

30 September 2021

The Transformation of Global Governance final conference

“New World, New Rules: Collective Action Repurposed”

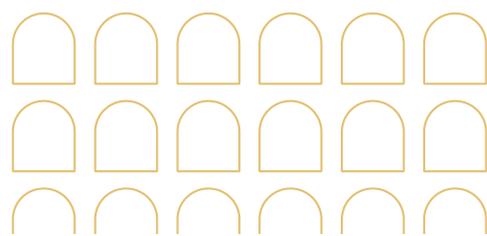
His Excellency Tharman Shanmugaratnam

Keynote speech and discussion

First, let me say I was quite impressed by the materials circulated coming out of this project, which is, to my mind, the most serious effort to think about globalisation, multilateralism and collective action problems given the challenges we now face. I don't see that similar thoughtful questioning effort taking place anywhere else currently. So, I'm very happy to be part of this process. And let me offer you some thoughts and some questions in that spirit.

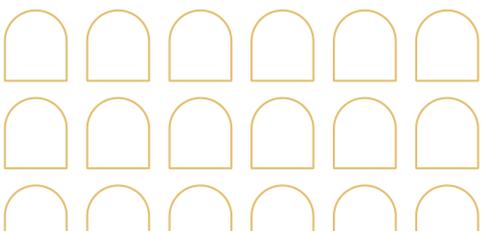
We must think about the meta-challenges that we face, quite apart from all the specific challenges of for example the WTO and digital trade, etc.: the meta-challenges that are going to occupy us for years to come.

First, of course, we have the challenges of the existential climate crisis and health insecurity. And I put them together because the science is firm enough that the problems, we face are intrinsically related to climate change: the deterioration of the natural ecosystem is what damages its capacity to keep viruses and pathogens out. They will come more often and take more lives. That is already baked into the system. So that's the first meta-challenge, and by far the most existential of them.



The second challenge has to do with the sharpening divergences, both domestically and globally. The pandemic has accentuated these divergences. There is a very real risk of a rollback of the process of modest convergence that we began to see on the part of the developing world with the advanced — except for some middle-income countries, which I think are reasonably well placed for this next phase of global development. But a large part of the developing world, a large part of humanity, is now very seriously at risk, not just from the rolling waves of the pandemic, but the long tail of consequences coming off of it. And the consequences of that rollback and that renewed divergence rather than convergence will obviously not be economically concentrated there, as divergences are also sharper in the advanced world than we've seen in seventy years. Because it's not just inequality, which is in a way the easiest thing to notice, income or wealth inequality. It's deeper, longer, and more corrosive, because it's really a divergence of opportunities. It's not about static inequality. It's really a divergence in life opportunities and a sense of life opportunities that is now sharper than it has ever been in the last fifty years. This sense of loss will continue to affect those who are less educated and estrange workers from essential yet poorly paid or recognised jobs. I think there is a sense of urgency here that is now sharper than it's ever been before. So globally and domestically, we now have to think not in terms of aggregate economic growth, per-capita income growth, productivity growth, but think about divergence, and think of it not just in static terms. I think of it the way human beings think about it: what's my life going to be one of my children's lives. It's always a projection, of hope or despair.

The third meta-challenge, related to the first two, is that of ethnonationalism, as well as its global projection in terrorism. It was always there in history, always there beneath the surface. But it is now coming to the fore, both in the advanced world and in the developing world, in country after country. It is far more pronounced than it used to be. It feeds off the insecurities coming out of domestic economic divergences, that sort of social estrangement, and the loss of security coming off climate change and the pandemic. But it's not just an outcome. It is also a force, a

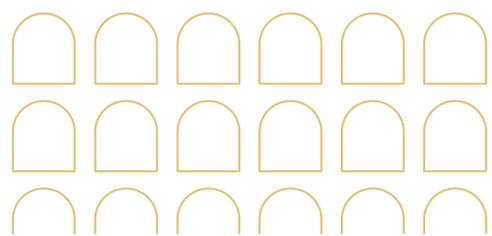


source of instability. And that has to be regarded as a challenge facing not just the global system, but also national futures.

