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Towards resilient health systems: New institutions, an invigorated civil society, and global cooperation

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Abstract

- A new health-sector institution is necessary at the national level. The UK needs a Health Resilience Commission whose purpose would be to monitor the UK health system and provide policy advice about its ongoing reform. This would be a statutory body holding public enquiries, making use of research skills and quantitative modelling abilities, and delivering reports to Parliament. The Australian Productivity Commission provides an indication of how to build such a body and how it might operate.

- New health-sector institutions are necessary at the global level. The world needs a reformed WHO, a body with delivery capabilities including crisis management skills, money to spend where necessary, and the ability to train and support national officials. It also needs a Global Health Board which can monitor the global health system and make recommendations about its ongoing reform. This body would have a similar role, at the global level, to the role of the Health Resilience Commission within the UK. The IMF provides a guide as to how a reformed WHO might operate and how it might be governed. The OECD provides a model for a Global Health Board, as does the Financial Stability Board, a body set up to help reform the global financial system after the Global Financial Crisis.

- All heath systems – both national and global – require greater cooperation between three "poles of delivery": namely markets, government, and civil society. The private sector is flexible, and is where innovation in production happens. Government can respond to crises, spend big money, manage society-wide systems, and enforce system change. Mechanisms involving civil society will come to the fore when markets and government alone cannot solve pressing problems. Civil Society can activate generosity and mobilise group support, and some things are best achieved with the kind of knowledge, skills and capabilities possessed by people who do not work for either the corporate sector or the government sector. Cooperation between these three poles of delivery is essential for health-system reform.

- Greater international cooperation on health policy is necessary between nation states, and between health-policy makers and the national treasuries and central banks who deliver economic policy.

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* Response to the Call for Evidence by the Post Pandemic Policy Commission. See https://www.r4rx.org/founding-vision. The Interim Report of the Commission is at https://47ef41f2-be4f-4426-80c9-35abcb384d23.filesusr.com/ugd/6a28e0_d77dea09dfce48f5b9bb15cfd643596c.pdf, and the Research Report of the Commission is at https://47ef41f2-be4f-4426-80c9-35abcb384d23.filesusr.com/ugd/6a28e0_9987825b034f4033a006b4f9ec3a68c5.pdf . Both of these documents make use of what follows.

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1 Introduction and Summary

This paper discusses how we might create more resilient health systems, both in the UK and globally.

Resilience is essential in systems. When a resilient system is shocked, it does not collapse, but instead recovers. For this to be possible, such a system needs secure foundations. In addition, those operating it need the ability to understand the current state of play and to plan for the future. Furthermore, the system needs a capacity to rapidly adapt and transform. In this paper I seek to understand how health systems might be given the three properties of resilience, understanding of the current situation, and the ability to adapt rapidly

What can we learn about resilience from the UK's success in rolling out vaccines? Why is this so different from the gross inefficiencies of the UK's test and trace system, and from the UK's lamentable job of keeping the virus at bay? What do these specific examples teach us about a much more general question: how to construct a resilient health system in the UK? In addition, thinking globally, what can we learn from both the actions of other governments and from the WHO's inadequate response to the Covid crisis?

In this paper, I make four points in response to these questions.

First, reform is required at the national level. The UK needs a Health Resilience Commission whose purpose would be to monitor the UK health system and provide policy advice on its ongoing reform. This would be a statutory body holding public enquiries, making use of research skills and quantitative modelling abilities, and delivering reports to Parliament. The Australian Productivity Commission provides an indication of how to build such a body and how it might operate.

Second, reform is also required at the global level. The world needs a reformed WHO, a body with delivery capabilities including crisis-management skills, with access to fund to spend where necessary, and with the ability to train and support national officials. The world also needs a Global Health Board, which can monitor the global health system and make recommendations about its ongoing reform. This body would be a global analogue to the UK's Health Resilience Commission; it would hold enquiries, issue reports on reform to the UN, and have research skills and quantitative modelling abilities. The IMF provides guidance to how a reformed WHO might operate and how it might be governed. The OECD provides a model for a Global Health Board, as does the Financial

Stability Board, a body set up to help reform the global financial system after the Global Financial Crisis.

Third, resilience of health systems will only be achieved if there is greater cooperation between three "poles of delivery": namely markets, government, and civil society. As we all know, various combinations of markets and government can provide delivery mechanisms. Roughly speaking, the private sector responds to needs in a flexible way, and is the location of productive innovations. By contrast, government can respond to crises by organising coordination and spending big money. And government can manage society-wide systems and – if necessary - enforce system-wide change. Governments can also orchestrate international cooperation. Mechanisms involving the third delivery pole - civil society - come to the fore when pressing problems cannot be solved by markets and government. Some things are best achieved with the kind of knowledge, skills and capabilities possessed by people who do not work for either the corporate sector or the government sector.[1] Furthermore, civil society can bring about changes in worldview, can lead to activation of generosity, and can be the way in which group support mechanisms are mobilised, all things which are necessary if large structural changes in society are to take place. Climate change policy is one example of this. The present paper provides evidence of how and why the participation of civil society will be necessary if essential changes to health-systems are to be brought about.

