SEVEN LESSONS FOR DEVELOPMENT POLICY FROM THE COVID-19 PANDEMIC

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ABSTRACT

Although the COVID-19 crisis is far from over, one may venture some tentative lessons that development policy can learn from the pandemic. This brief presents seven such lessons for how policy is conceived, designed and implemented.
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INTRODUCTION

Does the experience of the COVID-19 pandemic provide lessons for furthering sustainable human development? Do any of these lessons derive from or apply in particular to the Asia-Pacific Region (APR)?\(^1\) Some initial reflections on these questions may now be possible, recognizing that, as Zhou Enlai is famously rumoured to have said about the French Revolution more than 150 years later, “it is too early to tell” (SCMP, n.d.). In this brief, we make some observations about the national, regional and international responses during the crisis, critically evaluate these efforts, and identify institutional gaps and weaknesses that should be remedied to increase preparedness and improve responses to future pandemics and crises. We also use a lens borrowed from English art critic John Berger (1972) to focus on ‘ways of seeing’ policy rather than on identifying specific policy lessons.

LESSON 1: ACT STRATEGICALLY BY ACTING SPECIFICALLY

One of the most elementary but also consequential observations about the pandemic is that its effects have varied enormously across countries. This observation applies not only to how successfully countries have contained COVID-19 itself, but to how well they have avoided its damaging economic and social consequences. The measures governments have taken differ widely, as have the speed, effectiveness, and consequences of their implementation. The weight placed on distinct policy objectives, such as avoidance of COVID-19 deaths versus avoidance of economic contraction, has also varied across countries. Several countries have clearly done better in terms of some, perhaps all, major objectives, and this seems to be due to the specifics of their actions: not merely whether they took early, decisive or substantial action, but where and how they focused interventions. The best performing countries did better in terms of both health and economic outcomes and did not rely on untargeted, generalized lockdowns alone (Box 1). Of course, it is not possible to be certain that differences in outcomes have only to do with policies, since biological and epidemiological features, such as the strains of the virus affecting a country, would also have been relevant.

“The COVID-19 pandemic calls for a systemic, and systematic, reappraisal. It remains far too early to see all the lessons of the pandemic for development policy, but it is not too early to identify some ways of seeing policymaking that would have made a difference and that can do so in the future”

\(^{1}\) In this brief, ‘Asia-Pacific’ is equivalent to the World Health Organization’s ‘South East Asia’ and ‘Western Pacific’. All regions in Figure 3 and Figure 4 are as defined by the World Health Organization (WHO, n.d.a).
Box 1: The relationship between COVID-19 cases or deaths and economic performance

Figure 1 and Figure 2 show the relationship between COVID-19 cases or deaths and economic performance in 185 countries, as judged by the estimated 2020 gross domestic product (GDP) growth rate (or rate of contraction, in the case of most countries), using data available as of January 2021. The data illustrate the range of trade-offs between these goals across countries. The figures show a wide range of experiences: Countries have had very different GDP growth rates at the same level of COVID-19 confirmed cases or deaths and, correspondingly, very different case and death levels for the same GDP growth rates.

Figure 1: Worldwide cumulative COVID-19 cases per million vs. per capita GDP growth rate, 2020

Sources: GDP growth rates are estimations from IMF (2020); confirmed cases and deaths from WHO (2021)

Figure 2: Worldwide cumulative cases of COVID-19 deaths per million vs. per capita GDP growth rate, 2020

Sources: GDP growth rates are estimations from IMF (2020); confirmed cases and deaths from WHO (2021)
The R-squared of the fitted (ordinary least squares) relationship between COVID-19 incidence (cases or deaths) and per capita GDP growth also tells us that the former provides very limited information about the latter (Appendix A). The estimated regression coefficient is negative for both cases and deaths (although not always statistically significant), suggesting that, on average, greater disease incidence corresponded with greater economic contraction. But the extent of the variation explained by the bivariate relationship was low. The adjusted-R-squared tells us that most of the variation in estimated growth does not reflect variation in confirmed cases (85 percent unexplained) or in deaths (88 percent unexplained).

There does not appear to have been a necessary economy-health trade-off. The average relationship tells us that countries that better safeguarded health, as judged by confirmed COVID-19 cases and mortality, also generally experienced smaller economic contractions. The estimated coefficient suggests that, on average, for each additional 10,000 cumulative cases per million, a bit more than half a percentage point of growth was given up. Similarly, for each additional 100 cumulative deaths per million, around 2 percentage points of growth was given up on average. No trade-off appeared in the average relationship between economic contraction and COVID-19 incidence (cases and deaths), since both tended to worsen together, to the extent that a relationship can be found at all. But these average relationships also mask the large variation around the average. The low proportion of the variation explained by the bivariate relationship (the correlation between the two variables is only 0.14) tells us that the more important factor was the variation in the extent of economic contraction among countries that experienced similar health consequences of the pandemic.

A more complete model, capable of explaining a larger portion of the observed variation in economic outcomes, would have to introduce additional explanatory variables. These might include, for instance, the specific form of the policies adopted, such as general lockdowns versus more targeted approaches or the extent of testing and contact tracing. One might also argue that alternative indicators could provide a more accurate picture of the health or economic consequences experienced. For instance, to provide a more precise indicator of the economic impact of the COVID-19 crisis in most countries, one might use the shortfall of the per capita income growth rate from trend growth rather than the unadjusted growth rate, that is, the extent of economic contraction. It seems unlikely, however, that introducing such nuances will overturn the overall conclusion that much of the variation remains unexplained.