Fourth is the loss of trust between nations globally: in international institutions, domestic institutions, and domestic politics. And that's probably the most corrosive. Again, it comes out of the first three major challenges, and is not just an outcome, but also a force. The deficit of trust globally is going to make it very difficult to address the challenges of climate or pandemic security. And it also makes it more difficult to address domestic emergencies. It is a function of not just the economic divergences in the sense of different futures different people face now, but also a function of some phenomenon of a new era; in particular, the way in which information is constructed and disseminated. That's a big challenge. Social media, the algorithms of the platforms that dominate social media, are a big, new challenge. And this can be seen in the epidemic, the pandemic of misinformation. Even basic tenets are open to polarisation. Continuing weakening of trust domestically leads to the loss of a sense of togetherness, and to a sense of us versus them.

These are each challenges that are sharper than they were before, but the combination of the four means they're reinforcing each other.

Some think of the world in terms of unpredictable shocks. But it's actually not fundamentally about shocks. It's not about stochastic occurrences. There is a pattern, and there's a way in which one can predict that these things will happen. One can't predict the timing. One doesn't know which extreme weather events will happen more often, but one knows they will happen. Science is full of these patterns. And not only are there patterns that are predictable, but the long term consequences of shocks themselves when they occur are. They change the trajectory, the gradient. So this is not even a perfect storm, since many bad things are happening at the same time. This is a perfect *long* storm.

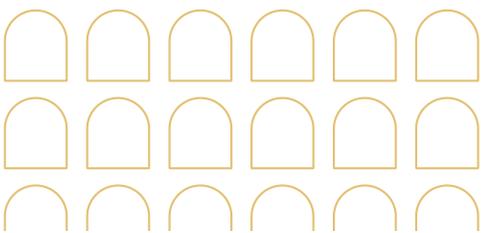


At home, we must organise ourselves domestically and internationally to confront and tackle this political storm. We'll have to decide whether it will be about individual nations, or whether it requires a new multilateralism.

We do not have the luxury of a grand reconstruction. The multilateral order was born from a moment in time when a unipolar world had come out of such devastation that it was possible to create new institutions; although as one of your papers pointed out very wisely, it was always a somewhat more legalistic and nebulous ideal compared to its reality. We cannot hope for a Florentine Renaissance coming out of the Black Death because, fortunately or unfortunately, our pandemic is not yet on that scale of human and political devastation. So do we let things proceed without reform, so as to wreak more devastation, so that finally the world wakes up? Do we want the chance of a Renaissance, a gilded story of dealing with existential crisis, at the cost of so much human life? Its political manifestations would be imponderable. So we do not have a choice. We neither have the choice of a grand reconstruction, nor the choice of letting the system run to the ground in the hopes that somehow political leadership is motivated to do something bolder, more fundamental.

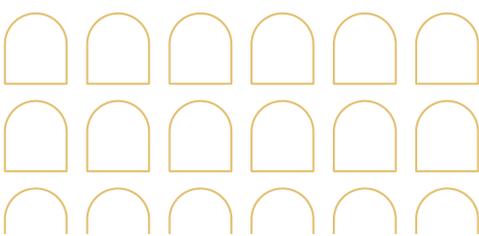
So what we have to do is to find a way of building on what we have and reorienting multilateralism — and reorienting it along these lines, not in the same old tired way. That really is a challenge: how do we start from a disarticulated, incoherent system, and gain momentum? A dynamic of continued strength has to be a basic orientation: not a grand reconstruction, but a dynamic where countries and their citizens see that there are benefits in mutual respect and collective action: tangible, real benefits. The incentive is not just something called global order. This is not just for the sake of international cooperation, but nations reaching for benefit. That's the challenge. And it is doable.

This is the focus of a project that I have worked on with one of our speakers, Ngaire Woods, another member of this independent panel. We think it's doable because if



you think of the institutions we have and how we can refocus them more effectively, get them to work together more effectively, we can actually do certainly better than we've done in the last two years. We can avoid the large-scale collective failure that we've seen in the last two years.