Finally, a greater degree of international cooperation will be required to make the global health system more resilient. The last time the world faced an economic and social challenge as serious as the one we now face was at the end of the World War II. At that time there was an extraordinary burst of institutional creativity: the Bretton Woods conference in 1944 at which the IMF and the World Bank were established; the foundation of the United Nations at a conference in San Francisco in 1945; the subsequent negotiations which led to the establishment of the General Agreement on Tariffs and Trade (GATT), which many years later became WTO; and the provision by the United States, through the Marshall Plan, of additional money for countries in need, something which eventually led to the creation of the Organisation for Economic Cooperation and Development (OECD) that was located in Paris. Finally, in 1948, the World Health Organization (WHO) was established as part of the UN. Seventy-five years on, these multilateral Institutions still provide a

[1] See the paper by Sam Bowles and Wendy Carlin called "Shrinking capitalism: Components of a new political economy paradigm". (Bowles and Carlin, 2021) This paper will appear, in due course, in Vol 37, No 4 of the *Oxford Review of Economic Policy* an issue which has title "Capitalism: What Has Gone Wrong, What Needs to Change and How Can It Be Fixed". See also the Bowles and Carlin (2020a, 2020b)

framework for international cooperation. We now need creativity of a similar kind to take these multilateral institutions forward, given the challenges which Covid is providing to the global health system. The two institutional innovations which I am advocating - a radical reform of the WHO and the creation of a new Global Health Board – will provide a way of taking this global cooperation forward.

2 The UK health system: both strengths and weaknesses

The Covid pandemic created interconnected medical and economic crises in the UK.

Here, I describe two cases in which the UK health system has shown itself to be resilient in response to this two-fold challenge. The first of these has been the ability of the government to provide immense fiscal support, both generally to the economy and, more specifically, to the health system. The second case is the way in which vaccination has been rolled out, both quickly and smoothly.

Following this analysis, I will consider two other cases in which the UK health system has demonstrated a lack of resilience, both in relation to the provision of test and trace facilities, and in the provision of medical equipment. I follow this up by discussing the chaotic management of lockdowns, and I consider reasons for the low overall level of medical preparedness in the UK. Finally, I consider how a lack of resilience might be avoided in future.

In all the cases analysed, I will conclude that success has depended on the effective combination of all three of the poles of delivery identified above (markets, government, and civil society), and that failure was the outcome when such a combination was not properly achieved.

Fiscal Support

In the UK, the fiscal interventions to tackle the Covid crisis have been extraordinary. The policy centrepiece has been the Job Retention Scheme, or 'furlough' scheme, under which employers have received 80 per cent (up to a limit £2,500 per month) of the wages of employees who are temporarily asked to stop working (Mayhew and Anand, 2020). By early May last year, 6.3m workers had been furloughed, and this number later rose to about 9m, about a quarter of the UK workforce.[2] Another key policy in the UK has been the variety of Covid loans which have been made available to firms.

[2] This bold policy still left large gaps: the scheme, for instance, failed to cover 20 per cent of the UK's workforce and the data were not available to judge if 80 per cent was the right figure.

These huge injections of money were organised exceptionally quickly, largely because of the existence of a well-administered tax system.

In addition, fiscal intervention has had a much more direct influence on the health system, because of the - also extraordinarily large - amounts which have been spent on that system since the outbreak of the pandemic. In May last year, NHS Test and Trace was set up with a budget of £22 billion. Since then it has been allocated £15 billion more: totalling £37 billion over two years (UK Parliament, 2021). In addition, the UK expects to spend £11.7bn on its vaccination programme (Owen 2021).

Vaccination

The UK vaccination process has proved to be resilient. This is because all the features identified at the beginning of this paper were in place: secure foundations, the ability to understand the current state of play and plan for the future, and the capacity to rapidly adapt and transform.

A brief summary of what has happened in the vaccination process will be helpful.

Research has been possible at speed because there was already a 100-strong team at Oxford working on Ebola and SARS and other vaccine-related issues. This is the result of strategic national-level research-funding decisions which were made more than five years ago. The Oxford team rapidly reached an agreement on drug production with Astra Zeneca, a research-based bio-pharmaceutical company. This drug-production system has a not-for-profit business model whose objective has been to produce vaccination at cost, on a not-for-profit basis, as is proper for such a global public good. (See Susskind and Brown, 2020.) US and European drug companies have brought pressure on European politicians to delay the distribution of the Astra Zeneca vaccine,[3] precisely because they (rightly) believe that the Astra Zeneca not-for-profit business model endangers their plan to make significant profits from Covid.[4]

The vaccine roll-out, coordinated through the NHS, has been rapid and well managed, in large part because it uses the already-established NHS IT system. This means that contacts with individuals to invite them for vaccination have been sent through doctors' surgeries using locally managed

[3] European politicians acted to delay the distribution of the Astra-Zeneca in Europe, citing blood clots as the reason, even although the European health regulator argued that rollout should not be delayed, using an appropriate balance-of-risks argument.

[4] The newly announced US policy on Covid vaccine patents is another threat to that model.

databases. Invitations for vaccination are sent out to patients by doctors' surgeries, usually by a text to a mobile phone, and then booked using a link from this text to connect with a nationally managed booking system which in turn connects individuals with local testing centres. An important element of trust and commitment has been fostered by the fact that this contact has come via local surgeries. In addition, the system of priorities established for vaccination, with the most vulnerable vaccinated first, has commanded public support. These elements of trust have generally dampened anti-vax sentiment.[5]

It is clear that good outcomes have emerged rapidly because of collaboration between the three poles of delivery: government, markets and civil society. Without any one of these, the rapid success of the UK's vaccination process would not have been possible.

