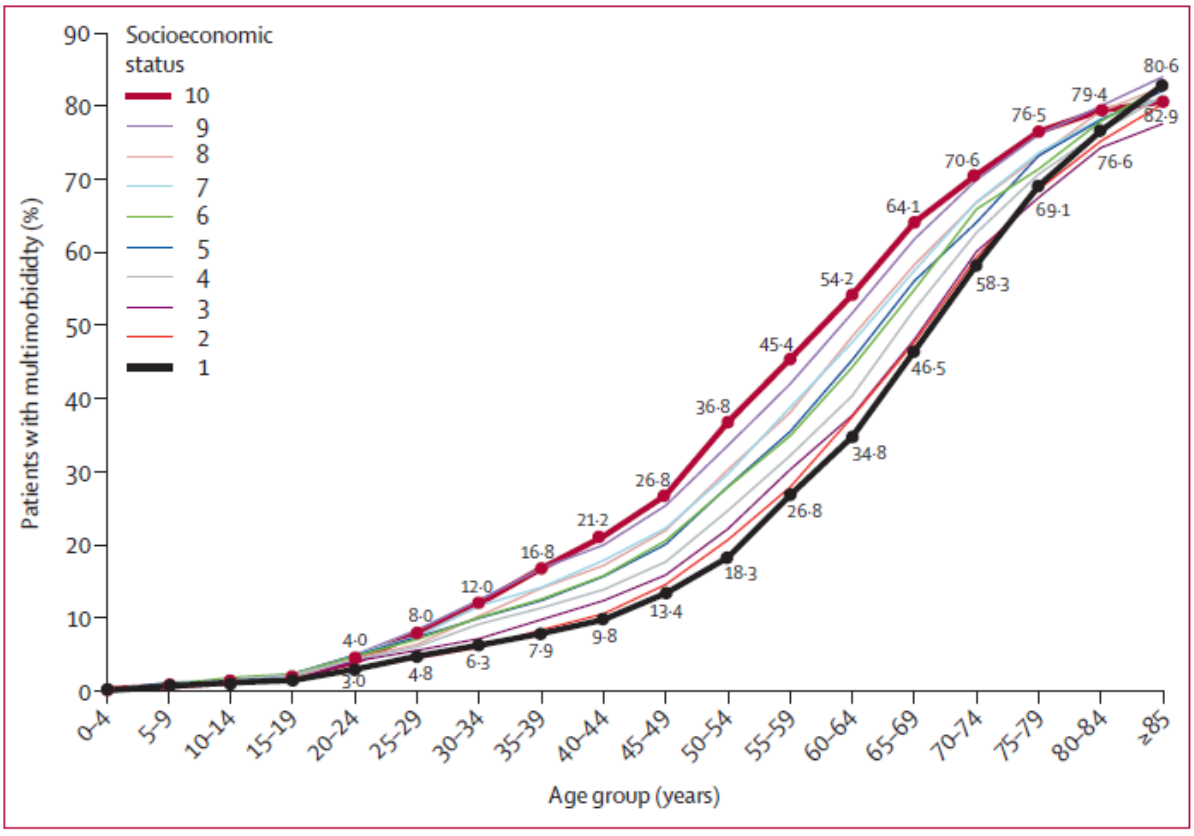


Figure 2: **Prevalence of multimorbidity by age and socioeconomic status**
On socioeconomic status scale, 1=most affluent and 10=most deprived.

Figure 22 – Prevalence of Multimorbidity in the UK by age and socioeconomic status
Source - ONS

As with Covid-19 a failure to tackle these inequalities runs the risk of health systems being overrun by demand, higher public debt through higher health costs and a failure to seize the longevity dividend through having a more productive workforce.

Given the economic value in saving lives and keeping people healthy that Covid-19 has revealed tackling these inequalities would be a consistent application of policy. As emphasised by Scott (2020c) a focus on healthy life expectancy would also encourage greater resources being focused on reducing these inequalities.

4.7 Preventative Health

The main policy response to Coronavirus has been preventative. Hygiene measures and social distancing aimed at keeping people well and out of hospital. The fear has been that given the number of older people and their exposure to COVID-19 existing health systems would be overburdened if they have to treat patients with COVID-19.