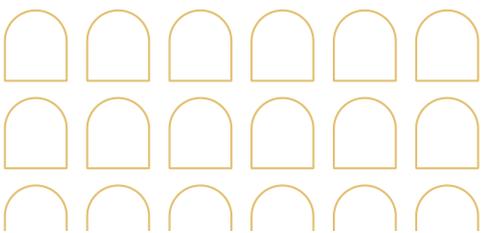
And it requires first, most fundamentally, shifting from thinking about international cooperation in terms of foreign aid for some other people, towards thinking of it in terms of collective investment in global public goods that all nations, rich and poor, benefit from. It should not be seen as foreign aid coming out of a budget. And that fundamental shift in thinking is what need. We have to make far better use of our international financial institutions: the Bretton Woods institutions, plus a range of regional development banks and development finance initiatives that have been created over the last few decades. They are catalysers through funding: they catalyse private funding with their initial resources, and are able to catalyse policy reform for governments by steering them towards the right investments. They are unique institutions, with a multiplicative ability. We know that the World Bank, the IMF and the regional development banks must be repurposed for a world where the principal challenges are not country-originated challenges, but the systemic challenges of the global economy. The principal challenges facing developing countries especially are going to be the challenges of climate change, because they are going to get the short end of the stick. So refocusing these institutions, as well as global central banks, for a world where the global commons are the central challenge that individual nations face is going to be critical. And it will be the shareholders that will have to take that very seriously as well. Three quarters of the staff of these institutions will agree with everything I have just said — but the shareholders must take it seriously too. This means they have to replenish resources regularly; they've got the resources to do so. These are not big amounts of money. If that is not done, the world will be forced into a false dichotomy of choosing between global commons or dealing with poverty eradication and the continuing challenges of development. It should be overall. We can refocus these institutions to put the global commons at the



core of our findings and have a holistic vision of what economic and social development is about.

Second, we have to strengthen global health organisations. For two decades, the whole approach to global health security has been shifting away from the WHO, the multilateral institution, towards bilateral donors doing their own thing. And we have seen the creation of a constellation of semi-independent agencies, the Global Fund for AIDS, TB and Malaria, GAVI, and several others, all doing a wonderful job within their own specific domains. But it is still a fragmented landscape. And what was weakened was the concept of multilateral funding for a multilateral organisation that has been fundamentally disempowered, which is how we ended up here. There is no global coordination, no systemic coordination. And even in its core rules, the WTO has to change. It needs reform. It needs strengthening. It needs more predictable funding. And the amounts of money required are really going to be modest compared to what is spent when there is a pandemic. So we have to restore multilateralism to a central place in global health security.

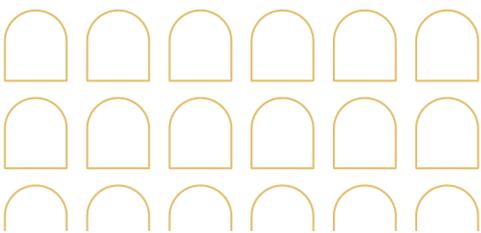
Thirdly, we need a new multilateral funding mechanism, to provide an overlay on top of this siloed landscape of different global health organisations and international financial institutions doing bad things because the system is gravely underfunded. The investigation others and I conducted, and it was a very conservative one, arrives at an estimation requiring a doubling of today's funding, which is \$15 billion — about 0.02% of world GDP. Affordability is not the issue at all. We proposed a new global fund to be able to provide flexibility and to raise funding across these institutions, not as a new diplomatic agency, because more fragmentation is not desirable, but a mechanism is needed to fund these different agencies to plug the gaps of the system. That can be done with a small amount of money. But I can tell you that even those numbers are balked at — even by advanced countries, for whom it is eminently financially rational because the small amounts of money spent on prevention are going to be dwarfed by several hundred times by the cost of fixing a



crisis. It is financially reckless to not be spending on prevention and preparedness, to be putting up the nominal sums of money required to safeguard the system. And the fact that it is balked at reveals the fundamental problem of political incentive within countries, which I'll come to later on, which is, I think, the most fundamental problem.