As the regression results and Figure 3 and Figure 4 show, a weak or non-existent relationship between COVID-19 cases or deaths and contraction in national income due to policies to address the pandemic appears in every region during 2020, with some evidence of a stronger relationship, that is, a greater economic contraction associated with more cases or deaths, in the APR than elsewhere. In other words, the magnitude of the regression coefficients describing this bivariate relationship and the proportion of the variation explained by the relationship appear slightly higher in the APR.

**Figure 3: Regional cumulative COVID-19 cases per million vs. per capita GDP growth, 2020**

Source: Author calculations based on WHO (2021); IMF (2020)
There are marked regional differences in the impact of COVID-19 on morbidity and mortality, with very low rates of cases and deaths in East Asia compared with Europe and the Americas (Figure 3 and Figure 4). Table 1 summarizes the difference in case and mortality incidence by region, describing cases and deaths per million by region, using WHO’s regional classifications. Figure 5 shows cumulative total deaths using a more generally familiar classification of regions (Our World in Data, 2021).

Asia had only 366,000 deaths out of 2.13 million worldwide, or 17.2 percent of the world total, as of 28 January 2021, despite the region having nearly 60 percent of the world’s population. Similarly, large variations appear in both confirmed cases and deaths per million among countries at similar income levels (Figure 6). Although inter-regional differences account for some of these differences, one can observe that they are sizable among countries within the same region as well.

Table 1: Regional cumulative COVID-19 cases and deaths per million and per capita GDP growth, 2020

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>Cumulative cases per million</th>
<th>Cumulative deaths per million</th>
<th>Per capita GDP growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>42045.65</td>
<td>966.16</td>
<td>-6.3</td>
</tr>
<tr>
<td>Europe</td>
<td>32032.17</td>
<td>683.74</td>
<td>-6.9</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>7686.90</td>
<td>185.53</td>
<td>-6.8</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>6295.97</td>
<td>96.63</td>
<td>-8.2</td>
</tr>
<tr>
<td>Africa</td>
<td>2154.92</td>
<td>50.86</td>
<td>-5.7</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>673.68</td>
<td>11.71</td>
<td>-0.7</td>
</tr>
</tbody>
</table>

Source: IMF (2020); WHO (2021)
Differences in age structure between regions—potentially consequential due to the higher COVID-19 mortality risks faced by older people—appear to explain only partially the observed inter-country variations in deaths (Figure 7). In particular, they do not seem to fully explain the relatively favourable performance of Asia. It is also not obvious how these differences would explain the variation in confirmed cases, although some correlation between an older population and confirmed cases may arise if older people tend to have more serious symptoms and therefore undergo testing. While the proportion of the population over the age of 65 in Asia is about half of what it is in Europe and North America (9 percent compared to 17 and 19 percent, respectively), the ratio of COVID-19 cases and deaths per million in Asia appears much lower than this difference would explain: as of late January 2021, Asia had around 370,000 deaths while Eu-
rope and North America combined accounted for 13 million deaths out of 2.2 million worldwide. Notably, Japan, with 28 percent of its population aged over 65 (a much higher percentage than the average in Europe, Asia and North America) had only 76 deaths per million whereas the United States, with 15 percent of its population over 65, experienced 1,721 deaths per million (Statista, 2021a).

The main difference between those countries with clear successes and those without appears to be the quality, as distinguished from the quantity, of government interventions. A comparison of national-level actions in the crisis highlights this finding. Quick and decisive actions were critical but not sufficient if they gave less attention to crucial measures or implemented them poorly. This is clear even if we focus narrowly on the impact of COVID-19. Taking a broader range of concerns into account further underscores the importance of policy design, as we shall discuss later.

India offers an example from the APR. The argument for the early lockdown introduced in the country on 25 March 2020 – a lockdown identified by some as one of the most stringent in the world – posited that it would decisively arrest the progress of the disease, giving rise to substantial long-term gains in comparison with inaction (OxCGRT, 2020). But buying time matters little if use is not made of it. China, despite earlier occurrence of the disease, used its period of stringent national lockdown to good effect, isolating the disease to pockets of outbreaks or eliminating it altogether. China implemented widespread testing, effective contact tracing and other measures to avoid and suppress subsequent outbreaks; it also enhanced treatment capacity (Xu et al., 2020). In contrast, the time gained by India does not appear to have been put to good use. When India relaxed its lockdowns, the trajectory of the disease returned to what might have been its expected pattern without such drastic action. COVID-19 eventually spread extensively in the country (Figure 8) in the second half of 2020, even prior to a second wave of the disease in 2021.