Test and Trace

The contrast between the U's vaccination programme and its test and trace system (t&t) could not be more profound. The UK possessed no structure in which to set up test and trace (National Audit Office, 2020). The trace part of the t&t system has been largely run from a national centre, governed by a Board which apparently contains no epidemiologist and has had very poor lines of accountability (*ibid,* p. 8 and West, 2020). This system has - until recently - bypassed the local knowledge possessed both by local government and local medical professionals (National Audit *Office,* 2020, p.7). There have been two consequences of this form of organisation. First, the t&t system traces very few people - the trace system reaches on average 0.4 close contacts of each person registered as having tested positive. Second, of those traced, only about 50 percent actually self-isolate as they are instructed to do. This is also true of those who test positive.[6] These poor outcomes are exacerbated by inadequate financial support for those who would lose wage income when they self-isolate. Outcomes might well have been different if, like the vaccine roll-out, the t&t system had been coordinated with the NHS and had made use of local resources, and if adequate financial support had been provided.

[5] There is, however, more work needed to persuade anti-vax people, who are mainly found amongst ethnic minority groups and those with low levels of education. Success here requires labour-intensive individual-level counselling, managed at the local level, another possible opportunity for civil society.

[6] See National Audit Office (2020), p. 4. The more up-to-date numbers which we cite have been obtained as explained in Maciejowski *et. al.* (2021).

Two further general points emerge in this in comparison of the provision of t&t facilities with the vaccination process. First, vaccination made use of an existing system for distribution. Second, people were motivated to cooperate because they trusted the way in vaccination was rolled out through local GPs. Neither of these things were true for t&t.

It is evident why t&t has performed very badly, compared with the vaccine roll-out that. In the case of t&t, none of the features which we identified at the beginning of this paper - secure foundations, the ability to understand the current state of play and to plan for the future, and a capacity to rapidly adapt and transform - were in place.

Other aspects of the health system required to manage the Covid pandemic

There was no resilient system, in the UK, to manage the availability of medical equipment: testing kits, ventilators and related technologies, personal protective equipment (PPE), and cleaning materials. Of course, different countries have different production capabilities, indeed, no country has the domestic capabilities to produce all the equipment it needs alone, and as a result much equipment was imported. But there was no accurate system of tracking available in order to determine what was available, and no understanding of who could produce more. Furthermore, when the urgent need for more PPE became evident, an attempt was made to nationally manage the required rapid response, rather than delegating it to the NHS system and /or local government, who might have used local contacts to sign up local producers.[7]

There also was no resilient system in place, in the UK, to manage the lockdown process. There appear to be a number of reasons for this. First, there were no recommendations or guidelines internationally from the WHO – or any other body - as to what might be done, including, in particular, how quickly to act and what to do about international travel. Second, in comparison with countries in Asia, including Australia and New Zealand, there was no policy experience accumulated as a result of dealing with SARS. Third, it appears that the epidemiologists involved in SAGE had little experience in actually making policy, the kind of experience that is more widely possessed by those in the economics profession, and it seems that it was often unclear as to whether science was leading policy, or vice versa. But fundamentally, the British Prime Minister was resistant to acting in

[7] We have all heard stories of producers who would have been able to produce PPE at short notice, and indeed who tried to volunteer to do so, but were unable to make contact with the disorganised top-down management structure which was put in place to increase the production of PPE. For a discussion of how this might have been remedied, and might be remedied in the future, see the next section of this paper.

the necessary manner, and there was no policy-making system in place to constrain such political obstruction.[8]

In addition, there was also no appropriate preparedness in the UK for an epidemic such as Covid, despite recent global experience with SARS, MERS and Ebola. It is understood that the NHS needs a plan for how respond to a wide range of incidents and emergencies that could affect health or patient care, and the Civil Contingencies Act (2004) requires NHS organisations, and providers of NHS-funded care, to show that they can deal with such incidents while maintaining their normal services. Furthermore, the relevant NHS website, on Emergency Preparedness, Resilience and Response, last updated in February 2019 (!) states that "the threat and potential impact of pandemic influenza is such that it remains the top risk on the UK Cabinet Office National Risk Register……" (See https://www.england.nhs.uk/ourwork/eprr/). Yet preparedness was entirely inadequate.

I now turn to describe how better preparedness might have been achieved, and might be achieved in the future.

3 Towards a more resilient health system in the UK : creating a Health Resilience Commission

How to create a more resilient health system in the United Kingdom? A report by a number of authors from the London School of Economics examines some of the details of what needs to be done. (Pitchforth, 2021). This report is, by and large, about the need for particular changes in policy. Another valuable report can be found on the web page of the Policy Reform Group. (Policy Reform Group, 2021). That report concentrates largely on the systemic structural changes which I believe to be necessary.

It is my belief that there is, in addition, a need to bolster the strength of civil society in the UK in an important way. There is, I believe, a need for a national policy review institution for health – a Health Resilience Commission - to provide guidance for these choices about the overall health system. This would be a statutory body, one that could undertake health system research, analyse

[8] For a discussion of how this might have been different, and might be made different in the future, see the next section.

possible reforms, hold public enquiries, and make policy recommendations. Its reports would be tabled in Parliament and considered by government.