We will have to accept the necessity of a certain flexibility and agility in the deployment of financing. If we go for the fiction that everything has to be decided upon by a universal, fully legitimate audience, we all know what can happen: donors will not contribute large sums of money, decisions will be a process of trying to reach the lowest common denominator, and decision-making will be paralysed. Conversely, neither can the G7 nor even the G20 assure this, because they are unrepresentative. But we have to make do with the institutions we have, which is why the idea of a more broadly and institutionally engaged "G20+" would ensure better representativeness coupled with nimbleness, while donors would have a sense that they have a say in the deployment of their contribution.

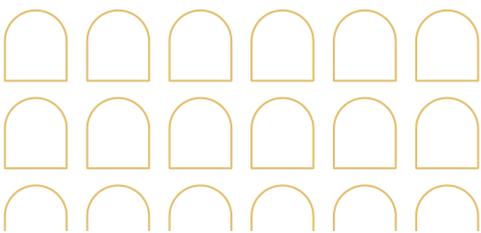
We will also have to have pragmatism about how we move forward. Clubs and networks of first-movers should be harnessed, but attention must be paid that they are not acting alone. There should still be some articulation with the U.N. system, a connection to the U.N. General Assembly. But there is a tension that I want to be open about: many developing countries now say that everything has to go through the U.N. system or to be regional, because that's the only fully legitimate set of actors. But there's some cognitive dissonance, because no one was objecting all this time to bilateral arrangements, or the power of non-state philanthropy. Everyone accepted the priorities of the Gates Foundation. Yet they do not accept a broadening of decision-making to involve a group of countries beyond the G20 or G20+. So we have to avoid thinking in terms of the extremes of either zero multilateralism, which everyone was very happy with, and full and perfect multilateralism. There's a large space in-between for using clubs of nations, acting in the best interests of the global



system, with monitoring and accountability and civil society applying pressure enough to make a difference.

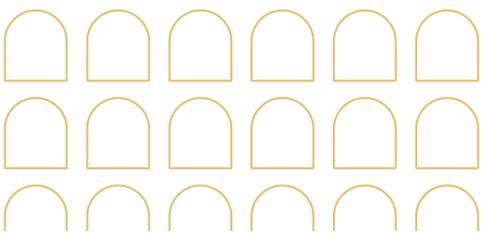
None of what I spoke about, none of these four meta-challenges can be addressed without addressing the US/China relation. We have seen an astonishing rise in negative sentiment in the United States towards China. If you look at the Pew Global Research Studies, in just three years, the proportion of people, both Republican- and Democratic-leaning, who view China unfavourably has risen from 50% of the population to three quarters in just four years. We don't have similar surveys in China, but I would not be surprised if it were similar. There's the same stiffening of attitudes, largely if you ask me, in reaction to what's taking place outside of China. But there's also that loss of trust between the two leading nations of the world. And until we have a community where the game is not about making sure that the other side loses more than I do, we are not going to be able to solve these larger problems of the world and the large problems that these individual nations face.

I'd like to point out the criticality of trade, open trade, as a solution to the world's problems, and have this taken very seriously, because old opportunities for developing countries to participate in global supply chains through labour intensive industrialisation are now getting more limited because of technology and the pace of innovation. It was already picking up with digitally enabled automation and robotics in particular, driven by the market economy, and has been accelerated by the pandemic. I would say that there still is a significant window of opportunity for developing nations — but it is finite. The next five years are critical, and require some new economic development strategies. Africa's regionalisation is lagging behind the rest of the world, despite significant margins for gains in specialisation and scale, which is critical for productivity growth; the Africa Continental Free Trade Area must step up its pace. Fortunately, trade in services is still thriving, and this is a very significant opportunity coming out of digitalisation for developing countries and individuals everywhere in the world. People who previously had difficulty getting



access to markets outside of their hometown, country or whole region can now do so: women in particular. So this is potentially an empowering technological development. But we've got to get nations, local governments, universities, local communities to use open trade, including the use of digital platforms (much maligned for good reasons, which should be fixed). E-commerce is a real opportunity to help small firms and someone who previously didn't have a chance to integrate global supply chains.