Once again this is Covid-19 serving as a stress test for an ageing society and revealing that what is needed is a preventative health system. As society ages there is a shift in the disease burden towards noncommunicable diseases (NCDs). In 2016 an estimated 71% of deaths worldwide were due to NCDs with 58% of these attributable to people aged over 70. When the population is mainly young, and diseases are mainly infectious then health systems dealing with interventions and curing disease are inevitable. As societies around the world age they will need to shift towards preventative health systems.

This shift to preventative health also requires a focus on key points of the life cycle rather than just a focus on older individuals. It is about ensuring that the future old are as healthy as they can be. As shown in Table 2 that means even countries with currently young populations need to be thinking about improving the health of their population now to ensure they achieve a longevity dividend in the future (Jowell, Carstensen, and Barry (2020)).

5. Problems caused by the crisis

5.1 Ageism and frailty

Given the link between age and the mortality rate from Coronavirus there is a very real danger that the pandemic will have reinforced notions of older people as frail and vulnerable (World Economic Forum (2020)). Whilst this may augment an understanding of the rights and needs of older people who are frail and in poor health the danger is that assumptions will be made that this characterises all older people. This in turn reinforces notions of dependency and so exclusion and marginalisation. Analysing English language social media messages Soto-Perez-de-Celis (2020) report that 'almost a quarter of tweets downplayed the importance of COVID-19 because it was deadlier among older individuals, and that 14% contained offensive content or jokes". However, they also note substantial differences in ageist content across countries (for instance in the US more than 80% of older adults felt discriminated against compared to 18% in Mexico and 4% in Spain). They also find that ageism peaked in the immediate

aftermath of the announcement of the pandemic and then declined, reinforcing the early comment that Covid-19 may have helped trigger a change in social narrative by confronting ageism with the complexity of ageing.

5.2 Employment

In high income countries, after decades of decline, the proportion of older people in employment has been rising for the past decade. As shown in Figure 23, more than 100% of the increase in G7 employment between 2008 and 2019 can be accounted for by the over 55s.

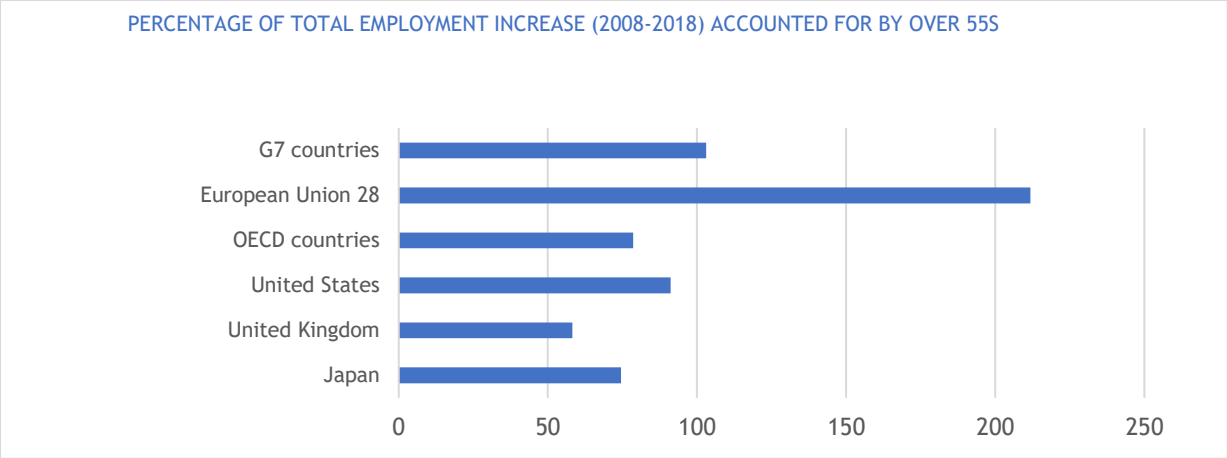
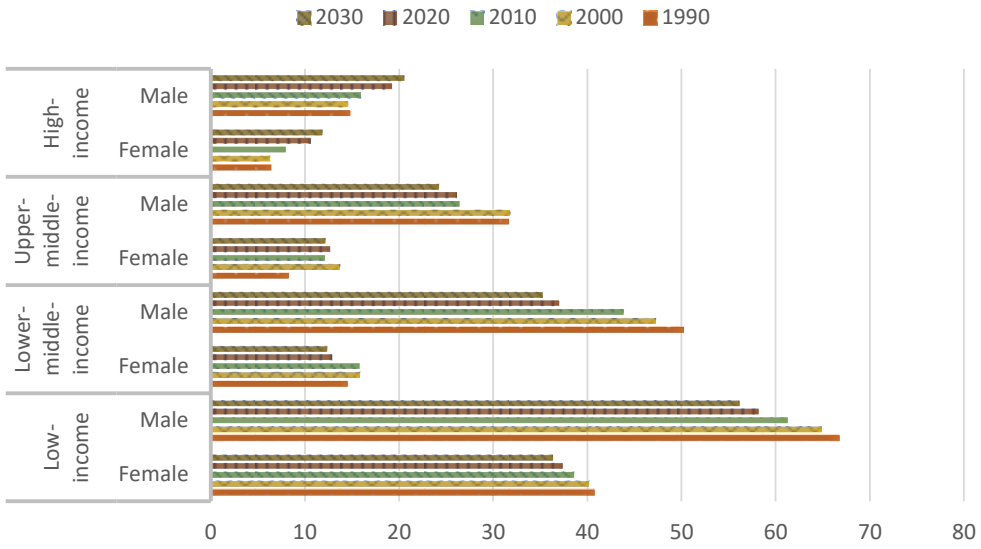