A valuable model for how to do this is provided by Australia's Productivity Commission, an institution with a long history of making recommendations on a wide range of microeconomic and social-policy issues. (Productivity Commission, 2020). Reform issues are referred to the Commission by government, and the Commission considers the implications for the country generally and for particular groups, both winners and losers. In particular, it considers how losers might be compensated. It then makes Reports to government containing policy recommendations.

This body has statutory independence. By legislation, its reports must be tabled in Parliament and considered by government. It conducts public enquiries when preparing reports with initial drafts released and further comment invited. The fact that the Commission is charged with carrying out public enquiries, and that it issues draft reports subject to public discussion leads to transparency and public engagement with the recommendations that it makes. This exposes the merits of policy actions to expert and public scrutiny and arguably increases policy efficiency. The Commission has research capacity, and modelling capability, which underpin its reports, and this strengthens the respect in which it is held. I discuss this body in some detail in Vines (2021). A shorter version of this paper will appear soon on the Policy Reform Group website. See https://www.policyreformgroup.org/ A Health Resilience Commission, modelled in a number of ways on the Australian Productivity Commission, woud bring enormous benfits for the UK health system.

It is important to note that analysis carried out by the Australian Productivity Commission is unlike that carried out within a government department. So the work of a UK Health Resilience Commission would *not* be the same as that carried out in the UK's Department of Health and Social Care or the UK Treasury. First, the work of a Health Resilience Commission would be open to expert and public scrutiny. This is very different from what happens to the confidential analysis conducted in a Department of State in order to provide advice to ministers. Second, such a commission would have statutory independence, which would safeguard the independence of its work. Third, this independence would enable it to contribute to strategic thinking in an informed manner. For all the health reforms which have been carried out recently, one can argue that too little strategic thinking has actually been done in the UK. (Policy Reform Group, 2021). It would be therefore be very

valuable to have a Health Resilience Commission carrying out such thinking in relation to the health system in the UK.

One of the key skills required by a Health Resilience Commission would be modelling capablity. An example of this kind of modelling is discussed in Henke, *et. al.* (2019) for the case of Germany. This paper describes what is in effect an input-output system, of a kind familiar to economists since the work of Wassily Leontief, for the production and distribution of health services. The authors describe the final demands for various kinds of health products, and, for each of them present an indication of the inputs required to produce each output, and an indication of where these inputs come from. Just this kind of knowledge is necessary for policy makers to create resilience in the supply of various medical products and medicine-related products. Such knowledge would have been useful, for example, in knowing just how well prepared the UK was, when Covid struck, with regard to PPE and other kinds of medical necessity.

Modelling would also enable rapid analysis of policy alternatives in relation to lockdown, in order to facilitate necessary choices . A recent paper by Maciejowsi, *et.al.* (2021) provides such a modelling system to address some of these questions, drawing a number of important conclusions. The paper shows that there is no choice, as some have argued,[9] between the two alternatives of an *elimination of Covid* and *living with Covid* . All strategies must aim to get as close as possible to the former, and vaccination appears to be the only way to do this.[10] However, there are important choices to be made in the interim about how strongly to lockdown, and for how long. All experience, and the modelling by Maciejowski *et. al.* shows, that those countries who lockdown fast and well, have fewer deaths even though, in the short run, the economic costs may be higher.[11] The modelling

[9] See Wren Lewis (2021) and Aghion, *et. al.* (2021)

[10] The reason for this is that Covid is so infectious and the costs of infection (including the possibility of death) are so great. Without vaccination, some form of perpetual lockdown seems inevitable, and that is so costly as to not be a viable policy alternative.

[11] The three detailed conclusions of the paper are as follows
(i) Test-and-trace and vaccination should be viewed as complementary policies which operate in different time frames. The former exerts its main effect in the early stages of infection before vaccination appears, whilst the latter is acting more gradually and will takes many months to achieve its full impact.
(ii) The optimal duration and severity of lockdown depends crucially on the effectiveness of these key disease control mechanisms.
(iii) Inclusion of the 'cost of death' into the cost-benefit modelling of optimal policy is both feasible and useful in determining the length and of lockdown, and the subsequent restrictiveness of policies once lockdown is abandoned. However, it does have one potential drawback. Under certain conditions, a small change in the value of life can radically alter the optimal length of lockdown, and the optimal severity of subsequent policy. This reinforces the scepticism shown by Mark Carney, in his third Reith Lecture (Carney, 2020), as to whether the value of life constitutes a good guide for policy. It may be more appropriate, as he suggests, to decide on a socially acceptable number of deaths, and then to seek the optimum length of lockdown, and severity of

system in this paper shows how the optimal length of lockdown, and lockdown severity, can be modelled with relatively few parameters. Such a modelling system might be re-parameterised very quickly in the face of any new epidemic. This would help enable decisions about lockdown to be arrived at in more orderly manner.

The skills related to modelling discussed above provide just one example of the kinds of skills which a Health Resilience Commission would need to possess. Such a body would provide advice, both about particular policy choices and about how the overall health system might be reformed. In my view, the UK needs a respected body to provide this kind of advice. And this body needs to do this in a credible way, combining both professional competence and public engagement, thus becoming an important part of civil society in the UK.