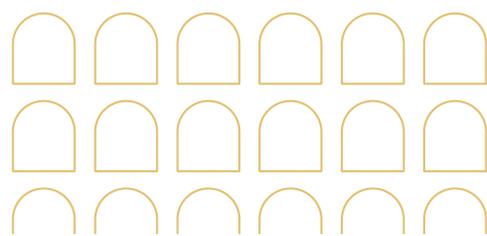
Finally, the theme that I mentioned briefly earlier, which we do not yet have a system for: we will not be able to develop a sustained spirit of mutual cooperation globally without addressing the disarticulated, despondent state of domestic political systems and domestic opinion. You cannot rearticulate the global system without regard for the domestic. Focus should be on policies, not politics: we have reached the limits of existing models of economic and social policy of the centre-right and centre-left, and they require remodeling. Yes, people want to keep enjoying the benefits of the existing systems. But that's a defensive reaction. No one wants things to be taken away from them. But there's no optimism coming out of this model. We've reached the limits as to the optimism and sense of togetherness that can be created through redistribution alone. We need regeneration, not redistribution. We need opportunities to be created, social mobility. These are basic values of social democrats, but they require different methods. In fact, we need more than ever the basic values, the core tenets of the centre-left, but we need a new method and a new policy mix. It requires finding ways in which a pluralistic political environment — which has its strengths, because that's actually the greatest strength of the democratic system, the fact that it is able to deal with different opinions, different preferences, different interests, different identities, even without the system breaking down — can deal with the challenges we have seen in recent times, not just about diversity of views and interests, but about increasing incoherence and inaction in the face of challenge, inaction in the face of national challenge, and, of course, the most pronounced



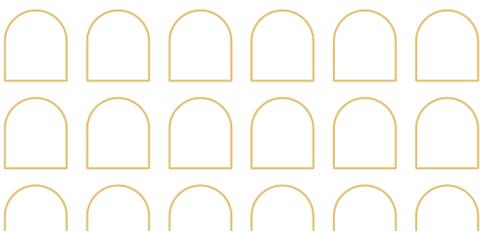
inaction in the face of the challenge of global climate change. This is where I really don't have the answers.

So how do we take advantage of the strengths of democratic societies to build a sense of challenge, to build a sense of urgency and to mobilise people? It must surely be possible in a democratic system to tell people what is in their own interest, and to have people themselves demand what is in their own interests. It must really be possible. And the fundamental problem we have is that unwillingness to take the very obvious necessary steps to prevent and repair the damage rather than wait for things to happen. This is a problem of political incentives. Politicians don't last long. We don't have a very strong incentive to do the right things for someone who comes for the long haul. So we have to make the moves and mobilise the actors of real civil society, NGOs, and businesses. And if you think of climate before climate change mitigation and adaptation, simple strategies, there's a momentum building amongst businesses who see this as an opportunity. It is remarkable what a big vision it is, how the legal system must change, but these are the actors, civil society, business communities, that can have a lot of pressure on politicians in typical advanced democracies. And we need to have them apply pressure on the politics of the moment, and define the movement's interests, a movement for public interest in a way that makes it attractive for political parties to respond. I say this too easily, but it seems to me that if you just rely on electoral politics as is without civil society and we don't get a broader set of stakeholders, we are trapped. And that's why we keep running into the problems that we run into. There is an incentive for them. So that's why I think of the political green shoots coming off of the climate crisis in particular, because more than any other crisis, people that have been apathetic are mobilising. The young are mobilising civil society, and those are the green shoots of democratic politics that must be further encouraged and mobilised.

So we must act. As Jean mentioned, in one of your papers, the old globalisation is dying; the new one is not yet born. I think the new one has to be borne out of a spirit



of idealism and pragmatism that starts at home, and it can come out of steps that are taken to create that dynamic for the future rather than the search for perfection and exactitude. And I always remember the wise words of Dag Hammarskjöld, the great U.N. Secretary General: the United Nations wasn't created to take humankind to heaven, but to save it from hell.