In some APR countries, such as India, the early pandemic response attached disproportionate weight to one policy instrument: the on-and-off application of generalized lockdowns. Other countries placed greater emphasis on more specific policy instruments, such as stringent testing, contact tracing, quarantining and universal mask wearing, as in Taiwan (Province of China), Viet Nam and China, or intensive measures to protect the elderly, as in Japan. Many made efforts to develop capacities rapidly where these did not already exist. Countries that used a broader range of policy instruments – some highly specialized and often deployed in a selective and targeted way – to achieve specific goals appeared to do better in managing the spread of the disease than those that applied a narrow range of instruments in a very diffuse, untargeted, and nonstrategic way, specifically, society-wide lockdowns. However,

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2 This point has also been forcefully made by Zakaria (2020).
3 See Summers et al. (2020).
4 See Elegant (2020).
5 See Pasley (2020).
no sure-fire solution emerged for containing the virus, as demonstrated by subsequent outbreaks in relatively successful jurisdictions, such as China, Taiwan (Province of China)\(^6\) and Australia,\(^7\) even before the worldwide spread of new, more transmissible SARS-CoV-2 virus variants in the first months of 2021.

As scientific knowledge of the virus has expanded during the world’s collective crash course in COVID-19, it has considerably altered initial understandings of effective policies, causing a movement away from, for example, cleaning surfaces and toward minimizing prolonged respiratory contact (Nature, 2021). In addition, there has been growing recognition that specific environments, such as poorly ventilated indoor spaces, favour viral transmission and a recognition that children and asymptomatic persons are likely to transmit the disease less (Bulfone et al., 2020; Zhu et al., 2020). Some countries that have performed well may simply have been lucky, but they may have also learned more quickly – a point to which we return below.

“The comparatively strong performance of East Asian countries in the aftermath of COVID-19, as measured by lower per capita mortality, underlines that preparedness entails not merely governmental or institutional capabilities, but also those of the population, which may in turn depend on prior experiences and societal investment in building understanding”

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\(^7\) See Mao (2021).
LESSON 2: TAKE AN INTEGRATED VIEW AND ANTICIPATE POSSIBLE SPILLOVERS

The crisis has underlined potential trade-off s. As noted above, the cross-country data on national performance show that some have handled the pandemic with relative success at less economic cost. The data show that the goal of limiting the impact of the disease need not come at a severe cost to economic prosperity. Where trade-off s do exist, they call for a policy framework that can identify and balance goals, keeping uncertainties in mind. Even where trade-off s are not necessary, the situation requires careful steering to avoid falling into or creating trade-off s, in other words, implementing policies in the combination and sequence that best secures diverse goals.

The theory of economic policy outlined decades ago by Jan Tinbergen, an economist closely associated with the United Nations, emphasized the need for a decision-making and institutional framework capable of identifying the linkages and trade-off s that are ever-present in national and global policymaking. Even in cases of pervasive uncertainty, rational planning requires taking note of the possible connections, however tentatively. Sound policymaking requires anticipating causal spillovers that affect the ability to achieve different goals.

Some countries had prepared for the possibility of a pandemic by making plans and undertaking scenario-planning exercises. But one would be hard put to identify a single country in the world that had an integrated policymaking framework in place to respond to the pandemic, one that estimated the diverse benefits and costs of policies as an input to decision-making. For instance, scant attention went to the potential trade-off between preventing deaths arising from COVID-19 and increased deaths from other sources, such as under-nutrition, lack of access to health services, loss of employment and income and resulting distress, and other consequences. Such trade-off s do not appear to have informed emergency decision-making in the early months of the pandemic, and it is not clear that previous preparedness plans had considered these connections either.8

In many cases, the knock-on effects of COVID-19 policies, which proved significant, appeared to receive little or no attention in policymaking. Once again, India of ers a useful cautionary tale, with a massive portion of the population returning to their natal homes due to a prospective loss of income caused by a national lockdown announced in early 2020 with only a few hours of notice.9 In other countries, national expert advisory panels formed in response to the crisis showed a narrow focus on COVID-19-related consequences, with few social or even medical scientists having relevant broader expertise involved. The United Kingdom of ers one such case. Its widely publicized Scientific Advisory Group for Emergencies (SAGE) appears to have disproportionately favoured specialists in a few narrow scientific areas immediately relevant to COVID-19 containment (SAGE, 2021). As noted by Van Rens and Oswald (2020), “it may not be widely realized, for example, that SAGE […] had from the start, and apparently still has, no economists on it.” This is merely one indication of a probable larger failure to integrate all relevant expertise.

Even if experts can offer insights on trade-off s, societal decision-making remains outside their remit, since it requires judgments based on ethical values, attitudes to risk and other broader concerns. All interested persons should have the chance to participate, with elected representatives ultimately taking due responsibility for the choices made. Politicians in various countries have instead emphasized that they would listen to the scientists, not recognizing that experts focused on a narrow domain could not offer insights into the broader societal questions involved. There is considerable ambiguity as to whether the phrase, “listen to the scientists” refers to taking science into account, which is necessary, or if it means putting scientists in charge of policy, for which science alone does not provide adequate training or conceptual resources. Scientists themselves have shown understandable resistance to this latter idea (Ramakrishnan, 2020).

The lack of an adequate integrated framework for policymaking, even within the health domain, has strikingly emerged as a result of unanticipated, and in many cases still unaddressed, adverse health effects of COVID-19 policies. The national and global health consequences of phenomena, such as missed screenings for health risks and other forms of health surveillance, interruptions to immunization and other preventative health campaigns, lack of timely curative interventions, and the physical and mental health consequences of economic and social disruptions, all require consideration in policymaking. There is, however, little evidence that policymakers have addressed such considerations, even at later stages of the crisis (Reddy, 2020a).