4 Lack of Resilience in the global health system

The Covid pandemic has created an interconnected medical and economic crisis for the whole world. I now discuss the lack of resilience that has been evident in the global health system. Resilience would have required a degree of international cooperation in both global macroeconomic policymaking and global health-policy making, but such cooperation has not been present. Below, I discuss how this might be rectified.

Lack of global fiscal support

There is an un-met global need for fiscal support to enable countries to respond to Covid, to pay for action to combat disease and to preserve the incomes of firms and workers until the economy recovers. This need has been met in most advanced countries by very large fiscal injections, in the way described above for the UK. But many of the world's emerging-market economies, and poorest less-developed countries, have been prevented from doing this because of their high levels of public debt and external financial constraints.

One example of how this problem has affected less well-off countries is provided by a study of some of the world's poorest countries in sub-Saharan Africa undertaken by Christopher Adam, my Oxford colleague. Adam and his collaborators have captured just what a catastrophic external position these

subsequent policy, that would bring about this outcome in the least costly way. The authors show how this might be done.

countries are now in, something that is likely to require them to embark on massive fiscal austerity at just the wrong time (Adam *et al*. 2020). They show very clearly how much of an increase in overseas development assistance (ODA) is required if these countries are to deal with the medical and fiscal problems which the COVID pandemic has thrust upon them. In particular, Adam *et.al.* show that merely keeping the degree of domestic fiscal adjustment within reasonable bounds—i.e. bounds which seem politically feasible—would require an extra $50 billion of ODA - in effect, a doubling of the aid which these countries receive. In addition, these countries would need three times as much aid if the aim was to fully isolate them from the Covid shock. This problem is not confined to countries in sub-Saharan Africa; we are all watching the crisis unfold in India, Brazil and South Africa. All of those countries also need massive fiscal help.

The World Health Organization (WHO) is the international institution which, in principle, is responsible for coordinating the global response to the virus. But the WHO has not been able to do what is necessary. Under the Trump Administration, there were systematic attempts to undermine and delegitimise this institution. This has now stopped. Nevertheless, the WHO is not in a strong position. It has played very little part in attempting to mobilise any large-scale macro response to the crisis, including the kind of necessary fiscal response outlined above.

Inadequacy of other aspects of global health policy

There has also been a notable lack of international cooperation in specifically disease-fighting activities. (Brown and Susskind, 2020) For instance, rather than cooperate on a joint plan to share expertise and increase the global availability of medical equipment, there have been export bans, equipment poaching, and beggar-thy-neighbour bidding wars. Rather than cooperate to develop a vaccine together, 'vaccine nationalism' has taken place, with countries unilaterally pursuing independent research programmes, even attempting to capture research teams from other countries. The WHO should have been able to help avoid this problem, but sadly it has been unable to curb such behaviour.

Indeed, the WHO is not in a strong position. It is a body which, up until now, has concentrated on setting norms and standards at the micro level. It does not have the experience of delivering large-scale programmes. It has an inadequate revenue model and its revenue is insecure. In addition, its governance is ineffective. Consequently, the WHO has not effectively brought together macro responses, or efforts to suppress the disease globally, or the global vaccination effort. As a result, both Unicef and the World Bank have been involved and the resulting flows of money have not been

coordinated. Furthermore, such interventions as the World Bank has been able to provide has been in the form of loans, not grants, which are in danger of adding to the debt problem of many emerging-market economies and very poor countries, such as those in sub-Saharan Africa.

Many of the activities involved in controlling an infectious disease like Covid are global public goods, *i.e.* public goods that spill across national borders. This has far-reaching consequences: these goods can only be delivered effectively if there is global cooperation. The provision of vaccines is one example. It is not enough just to discover a vaccine: it has to be mass manufactured and distributed equitably if the disease is to be eradicated in every country, something which is necessary to avoid further waves of the disease emerging in the future. Many activities like this have been underfunded, and under-provided for, until now. This kind of cooperation goes beyond the macro-fiscal cooperation discussed above. It requires micro-cooperation on tasks and delivery.

5 Towards a more resilient global health system: fiscal cooperation and the creation of new global-health institutions

The above failings stand in contrast with what has been learned by economists and economic policymakers about achieving resilience and cooperation in the global economic system. The global financial crisis (GFC) of 2008 brought out such cooperation at its very best. There are lessons which global health policymakers can learn from this about how the world might create a more resilient global health system. But – just as importantly – lessons are provided by the fact that this global macroeconomic cooperation was not sustained as the global financial crisis faded from view. That policy failure has contributed to the lack of resilience of the global health system.

Global cooperation at its best, followed by retreat

In drawing these lessons, it is important to go back beck to the origins of the GFC. The story starts with the lack of resilience which was present in the global economic system in the run-up to the financial crisis. In the early 2000s, after the famous dot-com crash, many banks engaged in a search for yield, since interest rates on short-term lending were so very low.[12] To do this, they borrowed a great deal, *i.e.* created a high degree of leverage, seeking to earn money on the margin between the

[12] Similarly, as I argue below, the pandemic has occurred because many health systems had searched for yield (and efficiencies) which made their business risky, and vulnerable.

interest rates at which they could borrow and the higher returns on the risky assets in which they invested. This high degree of leverage made the business of the banks very risky, and even vulnerable to disaster. A crisis emerged on September 18th 2008 when a fall in the price of assets created out of housing loans, in which banks had invested, led to the collapse of Lehman Brothers. The story of this crisis is now familiar; it is told in some detail, for example, in Morris and Vines (2014).