Q&A

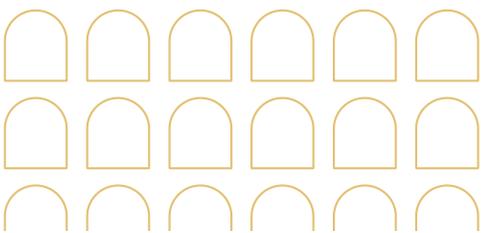
Q - In global health, we are facing a situation where billions in output gain is left on the table because of international reticence to actively advancing global vaccination. Why is that?

A - We all sense why: for some reason, no one blames politicians for spending in a crisis, but Parliaments will refuse granting finances for prevention efforts. Explaining why it is in one's own interest to mainstream preparedness is a democratic challenge. It is possible to do, but requires leadership and new methods of communication, as well as mobilising civil society and creating incentives for businesses. I have not seen this happen yet, but it must be possible.

Q - Students, including here at the EUI, seem to not need an explanation of the urgency for action on climate; they are already mobilised, thinking long-term, and drawing in the older people around them. Which lever should they be pointed to? And, regarding your framework of meta-challenges, the first two (the existential climate crisis and sharpening divergences) intersect: how can we empower those most affected by existential threat? How can we give a sense that action is possible, yet fair for first movers who will bear the brunt of costs? How do we reflect the doingness of youth in international organisations?

A - You seem to have answered the question on the necessity of youth involvement better than I can. I'll make three points.

First, let's think of the acceptability of a carbon tax for example: there must be a perception that the overall system is fair, so that the specific necessary costs are accepted. I don't believe this is an Olsonian problem, where minorities have leverage

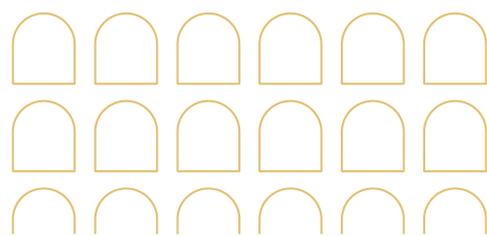


because they incur concentrated benefits or costs. The fundamental challenge here is that everyone will face diffuse costs, in order to head off diffuse costs in the future. A fair system would mandate some personal sacrifices, for all, on a progressive scale, in counterpart for tangible benefits. On the issue of pandemic security, a local hospital would have to be seen as doing better; especially in developing countries.

Second, we can build on national initiatives that show the right way. For example, the US' Operation Warp Speed was in some ways quite un-American: government-led, thinking ahead of time on research, development and distribution of vaccines. It was a monumental effort by government. The agencies involved (BARDA, etc) are technocratic like central banks, relatively isolated from politics. There is a need to create more such technical/scientific bodies and empower them to carry out their tasks. If even the US can do it, everyone can.

Third, I don't think the democratic imperative to vaccinate one's own population can be overcome, so pandemic supply capacity should be developed and maintained ahead of time to avoid the waste and inequality we've seen so far. This requires partnerships with private industry — but with a whole new set of instruments. It is a new challenge in public policy; but it can't be just national, it needs international coordination. Coordinating vaccine manufacturing alone is very difficult, as it involves hundreds of ingredients; and distribution is the even greater challenge. But this social investment has the highest return in this decade.

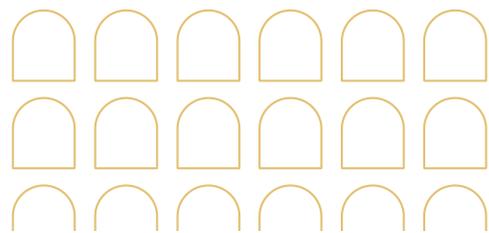
Q - On the diagnostic side, should there not be incentives to adopt a multidisciplinary approach to analysis to avoid new crisis? And on the normative side, politicians don't incorporate spillovers, counterfactuals, or repeated games; this is deadly. So don't incentives need to change here too? As you've suggested, work on promoting



European public goods has demonstrated that showing policy makers that pursuing global goals is in their own, tangible interest.