8 See WHO (n.d.).
9 For a sharp critique of India’s initial response in this dimension and others, see Ray and Subramanian (2020).
Quite apart from the lack of attention to spillovers between goals, the crisis has shown a lack of preparedness for the pandemic even in the most direct respects. Evidence for this appears globally and in almost all countries. Few of the entities nominally responsible had paid sufficient attention to global disease surveillance and pandemic response capabilities (Ross, Crowe and Tyndall, 2015). Regardless of one’s views on the adequacy of the response from specific actors, such as the WHO, it seems likely that their funding fell far short of requisite levels to properly fulfill disease surveillance and response responsibilities. National-level preparedness had not adequately addressed the possibility of a pandemic, even where partially anticipated, as reflected, for instance, in the preparation of national plans for influenza and other diseases recommended by WHO. Even those countries with the most extensive national strategic reserves for contingencies had inadequate supplies of many essential health commodities, such as personal protective equipment – needs that disaster planning might reasonably have anticipated.\footnote{On the case of otherwise generally well-prepared Switzerland, see Robinet-Borgomano (2020).} Institutional mechanisms for sharing and analysing information, funding research and development of vaccines and medicines, and otherwise rapidly developing a joint international response had to be improvised after the pandemic declaration because of insufficient prior attention. Such frameworks and practices remain severely inadequate even now, as discussed below. The failure to consider economic and social consequences in addition to health when designing the crisis response was an even greater institutional dereliction.

Even if it seems of no benefit in ordinary times, preparedness is a cost worth undertaking. Precaution by its very nature does not allow for precision. It requires anticipating possibilities that can be only roughly known, even in the optimistic case that the unknowns are known unknowns. Preparedness entails investing in insurance against the worst outcomes. Such investment has no immediate return and must be undertaken without full knowledge of what measures will be necessary and how adequate they will prove. In the stocktaking that has followed the pandemic, some discuss preparedness in terms of a trade-off between short-run, or apparent, ‘efficiency’ versus ‘resilience’ (Golgeci et al., 2020). Whereas recent decades of outsourcing and of shoring (globalization) prior to the pandemic had seen much emphasis on increasing efficiency by, for example, streamlining supply chains, using just-in-time inventory and other methods, the pandemic has shown that efficiency narrowly conceived may come at the cost of fragility. Where countries wholly lacked their own production infrastructure, it proved difficult to fill the supply gaps that emerged as a result of the crisis. Robust systems, such as supply chains, require adequate provision for resisting or recovering from shocks, which in turn demands investment in strategic stockpiles, excess capacity and intentional redundancy of production systems. Adverse shocks can diminish the sustainability of a system, providing a further reason to invest in resilience. For instance, the economic consequences of the pandemic may well lead to unsustainable debt loads for many countries and businesses (United Nations, 2020).

The comparatively strong performance of East Asian countries in the aftermath of COVID-19, as measured by lower per capita mortality, underlines that preparedness entails not merely governmental or institutional capabilities, but also those of the population, which may in turn depend on prior experiences and societal investment in building understanding and acceptance of public health requirements. One conjecture, for instance, attributes the comparatively strong response of the East Asian countries to COVID-19 to prior experiences with severe acute respiratory syndrome (SARS), avian influenza (bird flu) and other pandemics, as well as previously established public health practices that enjoy widespread public compliance, such as social distancing and mask wearing, and institutional capabilities, particularly testing and contact tracing (Khor and Heymann, 2020).
LESSON 3: PROTECT IN ADVANCE WITH STANDING SAFETY NETS

Countries with social safety net institutions and infrastructure that could expand automatically to cushion the adverse social and economic effects of pandemic policy response, such as lost income and unemployment, did better in limiting those harms. In most such cases, the institutions and infrastructure was established under different circumstances, but had the capacity to respond quickly and elastically to increases in need for social and economic protection; they were able to scale up rapidly at low incremental costs. The case for standing social safety nets and protection measures rests not only on the need to support individuals who fall between the cracks in normal times, but on sustaining society as a whole, or sizeable sections of it, when the cracks become a yawning gulf in a time of crisis.

Because the design of such standing social institutions and infrastructure does not necessarily target pandemic preparedness or preparedness for emergencies as such (even if it has the effect of providing protection in such circumstances), we should distinguish this lesson from the preceding one on anticipation of crises. Standing safety nets and other relevant response infrastructure serve as a form of preparedness, but a special kind: They exist in ordinary times and play a function then too, but become especially important in the context of a crisis that increases the need for them.

The contrast between societies that possess strong standing social infrastructure to meet growing needs in a crisis and those that do not has appeared most markedly among the developed countries. Some of these, such as Germany, which we discuss below in relation to its Kurzarbeit system of wage subsidies to encourage firms to maintain employment, possessed mechanisms for labour market intervention to sustain employment or diminish the costs of unemployment that many other countries, notably the United Kingdom and the United States, had to invent from scratch in response to the crisis. These latter countries introduced emergency measures, including loans for small businesses in return for refraining from job cuts, temporary extensions of unemployment insurance, temporary relief from payroll taxes and new temporary provisions for cash supports for individuals and businesses.