Nevertheless, the global economy did not collapse. Governments stepped in, in particular in the US and the UK, to bail out banks. And there was international cooperation in macroeconomic policymaking: interest rates were cut world-wide, governments spent more, taxes were not increased, and countries did not engage in exchange rate warfare to protect their employment at the expense of other countries. This cooperation was needed to prevent the banking crisis from taking down the whole of the global economy. The cooperation was initiated by global leaders at the G20 Summit in Washington November 2008, and then taken forward by world leaders, led by Gordon Brown and Barack Obama, at the London G20 summit in April 2009. At that meeting, global leaders pledged to increase fiscal spending by 2 percent of global GDP, a scale of intervention which was unprecedented at the time. And they agreed to allow deficits to rise to a size three or four times as large as this. This story is also told in some detail in Vines (2014, 2015 and 2016).

Furthermore, immediately after the GFC, the world embarked on a series of banking–sector reforms. These reforms required banks to raise more capital and to limit their leverage (Morris and Vines, 2014). The reforms have been managed and coordinated by the global Financial Stability Board (FSB), which operates under the auspices of the Bank for International Settlements in Basel. This body was created after the GFC, out of a much lower-level Financial Stability Forum, and Mark Carney, then the Governor of the Bank of England, became its first Chair. The FSB promotes international financial stability by "coordinating national financial authorities and international standard-setting bodies as they work toward developing strong regulatory, supervisory and other financial sector policies" (Financial Stability Board, 2021). This new institution has come to exert a major influence on global banking regulation.

The financial reforms undertaken under the guidance of the FSB, and the resulting greater degree of resilience of the global financial system, meant that the Covid crisis did not trigger a global banking crisis, as many observers initially feared that it might do. The ten-year period of reform which followed on from the GFC meant that the global financial system was able to either the Covid shock.

Nevertheless, although the *financial system* has proved resilient, the lessons about ensuring the resilience of the global economic system *as a whole* have not been learned (Vines, 2014, 2015, 2016). As just noted, economic cooperation in macroeconomic policymaking was crucial in 2008 and early 2009, at the time of the GFC and immediately afterwards. However, this cooperation soon evaporated. By 2010, major countries in the G20 were supporting a policy of austerity, which was sanctioned at the G20 conference in Toronto in June 2010 by George Osborne, the UK Chancellor, by Wolfgang Schäuble, the German finance Minister, and by a US Treasury under pressure from a Republican Party that was determined to hamper President Obama's room for fiscal action. Over the subsequent decade, this policy of austerity and a determination to act unilaterally has gone hand in hand with populism, and has contributed to many subsequent problems, including Brexit and the election of Donald Trump.

Because of this unilateralism, the international macroeconomic policy response to the Covid crisis has fallen well short of what is necessary. Partly due to resistance from the US, the G20 proved unable, and unwilling, to act as an institution in which economic cooperation could be assembled, as had happened in 2008 in response to the GFC. Just imagine what would have happened if global leaders had convened a special G20 Summit to discuss what to do about Covid, as had happened in in November 2008, when heads of state met in Washington to discuss what to do about the GFC just two months after the Lehmann crash. It is also salutary to consider what would have happened in 2020 if there had been a global fiscal response like that orchestrated by Gordon Brown and Barack Obama at the London G20 summit in April 2009. Such global financial cooperation could have made it possible for the world's poorest countries and emerging market economies, to respond fiscally in a similar way to the UK. A number of concerned individuals called for such fiscal support at the G20 meeting in Riyadh in November 2020, both publically, as in Vines (2020a, 2020b) and privately, in conversations with G20 Sherpas. But nothing happened.

The kind of support that was needed is described by McKibbin and Vines (2020). The authors of that paper provide evidence that if emerging market economies and the world's poorest countries had been able to carry out the kind of fiscal support that was mobilised in advanced countries, GDP and employment in these countries would have increased by a large amount, perhaps as much as 2 percent and 5 percent respectively. Furthermore, this would have pulled up output in the rest of the world, by as much as 1 percent of global GDP. The International Monetary Fund would have needed to provide support for such action, to prevent fiscal crisis, and currency crises, in the countries

providing extra fiscal support. Beyond that, additional support would also have been needed: debt relief for the world's poorest countries and for some emerging-market economies, and the provision of global liquidity through central-bank swaps, coordinated by the world's largest central banks (El-Erian 2021). But the effect on the world economy would have been remarkable.

Global cooperation in macroeconomic policymaking thus remains an urgent agenda item in response to the Covid crisis, just as it was during and immediately after the GFC. But this item was ditched as from June 2010, when fiscal policies switched to austerity in the US, the European Union, and the UK. The election of Joe Biden provides hope that this item is now back on the agenda.

