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The case for releasing the young from lockdown: A briefing paper for policymakers

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Summary

The UK is 'locked down' because of coronavirus (COVID-19). No clear exit strategy currently exists. This paper suggests a possible way forward that combines elements from economics and epidemiology. The paper proposes as a policy a *'release' from lockdown of the young cohort of UK citizens aged between age 20 and 30 who do not live with parents*. The paper calculates that there are approximately 4.2 million UK individuals who fall into this 20-30 age-band and who live outside the original parental home. Of those, 2.6 million work in the private sector, so unless some corrective action is taken they are likely to be extremely harshly affected, financially, when compared to employees in the public sector. The paper argues that a young-workforce release of this kind would lead to substantial economic and societal benefits without enormous health costs to the country. In this way, the nation might begin to move forward in the footsteps of the young. The paper's key concept could in principle be implemented in other countries.

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The case for releasing the young from lockdown

Introduction

At the time of writing the United Kingdom is largely 'locked down' because of risks posed by COVID-19. As is well understood, the rationale for this strategy is to save lives in the short to medium run. However, severe damage is currently being done to the economy, to future incomes, to the rate of unemployment, to levels of national debt, and to the freedoms of a modern society. Some balance will eventually have to be struck between epidemiological and economic objectives.

A central question is what happens after the lockdown period. Here we discuss one potential path -a so-called exit strategy- that might be taken. We discuss the merits and demerits of the idea that, at some point in the future, we 'release' from lockdown those in the UK young cohort (say, 20-30 year-olds) who do not live with any older citizens. This is because these young individuals:

- are, as a statistical matter, likely to be the safest among us
- can help restart the economy and increase their own prosperity
- can ensure movement, and support the rest of society
- may become troublesome in the longer run (particularly some of the men) if cooped up
- may in the long run not reliably abide by the lockdown restrictions anyway
- are likely, especially if jobless, to feel frustration that may spill over into domestic abuse (Anderberg et al. 2016)
- and other potential reasons, including offering a leadership role to the young in a moment of crisis, and giving a generalised sense of hope to the remaining adult population.¹

This policy has the potential to offer an appropriate balance between epidemiology and economics. Although it might appear that the youth-release policy would leave unfairly little role for older adults, who would necessarily have to remain in their homes, such an interpretation would not be entirely correct. The older workers in the economy might act-electronically through sources such as Skype, Zoom and Facetime- as supervisors and mentors to the young. In this way, older cohorts of citizens

¹ If a so-called antibody test is developed in the meantime, our proposal might be combined with a staged release of older people who have successfully recovered, but we assume that the numbers of those individuals may be low and the speed of any widely available test is highly uncertain.

would also reap economic returns from supervision and managerial assistance.

Using estimates from the Annual Population Survey and Understanding Society data sets, we calculate how many people would be likely to be affected. The age band 20-30 has an arbitrary element to it. We choose that age group mainly because (i) a large proportion of those younger than 20 still live with parents who might become infected, (ii) we can calculate risk numbers for this standardised age-band whereas it is harder to do so for some other bands (say, for each sub-age-group separately), and (iii) policymakers can, if necessary, expand the argument to include other age bands.

The rationale for the current lockdown is straightforward. It stems almost entirely from the epidemiology: if we allowed UK citizens to move around freely, that would foster a wider spread of the virus. As in all so-called SIR models, the gains from reducing human interactions can be viewed as multiplicative [S for susceptible, I for infected, R for Recovered]. That is because one person can infect approximately 2.5 people who in turn can infect large numbers of others in a multiplied way. The gains of the lockdown are important; we support the existing strategy followed by the UK government among others. In the future, nevertheless, it will be necessary to permit citizens to go back to some kind of normal life. Economic considerations will become pressing.

The Case for a Young Release

There would be a number of advantages of beginning, at some time in the weeks or months to come, with a release of the young that would allow them to go back to some form of moderately normal and largely unfettered life.

The first argument for a young-workforce release is that, in comparison to other age groups, the young are substantially safe. Table 1 of Ferguson et al (2020) estimates the fatality rate in the age group 20-29 at 0.03%, and the critical-care rate at 0.06%. Thus such a release of the youth cohort would not be costless in human suffering and pressure on the National Health Service. There would be tragic cases; in the current situation there is no riskless way forward. But the proposed policy's effects would be far, far smaller than those from any general release of the population.