A - Again the question provides its own answer. I would point out two big incentive issues. Developing countries don't have incentives to invest in global public goods, which are mostly domestic or regionally located. IFIs need to recognize that more grants are needed — not concessional loans. It is an investment for the world, which can be made conditional on these countries investing in measure with their capacity. This is major issue in retooling IFIs. The private sector on the other hand doesn't have incentives to prepare for pandemics, because that means the constitution of underutilised capacity. Some way should be found to use this capacity in normal times. Incentives again are missing in acting in the domestic as opposed to the global interest, vaccination being the sharpest example. Epidemiologically, we should be vaccinating the most vulnerable everywhere; but if a domestic population feels insecure, it won't support international cooperation. But on the other hand, there is the risk of breakthrough infections; booster shots do not seem to be urgently necessary, but there is medical case for them. So there is a tragic tradeoff.

Q - My concern is with public trust. Brexit for example shows that people can be persuaded to choose irrational policies. Independent agencies, such as the US CDC, can certainly be effective, but warn of an overload of responsibility without a sharing of political responsibility. Relatedly, their effective communication is hampered by the problems of penetrating disinformation, which is even more difficult than persuading. As a result, in Texas for example, there are crowds of people who are somehow simultaneously triumphant that Trump hastened the development of the vaccine and adamantly opposed to taking it. So what can be done?

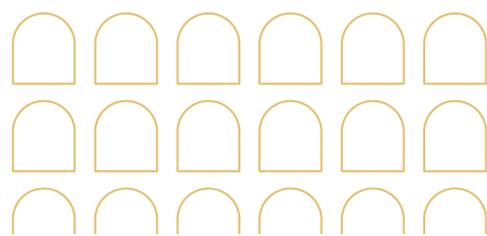


A - This goes back to the epistemological crisis of construction and dissemination of information. We don't have an answer for this yet. Technocratic bodies often do better than politicians; at least in the US. Democracy accommodates technocratic and accountable bodies: let them do the job.

Q - I have two questions. First, any endeavour on a new multilateralism is complicated by the US/China relationship, which at the moment is not good at all. What should Europeans do? Second, services are indeed a trade enabler, but accelerating climate change looms behind intensification of trade. How can a balance be found?

A - First, on the EU's role between the US and China, I start thinking as an economist. There is more FDI in China than ever before. Why? Because investors see opportunity in the market, and don't find the operating environment too oppressive. Requirements of transfer of intellectual property or restrictions on investment are less intense now. People want to be part of the Chinese economy. So there would need to be overriding strategic reasons for non-cooperation, which I don't think exist. Still, a level playing field needs to be ensured, and China held to its commitments.

Seasoned observers will recognize that today's efforts to restrict China from technology will hurt, but only delay things. And the consequence of attempting to contain China in this way will end up with China both technologically proficient despite this and independent from US. I prefer an interpenetrated China. This is a fundamental strategic point: Singapore for example knows to engage both China and the US deeply: at regional and sub-national levels. China knows it's a big country, but it can be handled. In that regard, choices on technology need a principled stance based in national interest, not industrial partiality. Such a position won't be deeply

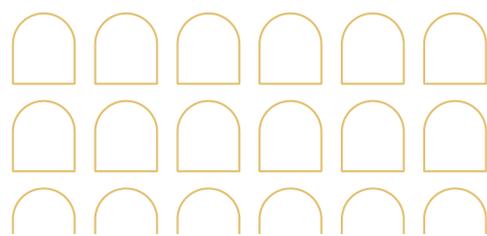


loved, but understood. The EU has a bigger role than small country: it can afford to take a more strategic, long-run view of China.

Second, on carbon in trade in services, the digital transformation has meant the increase in use of energy-intense data centres. Greening them is an interesting opportunity. As with everything, digitalisation can be positive if fair distribution is assured.