Such measures often take time to establish and rely on data collected for other purposes to determine eligibility or to convey benefits, leading to gaps in social protection. Benefit levels are also often determined arbitrarily and prove inadequate. Although 215 economies spent at least US$800 billion on around 1,400 social protection measures in the first three quarters of 2020, many were brief and of ered very low amounts: “Relative to pre-COVID levels, cash transfer benefits nearly doubled, and coverage grew by 240 percent, on average. Yet ‘large scale’ doesn’t mean ‘adequate’ [...] cash transfer programs lasted 3.3 months on average, with a mere 7 percent of them being extended; 30 percent of programs were one-off payments; and only one-quarter reached more than one-third of the population. In low-income countries, spending per capita amounted to a scant average of $6 per capita” (Gentilini, 2021). Ad-hoc measures cannot substitute for a standing social protection infrastructure, and the pandemic has highlighted which countries do not have one (Taylor, 2020; Goodman et al., 2020). At the same time, the pandemic has spurred the extension and reconstruction of safety nets now revealed as inadequate, even in countries with relatively formal labour markets and widespread, if limited, social protection coverage (Kelly, 2020). The large informal labour markets in many countries in Asia and elsewhere, especially those without any social protection system, add a further challenge.

“The human development approach’s insistence on open and participatory methods of public decision-making has great relevance here, as procedural legitimacy can also aid consequential efficacy. How best to combine expertise with democratic values remains an important unsolved problem”

Footnotes:
[[1] For a discussion of this feature of standing safety nets, see Reddy (2006).]
[[2] Kurzarbeit is a social insurance program whereby “companies hit by a downturn can send their workers home, or radically reduce their hours, and the state will replace a large part of their lost income” (Financial Times, n.d.).]
[[3] India’s National Rural Employment Guarantee scheme, although well suited to reaching informal workers, appears to have been underfunded in the aftermath of Covid-19, especially as a result of the return of migrant workers to their places of origin, and could therefore have benefitted from further expansion (Deccan Herald, 2020).]
LESSON 4: BUILD AND SUSTAIN TRUST

The pandemic has underscored that protection and promotion of the public good is a societal as well as a governmental project. The efforts of private citizens and civil society must supplement those of government to ensure the rapid adoption of desired behaviours. Additionally, success depends on citizens having motivation for taking the right actions and doing so in adequate numbers. Motivation, in turn, depends on public understanding and acceptance of the reasons provided for citizens to act in a particular way. As a consequence, the frequently used metaphor of ‘war’ for fighting a pandemic may not prove wholly appropriate (Sen, 2020). Of course, even effective mobilization for war depends on consent of the citizenry and on their accepting the arguments for it.

Adherence to prescribed public health measures, such as social distancing, depends on acceptance of a causal account (a presumed relation between acts and consequences) as well as on the motivation to bring about those consequences, whether because of presumed benefits for oneself and one’s loved ones or for society at large. This acceptance can, in turn, rest on either prosocial (altruistic) attitudes or on an idea of rationality linked to enlightened self-interest (Reddy, 2020b). Observers have noted that during the pandemic, far from acting as ‘rational fools’ who pursue a narrowly conceived individual interest at the expense of others, or with indifference to them, many have acted instead in a fashion more concerned with public interest. This willingness in turn suggests a broader idea of rationality than that typically conceived by economists — one expressive of good reasons for one’s actions, rather than simply maximizing one’s satisfactions according to a given preference ranking.

Cooperation in the game-theoretic sense requires acting in accordance with others so as to produce the best outcome for all including oneself, rather than pursuing a myopic and perhaps self-defeating self-interest, as in the famous Prisoner’s Dilemma game. Such cooperation, if it can be upheld, such as by an enforceable compact among agents, will serve the self-interest of all. But the cooperation sought by public health authorities can extend beyond such narrow self-interest, since it can encompass actions motivated by providing benefits for others.

The dependence of public cooperation on shared understanding underscores in turn the importance of past experiences and trust in public authorities. As noted above, this may help to explain the relation between prior exposure to the SARS epidemic in East Asia and the region’s apparently high levels of citizen compliance with public health messages. More generally, a belief that public authorities speak truthfully and out of regard for the public interest may prove an important determinant of public cooperation. Several observations from the current crisis show that active public scepticism about the validity of public authorities’ pronouncements has acted as a major obstacle to public cooperation, leading to active protests against government policies and disobedience of mandates in some countries. But such trust may in turn depend, especially in democratic contexts, on mechanisms for societal review of public health decisions and on the acceptance of legitimate debate about and scrutiny of the assumptions underlying policies.

One of the great questions of our time concerns the role of experts in society. The legitimacy of their role in decisions has increasingly come under question from sections of the public and, indeed, from other experts (Babones, 2018; Easterly, 2014). The COVID-19 pandemic has brought the issue to the forefront, underlining the lack of willingness to defer to experts in many cases, especially where they may be perceived as having made decisions on the basis of non-transparent criteria and selective values (Sandel, 2014). The human development approach’s insistence on open and participatory methods of public decision-making has great relevance here, as procedural legitimacy can also aid consequential efficacy. Such public decision-making requires considering diverse values and understandings and weighing them on the basis of accepted collective procedures. Societal decision-making of this kind must be able to draw upon expertise while also keeping it in its appropriate place (Reddy, 1996). How best to combine expertise with democratic values, both in normal times and during an emergency, remains an important unsolved problem. The COVID-19 pandemic has highlighted the difficulty and emergency, remains an important unsolved problem. The COVID-19 pandemic has highlighted the difficulty and

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24 The early models of Ferguson et al (2020) assumed adherence to social distancing and other public health mandates non-pharmaceutical interventions (NPIs) by a much smaller proportion of the population than has been reported to be complying with them. Whereas the models assumed one-half or two-thirds compliance for many interventions for the United States and United Kingdom, actual compliance has been more than 90 percent “all or most of the time” (Kantor and Kantor 2020).