A natural concern is that allowing young people to behave and move around as they wish would expose other kinds of older adults to substantial risk. To minimise that risk, we could restrict the release to those young people who do not live with parents. Those released would presumably also

have to give a strict undertaking, *upheld by the law*, that they would avoid all other older adults. That sounds draconian. However, in the UK and other countries at the moment there are already draconian restrictions of various kinds that are enforced by the police. That is because of the health externalities that one infected person can impose upon the rest of society.

The second argument for release of the young is that it would help to restart the UK economy and boost the typically low incomes of that cohort.² Although COVID deaths are, appropriately, the current concern, it is likely that the large financial costs of shutting down a major part of the economy will become increasingly obvious. Those economic losses in turn will eventually lead to physical and mental illness, deaths, and of course extreme levels of debt that future generations will have to repay. It might be thought that releasing the young would have only minor economic benefits (perhaps because many of the employers have shut). However, **the intrinsic nature of an economy is that entrepreneurship and people's efforts lead to self-generating prosperity.** The young cohort could be allowed to restart or open small businesses, restaurants, transport services, to buy and sell cars and houses, and much else. In the short run, their main customers might predominantly be the young. This would lead to greater tax revenues to fund the United Kingdom's public services and also greater prosperity – than currently possible – for young people themselves.

The third argument for release is that, because they are predominantly resilient to the virus, young adults are ideal as drivers and support staff across the UK's delivery infrastructure. It can be expected that the need for this cohort to be part of our transport system will rise quickly in the future as older lorry and van drivers become increasingly probable victims of widespread COVID-19. In this sense the young can become an ever-more vital foundation for the rest of society.

The fourth main argument for release is that if kept cooped up the young can be expected to be the most prone to aggressive and other dangerous kinds of behavior (Bonell et al. 2015; Long et al. 2016). This does not mean that after release they will commit no crimes. However, outside the home they will be more easily monitored by the police in a comparatively normal way.

There are subsidiary arguments. They include the possibility that, in our judgement, it is likely that the young will be the first to become restless once

² Another simple point, but perhaps one worth making, is that those who are most at risk of death from COVID 19 are people who live on pension income that does not require them to leave the house to earn a living. The young, of course, are in a different and more precarious position.

the lockdown has gone on for a long period, and then might begin to flout the lockdown in some numbers, which might in turn lead to a domino-like lack of respect for the law and normal social conventions, which might become corrosive for societal safety and wellbeing.

Illustrative Calculations

It is possible to calculate how many people would be involved in a release of the young cohort.³ We draw on various sources of data. Official estimates on the size of the UK population can be found on the Office for National Statistics (ONS) website. We also use the 2018 Annual Population Survey (APS). It provides valuable information on (i) how many young adults live with their parents and (ii) whether a young employee works in the private sector or public sector.

Various questions are relevant to our detailed calculations:

1) How many 20-30 year-olds are there in the UK?

From our analysis, the estimated number of 20-30 years old in the UK in 2018 = 7,836,394.⁴

2) Of those, how many work in the private and public sectors?

The approximate proportion of UK citizens 20-30 years old who work = 75% according to the APS data. Thus, combining the two numbers above, it is possible to estimate the number of 20-30 year-olds in the UK who are employment (in 2018 data) = $7,836,394 \times 0.75 = 5,877,296$. Of these, the proportion of 20-30 year-olds who work in the private sector = 82%. Hence their absolute numbers are given by $5,877,296 \times 0.82 = 4,822,912$. That, in turn, implies that 1,054,383 work in the public sector.

3) How many of those 20-30 year-olds live with their parents?

Going by the Understanding Society (2018), 47% of the 20-30 year-olds lived with parents in 2018.

The proportion living with parents is highest at age 20 (almost 70%). This number reduces with age within the age band of 20 to 30, as might be anticipated.

Therefore, of the 20-30 year-olds, $7,836,394 \times 0.47 = 3,683,105$ lived with parents in 2018. Hence 4,175,428 were not living with parents in 2018.

³ Although it may be unnecessary to emphasize, the small proportion of 20-30 year olds with underlying health problems would have to be encouraged to stay safely at home.