Q - I'd like to make four points. First, while the Renaissance was indeed an information revolution, an ideas revolution, coming at the expense of the Black Death, it also had its downsides: civil war, the Inquisition, Savonarola — an information war. Second, on governments and the future: they are consistently looking in the rearview mirror. They do spend; but on the wrong risk, the last war. How can this mechanism be updated? Third, you've spoken of clubs and new alliances, reinforcing technocratic bodies and IFIs, but also of the importance of infranational actors. There is a tension here. How can a reinforcement of top-down bodies be reconciled with the empowerment of new, non-state actors? And fourth, specifically on pandemic prevention and mitigation: it is a true global public good, one example where club solutions should not be expected to optimal, as opposed to a great many other issue areas. Could you elaborate on the notion of a club to stop future pandemics?

A - First, on the tension you speak of, thinking in terms of opposing technocracy and civil society. Indeed, a tension exists. But both share the benefit of being separated from short-term politics. The tension exists, so a solution can't rely on one or the other. We need technocratic bodies like BARDA or its inceptive European version HERA to deal with huge, complicated problems. We need institutions that outlive an electoral term. But we also need the urgency from civil society to shape politics and

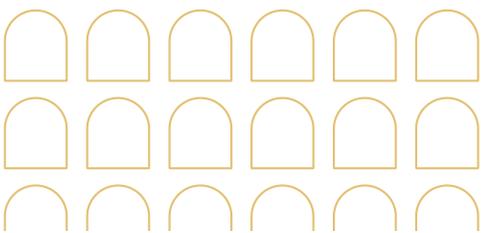


ensure the right priorities and the right allocation of public spending. Technocracy needs to be accountable.

Second, on clubs. We must use the space between the extremes of concentrated, unrepresentative bodies and fully representative but atomized and paralysed bodies. The largest contributors cannot use their funding power to reinscribe hierarchy. A club or a group must be accountable for its actions, but able to fit in a room. It cannot be just the largest economies, or the most developed countries: regional organisations like the African Union need to be present; rotation should be organised to mitigate exclusivity. It is urgent to go about things creatively. In this light even the notion of a pandemic treaty is a good idea, though it will take a long time to complete. And the world is burning.

Q - I have two questions. First, going back to the US/China relation and the EU's role: there is not only the issue of trust, there is a genuine diversity in systems and preferences, which seems to be sharpening. Are there policy areas or levers to prioritise for successful cooperation? Second, on the tension between more technocracy and increasing public distrust. How can this be reconciled? And if this distrust is obstructing short-term capacity to act, which needs political power and legitimacy, how can work begin to be engaged across policy areas?

Q - I have an implementation question regarding the momentum on climate action: how can it be built on? And on reinforcing technocratic bodies: should national ones be reinforced and then induced to coordinate, or should supranational bodies be privileged?



A - Climate and health action are the most fertile grounds for cooperation between the US and China. It is not happening at the moment because China feels besieged. Getting China on board requires some skill, which seems regrettably absent now. There is a timeframe mismatch: it was recently the hundredth anniversary of the Chinese Communist party, which led to a major exercise of future-looking. The Party wants to think in multi-year, decade terms. On the other hand, President Biden says that China "won't catch up on my watch" — but his term is the span of time he has. Going further requires statecraft, which stems from the strong beliefs from politicians and their projection. We know that issues won't be solved without the US and China. And China wants to play a part: it didn't want to set up the Asian Infrastructure Investment Bank — it wanted a commensurate say in the World Bank. There needs to be an enlightened, medium/long view on China, being tough when necessary, but engaging closely when in the common interest. Public distrust can only be combatted by political leaders. Talented political leaders can shape public opinion and direct it, rather than reacting piecemeal and damaging public trust.

The reinforcement of technocratic bodies and the establishment of clubs are eked-out, highly contingent solutions to problems for which the counterfactual is disastrous. But they are only one facet: they must be balanced by accountability and responsiveness to civil society.

Finally, returning to global health concerns, thinking exists on networking regional and domestic initiatives, supplied with vaccine overstock. Some preemptive rules on the pharmaceutical companies would be necessary, but much is doable. Cepi will play a key role here. Epistemic communities, such as the African CDC or the network of scientists developing the mRNA vaccines, have been shining stars in this crisis. Global health needs more public funding; it has to be run technocratically, but with accountability. Rules of the game must be quickly established for vaccine distribution. The current situation is indeed imperfect — but better than the counterfactual.