An essential requirement for a resilient global economy is the preservation of an open international trading system. Experience since World War II has shown that countries grow most rapidly when they open themselves to international trade, by encouraging domestic firms to expand by exporting into foreign markets and by importing whatever goods are necessary to make this possible.[13] But protectionism is on the rise again, putting that strategy at risk, and Brexit has contributed to this sea-change.[14] Nevertheless, access to foreign technology and external markets remains essential in all of the poorest counties of the world, in emerging-market economies, and in developed countries. These threats to a strategy of outward-looking growth must be addressed. Indeed, it will be essential to successful action to contain the Covid crisis.

A resilient global economy needs to go hand-in-hand with a resilient global health system. The Covid pandemic has arguably occurred because many of the world's health policy-makers had searched for yield (and efficiencies) which made their business risky, and vulnerable, in much the same manner as the policies pursued by banks in the run-up to the global financial crisis. And the Covid pandemic which emerged has certainly created a global macroeconomic crisis, even if it did not create a global banking crisis. There is a danger of a circle here, a danger that an unresilient global health system can reinforce the problems of an unresilient global economic system, and vice versa.

[13] The reason is that, for most modern goods and services, the cost of bringing these products to market is very large, so that reliance on a global market, rather than a sheltered domestic one, is crucial.

[14] In many parts of the world, the challenge from China has led to a sullen retreat from policies of openness; India provides the outstanding example of such a development, but this has also been true in the US (Posen, 2021). This is all happening at a time when, in so many of the world's poorest countries, export prices have collapsed because of the global macroeconomic crisis caused by Covid which I described earlier *i.e.* the advent of Covid has helped to worsen the protectionist problem.

It is clear, in retrospect, that more careful thought about resilience in global macroeconomic policymaking might have cautioned against the inadequate macroeconomic policy choices which the world has made since 2010, and continued to make until the end of 2020. It has become clear that austerity in relation fiscal action in general, and health expenditures in particular, has generated health-system vulnerabity. And when that health vulnerability leads to economic crisis and then to further austerity in relation to health expenditures, the result is a bad spiral. We need to break out of this trap. The election of Joe Biden in the US provides – one must hope - a new opportunity here.

Some lessons from the IMF for the WHO

What can we learn from this examination of global economic policymaking as to how the international policymaking-space, in relation to the global health system, might be better managed?

In thinking about this, it is worth learning from the three global economic institutions that manage global economic policymaking: the International Monetary Fund (the IMF or Fund or IMF), the World Bank (the Bank), and the GATT (which became the World Trade Organisation or WTO). As noted in Section 1, these institutions were put in place at the end of World War II by policymakers who were determined to face up to post-war challenges. The IMF is is the most successful of these institutions.[15] House, Vines and Corden (2008) describes how the tasks facing the IMF as an institution have been radically transformed since the time when it was established in the mid 1940s. That paper goes on to and explains the way in which the Fund has adapted, as an institution, in the face of these changing needs and takes the story until just before the GFC.[16]. Adam, Collier and Vines (2011) brings the story forward to a time a few years after the GFC. These accounts are of obvious relevance when thinking how to transform global health policymaking in the face of the Covid shock. Here is a brief summary, and an indication of what we can learn.

The Fund has a clear focus on a set of tasks. Its core task is to manage short-run macroeconomic crisis-resolution for countries in external difficulty, *i.e.* balance of payments troubles. In addition, it is involved in the coordination of global macroeconomic cooperation, often in collaboration with the

[15] Vines (1998) provides a comparison of the kinds of activities which each of these three institutions undertakes, and gives an account of the challenges which each of them faces as an institution. That discussion is now somewhat dated, but is still useful. The successes and failures of each of the IMF, the World Bank and the World Trade are discussed, one by one, in Gilbert and Vines (2000), Vines and Gilbert (2004) and Vines (1998). Here I concentrate just the IMF.

[16] Kanbur and Vines (2000) does the same thing for the World Bank.

G20. And it trains staff in the conduct of good macroeconomic policies.[17] The success of the IMF depends, in part, on its ability to raise its own revenue. It does this by charging interest on the loans it makes loans to countries in external difficulty, providing them with the liquidity which they need and which private markets are always unwilling to provide at time of crisis. The contrast with the World Trade Organization, which does not have an ability to raise funds, shows the importance of having such a revenue source.[18] The Fund has a system of governance which enables it to actively engage with its tasks as ab institution.[19]

This brief description of what we know about the IMF leads to my suggestion that there should be a radical reform of the WHO. A reformed WHO would deliver of public health measures to the global community. These measures include actual provision of services such as vaccination. But they also include the provision of public health guidelines like those which were missing at the outbreak of this pandemic on how quickly to act or what to do about international travel. This reformed body would also provide education and training for officials from countries with inadequate health systems. It would need a business model which enabled it to charge client countries for the services which provided for them, thereby providing it with a secure source of funding.

In addition, the WHO would need a system of governance very different from that at present, one which enabled it to actively engage with its tasks as an institution. For example, I noted above how different things might have been if health ministers had met alongside finance ministers at the beginning of the Covid crisis, to discuss the economic aspects of a global response strategy to the

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17 The World Bank handles long-term project finance and training of policymaking staff in the implementation of development strategies. The purpose of the WTO is much less clear. It negotiates rules on government policies relating to cross-border trade which are embodied in treaties, and enforces these treaties. But the negotiations of these rules about trade policy is difficult, as evidenced by the failure of the Doha round of trade negotiations, and enforcement of these rules is also difficult as US policy under President Trump made abundantly clear.