Figure 23 – Employment increase 2008-18 accounted for by over-55s
Source – Author's calculations OECD data

This rise in employment amongst older workers was achieved in labour markets characterized by relatively low unemployment. However, Covid-19 is exerting a significant impact on the labour market and, as outlined in Section 3, unemployment is expected to rise and remain high for some time. **Error! Reference source not found.** shows, for a selection of high-income countries, what has happened to unemployment in the wake of Covid-19 across different age groups. Whilst the biggest impact in terms of numbers affected has been amongst the younger age groups the biggest percentage increases in unemployment have been amongst older workers. Given that older workers experience discrimination in the hiring market (Neumark, Burn, and Button (2019)) this suggests a reversal in the trend increase in employment amongst older ages.

That is problematic on two grounds. At the individual level, becoming unemployed in your 50s and 60s is likely to have a permanent effect on wealth and retirement planning and contribute towards financial insecurity. At the macroeconomic level it means the loss of a significant driver of economic growth over the recent decade.

Figure III
Labour force participation rates by sex and country income level, 1990–2030, for the 65+ age group
(Percentage)



Source: ILOSTAT database, "Labour force participation rate by sex and age: ILO modelled estimates, July 2019".

Figure 24 – Labour Force Participation Rates by Sex and Country Income Level 1990-2030 for 65+ age group

As shown in Figure 24, participation rates of older workers are highest in low income countries with most of this employment occurring in the informal sector. The same economic trends that will lead to higher unemployment will also put downward pressure on the informal sector too. This will be a particular challenge for older workers operating in face to face sectors, where the risk of COVID is greater and will make employment either less likely or less desirable.

COVID-19 will create labour market pressures for many, but older workers seem particularly exposed. Given the lack of formal social insurance networks in many low-income countries and the fact that lost employment at older ages frequently leads to permanent withdrawal from the labour market Covid-19 will lead to considerable financial insecurity amongst older people.

5.3 Long COVID-19

The novelty of COVID-19 and its dramatic arrival means that the main area of focus to date has been on its fatality rate, treatments that can reduce this and a search for a vaccine. However, little is known about its long-term effects on health for those who survive. The danger is that long COVID-19 or long-term consequences of infection will lead to longer running health problems.

A related problem is that due to social distancing and resources being focused on dealing with the pandemic a number of other health issues have been relegated in importance. The

risk is that many conditions will be untreated and undiagnosed leading to an increase in diseases in the wake of Covid-19.

5.4 Austerity and health

In the wake of the financial crisis of 2007-8 and the subsequent increase in government debt, a number of countries implemented policies to stabilise fiscal policy. This coincided with declining trend growth in life expectancy and widening health inequalities in many countries. Many commentators (e.g Tyrovolas et al. (2018), Marmot et al. (2020)) argue that the two are connected and cuts in government expenditure contributed to deteriorating health statistics especially for older people. The danger is that in the face of slowing GDP growth and higher government debt, governments will look to cuts to pensions, old peoples care and health care and that this will impact the most vulnerable members of society

5.5 Intergenerational conflicts

The effect of social distancing and economic lockdown has tended to have a greater economic impact on the young whilst the health gains in terms of reduced mortality have accrued mainly to the old. (See Figure 25 for calculations based on the U.S). The danger is that this will lead to increasing political tensions and a young vs old narrative in society as the fight over scarce resources intensifies.