25 See the foundational article, “Rational fools” by Amartya Sen (1977) and his subsequent contributions on this theme in Sen (1993).
LESSON 5: QUESTION ‘CONSTRAINTS’

An important lesson of the pandemic concerns the modifiability of apparent economic or social constraints. For instance, the already severe financial constraints perceived as existing in many countries were incrementally loosened in light of the massive fiscal requirements of responding to the pandemic, such as providing economic stimulus and targeted support to those affected by closures of businesses, loss of employment and other direct and indirect effects. National and international institutions that have previously acted as guardians of economic and financial probity altered their stances as circumstances changed.

In a marked departure from received wisdom, the International Monetary Fund (IMF) and the Organisation for Economic Cooperation and Development (OECD) have both advocated increased fiscal stimulus during the past year. Prominent academic and policy economists have argued that financing fiscal stimulus and public investment via public debt need not prove as undesirable as widely believed in the recent past. This reflects a change of thinking already underway before the pandemic, but which has accelerated in response to it (Blanchard, 2019). This, of course, does not mean overlooking constraints altogether. The appropriate level of fiscal expansion would reflect country-specific factors, such as indebtedness (The World Bank, 2021). Unsurprisingly, given the circumstances and this newly permissive atmosphere, countries have shown considerable willingness to employ fiscal firepower in response to changing needs – although the extent of expansion has varied greatly across countries (IMF, 2021). The differences in the extent of the fiscal response to the crisis may play some role in explaining variations in the extent of GDP contraction across countries. The benefits of fiscal expansion would have been greater if accompanied by more supportive international measures. For instance, the temporary debt-payment moratorium for low-income countries, announced by the Group of 20 and supported by international financial institutions after the onset of the COVID-19 emergency in 2020, does not benefit the majority of countries (The World Bank, 2021a). The IMF’s newly agreed special drawing rights (SDR) allocation as well as new measures under discussion, such as the development of a global minimum tax on corporate income, may help to address these limitations (Lawder, 2021; Strupczewski, 2021).

Similarly, several factors have alleviated constraints in the health sector over time, including additional hospital beds and equipment, such as ventilators; the development of new medical technologies, such as mRNA vaccines; the training of additional personnel devoted to certain tasks, such as contact tracing; the increased stock of social knowledge about disease transmission; and associated changes in social and personal behaviours. Some of the constraints initially thought most likely to bind, such as supply of ventilators, have proven much less consequential than originally anticipated, in part because of increases in supply (Siddiqui, 2020). In other cases, constraints have appeared in unanticipated areas, such as in scaling-up vaccine production rather than in discovering viable vaccine formulae and in hospital oxygen supplies (Iyer, 2021). Scaling-up may entail diverse requirements. For instance, the freeing of intellectual property rights for COVID-19 health commodities through a waiver on the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) waiver on Covid-19 health commodities, as proposed by India and South Africa, might aid in scaling-up vaccine supply in the current situation but will likely need to be accompanied by new production facilities and measures to ensure an adequate supply of physical inputs (Usher 2020; Acharaya and Reddy, 2020). A diagnostic approach can help determine which constraints bind and must therefore be relaxed in order to further the policy objectives (Hausmann, Rodrik and Velasco, 2005).

“Cooperation does not take place in a vacuum. It benefits from prior mapping of capabilities, experience in collaboration, and established relationships, protocols and institutions of cooperation. Cooperation is more likely to succeed when it is based on prior experience.”
LESSON 6: LEARN TO LEARN

Policies and interventions have the greatest chance of success when they allow for revision over time. This requires the presence of a framework for collecting the data that can inform such revisions. Developing a fruitful learning orientation in policymaking therefore requires forethought. For instance, determining which geographical areas or social groups to focus disease control efforts upon, inferring the probable activities and sites in which transmission takes place, and assessing whether specific policies appear to influence prevalence or transmission – all require collecting detailed information on disease status and on the behaviours and interactions associated with the reported test results. As obvious as this seems, we have no evidence of such systematic data collection throughout the crisis, let alone collection in a format comparable and shareable across jurisdictions.