18 The World Bank gets its revenue in a similar way: it earns a markup on the arbitrage which it conducts. The Bank borrows money from private capital markets (at an AAA rating) and then lends it to developing countries, charging a markup but still providing the money to these countries at much lower rates than they would be able to obtain from private markets, because such loans – if available at all – would carry a high risk premium. Loans from the IMF are basically used to tide countries over short-term liquidity crises and are repaid quickly. Loans from the Bank are invested in long-term projects and are easy to repay only if the projects if the projects are successful over the longer term. It is clear that thinking about what the Fund does is more relevant to thinking about the immediate challenges posed by the Covid crisis than thinking about the Bank.

19 I say this even although emerging market economies are under-represented in the governance system of these two organisations, something which is being remedied too slowly. Such effective governance is also to be found at the World Bank. But this is not true of the World Trade Organization, which is fundamentally a legal framework of regulatory review, rather than an institution which takes action (Vines, 1998).

Covid pandemic. One would have expected the WHO to play a part in organising such a discussion, in the way in which the IMF collaborated with the G20 in organising the response to the GFC in 2008. At present, the WHO has neither the capabilities to do this, nor the governance which would have made it possible for it to act in this way.

Some Lessons from the FSB and the OECD: the Creation of a Global Health Board

It is also worth bearing in mind to the successes of two other global economic institutions. One of these is the Financial Standards Board, or FSB. I described above the purpose of that body as being to coordinate national financial authorities and international standard-setting bodies in developing stronger regulatory, supervisory and other financial sector policies. The other global economic institution of international importance is the Organisation for Economic Cooperation and Development (OECD), which evolved out of the Marshall Plan in the period after World War II, as mentioned in Section 1 above. The OECD is an international organisation that works to shape policies that, as it says "foster prosperity, equality, opportunity and well-being for all". (OECD, 2021). It does this by working together with governments, policy makers and citizens, in order to establish evidence-based international standards, and find solutions to a range of economic, social, and environmental challenges. One can think of the OECD as fulfilling a role in global civil society similar to that occupied by the Productivity Commission in Australia.

This brief examination of the FSB and OECD leads me to suggest that the world needs at least one more global-health-policy institution, a Global Health Board. I say this having in mind the fact that different institutions are needed for different purposes. (Dixit, 1996). As I have shown, the world possesses a number of different global institutions which contribute to the making of global economic policy, in a number of overlapping ways. The world also needs, in my view, another body which will contribute to the making of global health policy, and will do this in a rather different from what will be done by the WHO, even if that body is appropriately reformed.

A Global Health Board would be an international body that would monitor the global health system and make recommendations for its reform. The creation of this body at the time would mirror the way in which the Global Financial Stability Board (FSB) was created out of the much less substantial Financial Stability Forum in 2008, in order to help manage the global financial system. Creating a Global Health Board would help take forward the management of the world health system, in much the same way that the creation of the FSB helped take forward the management of the global

financial system. And such a body would come to make recommendations about global health policy reforms in the same way that the OECD makes recommendations about global economic policy reforms.

The Global Heath Board would need to have many of the capacities, at the global level, that I have recommended for the UK's Health Resilience Commission. it would have the capacity to carry out research and to do the relevant modelling to enable it to think about increasing the resilience of the global health system. It would engage with other aspects of international civil society, including the many NGOs which are associated with the delivery of health care. In doing this, it would serve to strengthen networks of connections between scientists, academics and policymakers worldwide, networks which have proved to be important during the Covid crisis. It would have the capacity to make recommendations to the United Nations Security Council.

Such a body would provide advice, both about particular policy choices and about how the overall health system might be reformed. In my view the world needs a respected body which can provide this kind of advice. And this body needs to do this in a credible way, combining both professional competence and public engagement, in an accountable way. This will encourage wider understanding, voluntary involvement, and consent and compliance with whatever regulatory restrictions become necessary. One can think of the Global Health Board as fulfilling a role in global civil society similar to that which would be occupied by a Health Resilience Commission in the UK. A body which does that would become an important part of global civil society.

6 **Conclusion**

I have argued that a Health Resilience Commission is necessary in the UK, in order to provide a forum in which advice about the ongoing reform of UK health-system policy. This would be a statutory body holding public enquiries, making use of research skills and quantitative modelling abilities, and delivering reports to Parliament. Once this Commission was established in the UK, its system-wide view, its transparency, and its independent stance would safeguard its effective operation. It would become an important part of UK civil society.

I have also argued that institutional creativity is needed at the global level, given the challenges which the Covid pandemic has provided to the global health system. In response to these challenges, the WHO needs to be radically reformed, so that it becomes a body with much better delivery

capabilities, including crisis-management skills and the ability to train and support national policy officials. This would require the WTO to have the access to the necessary resources, and also to have a much more adequate system of governance. I argue that the world also needs a Global Health Board, a body which would monitor the global health system and make recommendations about the system's ongoing reform. Such a body would be a global analogue to the UK's Health Resilience Commission. It could hold enquiries, issue reports on reform to the UN, and have research skills and quantitative modelling abilities. These are the global institutional innovations which are now needed. A reformed WHO and a new Global Health Board would together provide valuable additions to global civil society.

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