Intergenerational equity and intergenerational cooperation are key social outputs and need to be a constant focus for governments. It should also be noted that the rationale for intergenerational conflicts should be reducing as longevity declines. Around the world the probability of a 20-year-old reaching the age of 70 has never been higher. In other words, the young have never had a greater chance of becoming old. From this life cycle perspective, the battle between young and old for social resources is no longer a zero-sum game.

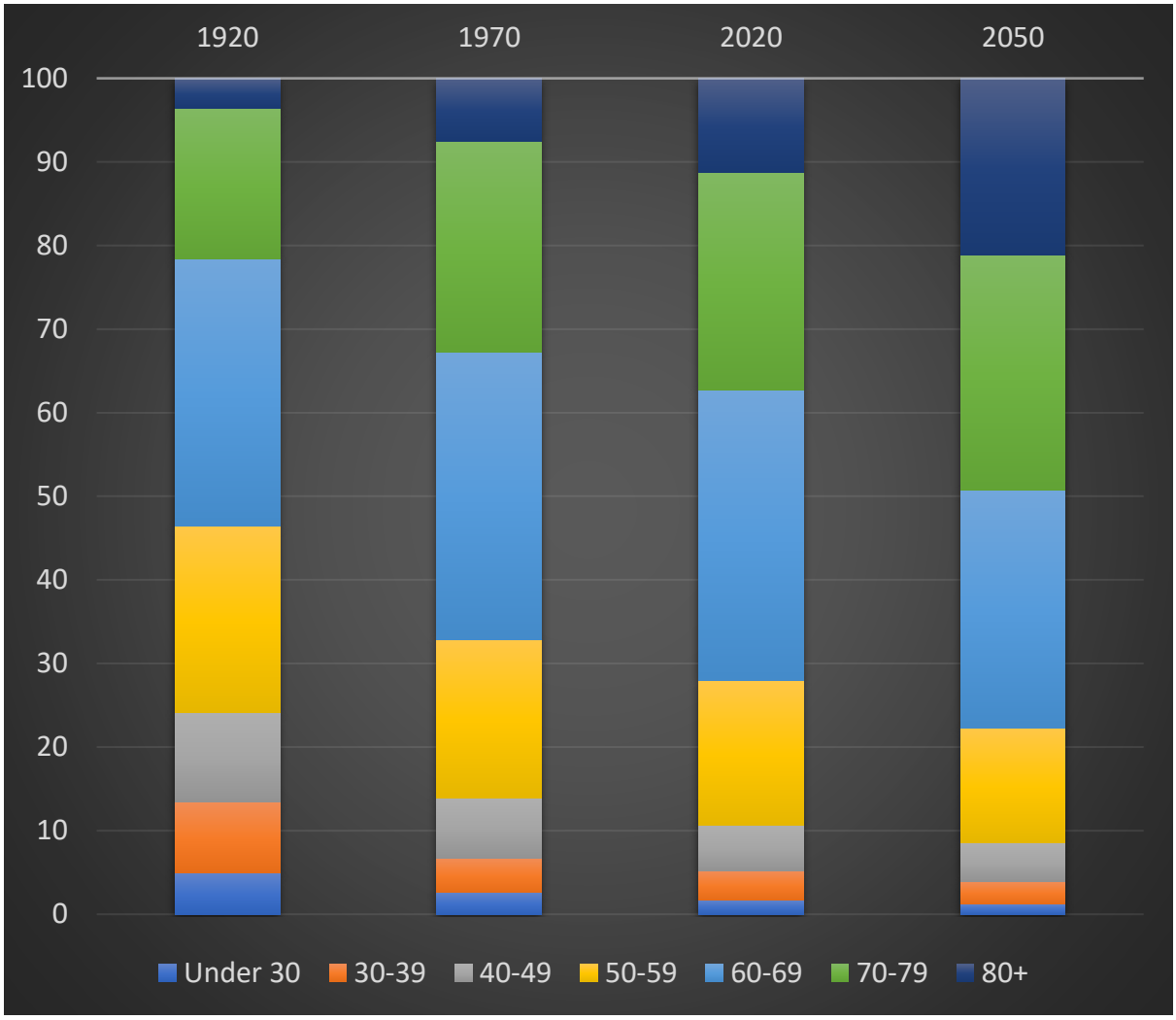


Figure 25 – Estimate of Gains from Social Distancing by Age Group in the US
Source: Author's calculations