Developing a data-collection framework that can support decision-making requires identifying the relevant kinds of data and their likely application. Policymakers have not invested adequately in data for decision-making in the current crisis. For example, stark confusion has remained about basic facts such as the rate of infection in the population, as opposed to formal cases or the proportion of the infected among those tested, due to the lack of adequate random or quasi-random testing protocols. In the absence of such information, decision-making has taken place without adequate information and beliefs have persisted without validation or correction by data. The costs of holding fast to specific models with fixed parameters can be costly. An example is the slow pace of resuming in-person schooling in many countries, despite growing evidence of both the cost of disruptions to schooling and of the limited role of schools in virus transmission. Adaptive policymaking can benefit from flexibility in the choice of models, data gathering to update parameter and data sharing to better understand the sources of observed variation.²⁵

Previous experiences from prior pandemics have informed some of the inferences (or guesses) about policies that might prove effective, but this knowledge has remained underutilized. For instance, previous experiences with SARS in 2003 and influenza A (H1N1 or swine flu) in 2009 showed the possibility of opening schools with social distancing, shortened and staggered school times, movement of teachers instead of students between classrooms, and other measures, but these prior experiences did not become widely known, even though they underpinned the strategies of jurisdictions that successfully avoided school closures altogether, notably in Taiwan (Province of China) (Viner et al., 2020). Some rapid learning has taken place during the current crisis as scientific knowledge has evolved, such as on the settings that favour transmission or the efficacy of various epidemiological and economic measures, leading to policy adjustments, including greater freedom in relation to outdoor recreation and gatherings. Many more lessons, both from experience elsewhere in the current crisis and from prior experience, could have informed policy actions – but did not.

We noted earlier that the German Kurzarbeit system has influenced policies adopted by other countries, such as the United Kingdom and Spain, to prevent crisis-induced joblessness and business closures. Similarly, the apparent early efficacy of the generalized lockdown applied in Wuhan and later in all of China may have informed decisions by policymakers elsewhere. They were also influenced by the almost singular attention given to this particular measure in quantitative modelling.²² On the other hand, many lessons from successful East Asian experiences appear to have been neglected (Valli, 2020). Some common sense measures were very slowly adopted or not at all. For instance, the lack of adequate sick-leave provisions in certain countries has continued as an institutional factor propelling disease transmission in workplaces, such as in Australia,²⁶ Canada,²⁹ and the United States.²³ Difficulties that some jurisdictions experienced did not influence preparations and policies elsewhere; for example, oxygen shortages in Brazil in late 2020 did not act as a warning to others who later experienced shortages, such as India in April and May 2021 (BBC News, 2021; NPR, 2021). On the whole, it appears that institutions and governments require much more ‘learning to learn’ so as to develop an effective response to the pandemic (Sabel and Reddy, 2007).

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²⁵ On the importance of adaptive policymaking and the recognition of fundamental uncertainty in the pandemic, see Collier (2020).
²² In particular, from the widely cited Imperial College group (Ferguson et al., 2020).
²⁶ See Kayarma, Burgess and Fitzgerald (2020).
²⁸ See Ackers (2021).
LESSON 7: COOPERATE BETTER, MORE, EARLY AND OFTEN

The crisis has demonstrated inadequacy of existing mechanisms of international cooperation. They have failed in the early identification and containment of the disease, in subsequent gathering, sharing and analysis of data and knowledge, in coordination of policies and responses, and so on. One illustration is the failure to develop a vaccine as a common project among nations, recognizing its nature as a global public good, substituting instead a widely decried – because both inefficient and inequitable – ‘vaccine nationalism’ that prioritizes domestic vaccine access at the expense of the rest of the world (Karp, 2020; Reddy and Acharya, 2020; Acharya and Reddy, 2021).

Whether regional or global, what international cooperation has taken place has mostly appeared too little and too late. Successful international cooperation aggregates efforts to bring about greater benefits for all, as the economic theory of public goods underlines (Samuelson, 1954). But it also benefits from a qualitative dimension: sharing diverse but different capacities. Consider, for example, the collaboration between Oxford-AstraZeneca, developers of one of the current leading vaccines for COVID-19, and the Serum Institute of India, which possesses the largest vaccine-making capacity in the world, or the collaboration between BioNTech of Germany and its leading mRNA research and development capability with Pfizer of the United States with its sizable manufacturing capability (SII, 2021; Pfizer, 2020). These collaborations drew upon the distinct strengths of firms in different countries. International cooperation between governments should similarly both pool efforts and allocate tasks efficiently to take advantage of varying capabilities. But such cooperation does not take place in a vacuum. It benefits from prior mapping of capabilities, experience in collaboration, and established relationships, protocols and institutions of cooperation. Cooperation is more likely to succeed when it is based on prior experience. In other words, effective crisis cooperation requires learning to exercise the muscles of cooperation outside of crises, too.

The lack of a global mechanism for modifying the treatment of intellectual property rights during a global pandemic also highlights the failure of international cooperation. While the WHO recognizes a pandemic as a formal concept, and the WTO recognizes national health emergencies as circumstances in which governments may undertake compulsory licensing and other ‘flexibilities’ no bridge exists to link the two (WTO, n.d.a). The proposal to suspend intellectual property rights relating to vital health commodities during the pandemic, advanced in 2020 by South Africa and India, arose to fill this vacuum (Usher, 2020). The WTO could easily have evaluated arguments for such a suspension in a potential pandemic and arriving at some general principles, even if specific conditions for application remained undefined. Not only was this not done prior to the pandemic, but there was no move to do this until late in the crisis, resulting in immense health, social and economic costs.