⁴ It should be explained that this and later numbers capture a kind of spurious accuracy, of course, but we round them up at a later stage in the argument.

4) *How many of the 20-30 years old who do not live with parents work in each of the private and public sectors?*

The 20-30 years old who work in the private sector AND not living with parents = $4,822,912 \times 0.47 = 2,556,143$.

And the 20-30 years old who work in the public sector AND not living with parents = $1,054,383 \times 0.47 = 558,823$.

The number 2,556,143 seems particularly important to know (of course it is best to think of this as an approximate 2.6 million). These individuals are likely to be particularly vulnerable in an economic sense. Public-sector employees, by contrast, are likely to continue to keep their jobs.

How much extra national income and GDP might be produced by allowing young people to return to normal life? It is not easy to estimate how much extra income would be generated by a release of the young. However, one illustrative guess might go as follows. The average gross weekly earnings from the main job for the young cohort as a whole, and who may or may not live with older people, equals £386.28 (S.D. = £195.33). If half (for example) of that could be made in some way after the young cohort's release, and assuming that half of young private-sector workers lose their earnings entirely, then the extra annual income generated at first by a release of the young who do not live with parents would be *0.5 times 0.5 times 386.28 times 2,556,143 times 52 = approximately 13 billion pounds per annum*.

Further Possible Concerns

What would happen after the young are released? Much would be learned in the ensuing weeks. Further cohorts, of somewhat older individuals, could follow in a carefully staged way.

How would the 20-30 year-old release rule be enforced? Presumably it would have to be done in the same way as the lockdown that is currently being administered. In other words, police officers would have to be given the right to fine or arrest those outside the age band who are caught breaking the age rule.

A release of the young might cause jealousy and rebellion among those a little older than the age group released. Such reaction, particularly among those in their early 30s, would be human and is to be expected. Efforts would have to be made by politicians and others to explain the logic of the release of the young, and to offer hope for the future.

There would inevitably be a chance of unethical behavior and corruption where a minority of young people attempt both to claim the new COVID benefits from the government while also working after being released. Government offices would have to try to detect this in the way familiar to tax offices in the UK and elsewhere.

How many young deaths might society have to tolerate? It may be that this number would eventually have to be countenanced anyway if a vaccine cannot be developed. But to help understand the immediate number of young deaths it would be necessary to multiply 0.03% times the likely infection proportion of the young times the 4.2 million young people not living with parents. If the infection proportion were 0.5 then the extra premature deaths⁵ in the United Kingdom would be 630.⁶

Conclusions

This briefing note has considered what might happen in the United Kingdom after the current COVID-19 lockdown is allowed to ease, that is, how an exit strategy might be designed. Unless a vaccine is discovered quickly, it is unlikely that there will be any riskless or painless course of action. Epidemiological and economic trade-offs will instead have to be faced. The choices at that juncture are likely to be difficult ones for politicians and citizens.

We have suggested that there may soon be a case to release from lockdown the millions of UK citizens aged 20-30 who do not live with their parents. This would help to restart prosperity⁷ before an extraordinary recession takes hold; it would lead to other societal benefits; it would also create a reasonably small, but unfortunately not negligible, extra risk to health in the country. UK society and the economy might in this way begin to move forward by following the footsteps of the young. An equivalent strategy could in principle be pursued in other countries.

⁵ If the optimistic scenario of the Lourenco et al. (2020) from Oxford turns out to be true, the case for an early release of the young would be even stronger. We are not especially optimistic at this time.

⁶ However, it should also be noted that the rate of hospitalizations that require oxygen would be far higher, even among the young, than the deaths figure of 630.

⁷ To reiterate an earlier point, non-economists may find this difficult to believe. They might feel something like 'but the businesses are largely shut down anyway'. However, since the time of Adam Smith, economists have been used to the idea that economies are essentially self-generating from the bottom up. Humans have entrepreneurial ideas; they want to make a living; they offer goods and services that others desire; they become richer; they purchase things from others; a multiplied degree of prosperity spreads throughout a larger and larger group. In principle, a youth-led sub-economy could emerge. It would be likely to begin in the services sector – driving, delivering, the creation of food and entertainment, and so on.

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