5.6 Isolation

Given the risk Covid-19 poses to older individuals, social distancing has led to issues of isolation and exclusion amongst older people. Given that mortality rates are also highest for the old there is an increased risk of loneliness through the loss of other members of the household. Further given the greater risk from infection older individuals will also be self-isolating and removing themselves from public and workspaces until vaccines are widely available.

Isolation and loneliness lead to obvious risks around mental health as well as financial insecurity. This physical distancing also increases the risk that as an age group older people will be excluded by omission from building back initiatives. As estimated by Bloom et al. (2020) older adults play a substantial role in providing productive non-market activities which are not captured in GDP. Policy measures aimed at building back better need to ensure that

measures are taken to support the involvement of older people not just in market-based activities but also though their substantial contribution to non-market based social activities.

6. A Post Crisis Agenda

The broad impact of the pandemic on an older persons' agenda is threefold

6.1 Restating the Long-Standing Importance in the face of Economic Pressures

Post-pandemic the world will be different. Crucially the world economy will be weaker, have fewer resources, more debt and greater financial fragility. That makes pursuing an older persons' agenda more challenging but not less important. That raises the need to more urgently and loudly raise awareness and champion an agenda for older people so that a long standing need that predates Covid-19 is not side-lined. It is also important to recognise the role of older people, though both their economic and social contribution, in contributing towards economic recovery.

6.2 Seizing the Opportunity to Build Back Better

Given the magnitude of the COVID-19 shock and the various fault lines it has exposed there is a desire to "build back better". To create more robust and inclusive institutions supported by relevant policies. The inclusion of an older person's agenda aimed at respecting the rights of older people, adjusting to an ageing society and achieving the opportunities of a longevity agenda need to be a component of this. It is also important to recognise that older people will have been affected directly by Covid-19 – health risks, financial impact, social distancing – but also indirectly. Covid-19 has triggered a major global recession, and this will have a lasting impact on older people over and above any direct impact.

6.3 Reacting to what Covid-19 has revealed

Whilst the previous factors are relevant for an older persons' agenda, they are equally important for other significant long-standing agendas i.e. sustainability and climate change. However, it is also important to recognise that a unique feature of Covid-19 is its disproportionate impact on the health, lives, rights and welfare of older people.

With more than a billion people aged over 60 (expected to rise to 2.1 billion in 2050) the pandemic has highlighted how crucial and impactful the welfare and health of older people is to society in general. It has shown how much society values older people but also the importance of a healthy older population for a healthy economy. In other words, a pandemic caused by an infectious disease with a disproportionate impact on older people has shown clearly the importance of an older persons' agenda and what needs to be tackled as the world looks set to age in the decades ahead.

Together these three factors point to the need to reiterate, intensify and accelerate a broad range of issues connected to older people.

From a rights-based perspective, policy priorities post-COVID-19 have to be:

- Awareness that Covid-19 has accentuated existing weaknesses and so increased the vulnerability of many. Policies focusing on the welfare of the poor, vulnerable and marginalised have become more important. Ageing is characterised by considerable diversity, but especial attention needs to be paid to the old, the physically frail, women and rural population who tend to be disproportionately represented. Despite fiscal pressures the need for government support to this group is now greater.

- Cross-country comparisons should be made to identify which policies and institutional set ups helped provide the most effective social insurance to older people during the crisis. Given the magnitude of the shock lessons learnt can point to effective best practice.

- In particular lessons learnt from the care home sector need to be urgently learnt given the wide disparity in outcomes across countries (Comas-Herrera et al (2020)). Understanding best practice, examining the role of the wider community in providing care as well as how to properly integrate care into the health system all need to be the subject of rigorous study.

- Good policy requires good data as a foundation. With more and more people having to make different decisions as they read older ages what is needed is better data to understand how current practices are working (Lloyd-Sherlock et al. (2020)) as well as to better understand the wishes and preferences of older people.

- Recognition that Covid-19 has in particular increased the risk of social isolation and inclusion amongst older people. Attention should be placed on mental wellbeing to ensure no long-lasting effects.