The United Nations (UN) could have had a larger role in responding to the pandemic. The WHO, WTO and other specialized organizations were not well-positioned to grasp the complementarities between areas of their respective competence. In the aftermath of the Global Financial Crisis of 2007-2008, the 2009 Stiglitz Commission recommended creating a Global Economic Coordination Council "established at a level equivalent with the UN General Assembly and the Security Council...[whose] mandate would be to assess developments and provide leadership in addressing economic issues that require global action while taking into account social and ecological factors" (Stiglitz et al., 2010). This recommendation of a direct response to gaps in the surveillance and response capacities of the international economic governance system that the crisis had revealed: It has never been implemented. Although the United Nations undertook some steps, such as to strengthen the UN Development System (Reddy, 2013), these fall short of those needed to provide early warning of, and responses to, threats of a global nature. The pandemic of 2020 calls for a similar systemic, and systematic, reappraisal. One can hope that the shock experienced by all may at least help to bring about the required coalescence among member states. It remains far too early to see all the lessons of the pandemic for development policy, but it is not too early to identify some ways of seeing policymaking that would have made a difference and that can do so in the future. This brief has outlined seven such ways of seeing; they include thinking about acting strategically in terms of acting specifically, anticipating and preparing for possible spillovers, protecting populations from the possible impacts of a crisis in advance, regarding trust as a vital resource, viewing constraints as revisable, learning to learn and cooperating early, more and often.
The UNDP Strategy, Policy and Partnerships (SPP) team in RBAP

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## APPENDIX

### Table A1: Regression of per capita GDP growth on cumulative COVID-19 cases by region

<table>
<thead>
<tr>
<th>Cumulative cases per million</th>
<th>Africa</th>
<th>America</th>
<th>Eastern Med</th>
<th>Europe</th>
<th>Southeast Asia</th>
<th>Western Pacific</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.044*** (0.006)</td>
<td>-0.093*** (0.019)</td>
<td>-0.101* (0.052)</td>
<td>-0.041*** (0.008)</td>
<td>0.022 (0.034)</td>
<td>-0.048*** (0.011)</td>
<td>-0.059*** (0.007)</td>
</tr>
<tr>
<td>Observations</td>
<td>46</td>
<td>36</td>
<td>19</td>
<td>50</td>
<td>10</td>
<td>25</td>
<td>186</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.151</td>
<td>0.001</td>
<td>0.005</td>
<td>0.345</td>
<td>0.241</td>
<td>0.026</td>
<td>0.026</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.132</td>
<td>-0.028</td>
<td>-0.053</td>
<td>0.127</td>
<td>0.349</td>
<td>-0.017</td>
<td>0.020</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>0.034 (df = 44)</td>
<td>0.081 (df = 34)</td>
<td>0.149 (df = 17)</td>
<td>0.029 (df = 48)</td>
<td>0.087 (df = 8)</td>
<td>0.049 (df = 23)</td>
<td>0.072 (df = 184)</td>
</tr>
<tr>
<td>$F$ Statistic</td>
<td>7.823*** (df = 1, 44)</td>
<td>0.039 (df = 1, 34)</td>
<td>0.093 (df = 1, 17)</td>
<td>8.130*** (df = 1, 48)</td>
<td>5.829*** (df = 1, 8)</td>
<td>0.610 (df = 1, 23)</td>
<td>4.827*** (df = 1, 184)</td>
</tr>
</tbody>
</table>

Note: *p<0.10, **p<0.05, ***p<0.01  
Growth rates expressed as decimals (i.e., 1 percent = 0.01). WHO source data downloaded circa 15 January 2021.

Sources: IMF (2020); WHO (2021)

### Table A2: Regression of per capita GDP growth on cumulative COVID-19 deaths by region

<table>
<thead>
<tr>
<th>Cumulative death per million</th>
<th>Africa</th>
<th>America</th>
<th>Eastern Med</th>
<th>Europe</th>
<th>Southeast Asia</th>
<th>Western Pacific</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.048*** (0.006)</td>
<td>-0.095*** (0.020)</td>
<td>-0.090 (0.054)</td>
<td>-0.043*** (0.007)</td>
<td>0.037 (0.048)</td>
<td>-0.048*** (0.011)</td>
<td>-0.061*** (0.007)</td>
</tr>
<tr>
<td>Observations</td>
<td>46</td>
<td>36</td>
<td>19</td>
<td>50</td>
<td>10</td>
<td>25</td>
<td>186</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.063</td>
<td>0.00002</td>
<td>0.018</td>
<td>0.162</td>
<td>0.276</td>
<td>0.022</td>
<td>0.038</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.042</td>
<td>-0.029</td>
<td>-0.040</td>
<td>0.145</td>
<td>0.185</td>
<td>-0.021</td>
<td>0.013</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>0.035 (df = 44)</td>
<td>0.081 (df = 34)</td>
<td>0.148 (df = 17)</td>
<td>0.029 (df = 48)</td>
<td>0.098 (df = 8)</td>
<td>0.049 (df = 23)</td>
<td>0.072 (df = 184)</td>
</tr>
<tr>
<td>$F$ Statistic</td>
<td>2.983* (df = 1, 44)</td>
<td>0.001 (df = 1, 34)</td>
<td>0.314 (df = 1, 17)</td>
<td>9.309*** (df = 1, 48)</td>
<td>3.047 (df = 1, 8)</td>
<td>0.515 (df = 1, 23)</td>
<td>3.429* (df = 1, 184)</td>
</tr>
</tbody>
</table>

Note: *p<0.10, **p<0.05, ***p<0.01  
Growth rates expressed as decimals (i.e., 1 percent = 0.01). WHO source data downloaded circa 15 January 2021.

Sources: IMF (2020); WHO (2021)
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