- Focused efforts on achieving inclusion back into the community should be made recognising the role older people can play towards social capital and entrepreneurship after a pandemic and the importance of their social participation. Lessons can be learnt from how older people helped in response to past crises.

- In a world of fewer resources, a legacy of health challenges arising from the pandemic and competing demands for urgent delivery of vaccines the rights of older people to health care provision need to be protected.

- Covid-19 has revealed the diversity with which people age and that neither ageing nor demography is destiny. The intersection with broader social inequalities is also marked. That is supportive of an enhanced narrative focusing on older people as individuals with diverse and varied needs – just as other groups have.

From the perspective of an ageing society agenda

- The policy choices made in 2020 in order to save lives even at the expense of substantial declines in GDP growth reveal just how much value society places on older lives. Policy choices made going forward need to be consistent with those values

- Given the vulnerabilities that have been revealed in care and support services and the economic cost of policies to protect the old the underfunding of these activities needs to be ended. Despite greater fiscal pressures the crisis reveals what is valuable to society and that more financial resources should be allocated to their care.

- Given the revealed preference for saving lives over GDP, governments need to target measures such as healthy life expectancy as the way to measure success in adapting to ageing societies.

- The pandemic has revealed the importance of keeping older people healthy rather than focusing on treating them when they become ill. A shift to preventative health for older people needs to be accelerated.

- This is made all the more important given the pandemic is likely to have impacted monitoring of underlying health conditions and the risk of long Covid-19 influencing the health of many future generations of older people.

- The manner in which Covid-19 impacted different socio-economic groups differently revealed the need for policies aimed at tackling systematic health inequalities. Given the revealed valuation of lives saved greater priority should be placed in tackling these inequalities.

- As a result of the crisis the use of digital technologies by older people has increased. Policies aimed at exploiting this for preventative health, creating social engagement and connectivity need to be developed. At the same time education also needs to be provided to help protect older people new to such technologies from scams and misinformation.

From the longevity agenda the following policy issues are important:

- The need for economic growth to aid recovery and bring down government debt has become more important. Given the number of older people working that requires economic policies focused on supporting employment at older ages. Older persons have played an important role in GDP growth in the past decade and will be even more important in the next decade. Given current demographic trends and the need for growth in the face of the pandemic it is important to integrate older people into economic development plans.

- Supporting older employment in the face of ageism and post-Covid health vulnerabilities will require targeted programs including potential employer wage subsidies, reskilling programs for older workers as well as job creation schemes focusing on small firms and sectors well suited to the skills of older workers. It will also require employers creating age friendly work environments and flexible working conditions.

- Post-pandemic older people have a greater risk of suffering from economic decisions based around ageism in terms of work, recruitment and health provision. Better awareness of the dangers of ageism as well as regulation/legislation preventing age discrimination are needed.

- Covid-19 has started to raise awareness of increases in length of life that have occurred and how much more life ahead of them older people face. Building on this narrative and the importance of ageing well needs to be a priority. There is much that governments, corporates and social organisations can achieve but raising awareness amongst individuals of the need to prepare for a longer future is crucial.

- Given this increases in length of life the value of medical interventions, as assessed by metrics such as QALYs, DALYs, VSL etc, have increased and should be reflected in allocation decisions.

- The economic gains to healthy ageing have been starkly revealed by Covid-19 and the need to 'flatten the curve' so that underlying health deteriorates more slowly with age has become apparent. Preventative health is a key component to this but so too is investigating the medical potential for treatments aimed at slowing biological pathways of ageing (Campisi et al. 2019)(Campisi et al (2019)).

- The substantial variations across countries in terms of fatalities by age group from Covid-19 are a stark reminder of the malleability of age and offer countries an opportunity to study which policies and practices work best.

- There is a danger of intergenerational conflicts emerging given the split between economic costs and health gains from policy measures implemented during Covid-19. Greater focus needs to be placed on a life cycle approach to thinking about ageing and older people recognising that the young have never been more likely to be old.

- Developing from this theme many countries, especially middle-income ones, need to recognise that the future old are the current young and middle aged. Investing in their ageing through health, education and labour market policies needs to be an urgent priority as part of recovery.

- This life cycle perspective highlights the importance of not cutting back general health expenditure in the face of fiscal pressures. Doing so will worsen the welfare of future older people.

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