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RECOUPLING

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When we wrote the original version of this foreword, the most pressing challenges were the global pandemic, climate crises, biodiversity loss, and growing inequality. Those were the major global challenges that put the people’s well-being at risk.

However, since 24th February 2022, humanity is facing an additional threat. The Russian invasion of Ukraine is a humanitarian disaster. The Russian war is also a clear breach of international laws. It raises critical questions about the multilateral and rule-based world order. It affects the international order and multilateralism at a time when the global challenges most urgently require international cooperation. Therefore, multilateral formats have a particularly critical role in addressing these challenges. The Global Solutions Initiative’s central narrative focuses on recoupling economic and social prosperity to enable all human beings to thrive. It necessarily excludes aggression, war, and the violation of human rights.

The Global Solutions Summit, which will be taking place on March 28th and 29th, 2022, calls on all participants, speakers, and members of G20/7-related working groups to include the current geopolitical developments in their contributions, policy briefs, and discussions.

We have opened our program for special multilateral questions and panels and will include discussions on the future of the G20 and the G7. We understand the summit as an opportunity to keep international forums and global networks alive, even under the most difficult circumstances.

“Acting stronger, acting together,” based on common values, will be key to overcoming all kinds of confrontations. “Listening and learning” are the pre-requisites for common understanding and action, which we seek to foster both at the Global Solutions Summit and through the articles in this journal, reflecting insights and proposals from all over the world to tackle major problems.

With the summit and the journal, we are providing platforms to contribute research-based insights and recommendations to Indonesia’s G20 Presidency, followed by India’s. Both herald a timely and crucial shift in perspective for multilateral problem-solving. It is our hope that a stronger Asian voice in the G20 and beyond will accelerate and amplify the process of listening and learning. This will help ensure that the systemic change needed for a sustainable and prosperous post-COVID, post-war world strengthens the voices of developing countries alongside the developed ones.

The G20 – including Russia – continues to play an essential role in addressing global challenges. What we learned in 2021 was that we can achieve almost anything if communities, scientists, decision-makers, and different social groups work hand in hand. The good example of this was the rapid development of effective and safe vaccines, although the world has so far failed to distribute them in an adequate and just manner. There are more solutions out there.

The Global Solutions Summit 2022 is held under the theme “Listen to the world: Promoting social wellbeing within planetary boundaries.” Our vision for the future rests upon the underlying assumption that our economic, societal, and planetary systems are indivisible and need to be treated as such in pursuit of a common aim: ensuring the wellbeing of people in thriving societies.

Please stay safe and healthy. May peace be with you.

In hope and confidence

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How to make net zero happen

Opinion piece

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PwC

At PwC, our purpose is to build trust in society and solve important problems. We’re a network of firms in 156 countries with over 295,000 people who are committed to delivering quality in assurance, advisory and tax services. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity.

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Keywords:
Climate change, Net Zero, Environment

Why isn’t the world decarbonizing fast enough – and what can we do about it?

We know we need to decarbonize much faster. Our 2021 Net Zero Economy Index shows just how fast we need to reduce the carbon intensity of our activities – by 12.9% a year. Currently, we are achieving less than a fifth of that rate.

Why so slow? One reason is that reaching net zero involves a huge transition. Over 80% of our energy still comes from fossil fuels. Changing this will require a rewiring of the entire global economy. Complex change like this is going to be complicated. No one actor can achieve it alone. It requires a wide array of actions over time from multiple actors across the world – in both the public and private sectors.

In this article, we offer one way to start to break down the complex challenges of reaching net zero, and to start to map the complementary roles that both public and private sectors can play in achieving such a deep, far-ranging transition.

We don’t mean to suggest an artificial distinction between public and private sector roles. Both government and business can innovate, grow markets, create value, develop, and deliver goods and services, and shape consumer behavior. Our focus is highlighting how business can contribute and what the government is uniquely well-positioned to do. If we want change at speed, both need to work together with their efforts building on and amplifying each other.

To see how the public and private sectors can together help complex net zero transitions begin to become reality, let’s start with an emerging success story: electric vehicles.

»The interlinked efforts of public and private sectors can amplify each other, speeding the ‘flywheel’ of progress.«

Electric vehicle adoption has reached an inflection point. The Financial Times observed that “the revolution is finally here.” In the first half of 2021, global electric vehicle sales grew at an annual rate of 320% to reach 26% of new vehicle sales, while major carmakers are revealing targets for electric vehicle adoption. Mercedes-Benz, for example, announced that from 2025 onwards, all newly launched vehicle architectures will be electric-only.

How has this tipping point been reached? Many actions by government and business, supported by the public’s demand and desire for change, have reinforced each other over time, finally building to a “perfect storm of progress.” Here are four key ways in which public and private sector actors have built momentum for electric vehicle adoption:

- Policy and regulation. For example, governments gave clear market signals through emission standards and planned phase-outs of internal combustion-driven vehicles.
- Innovation and product development. Technological improvements in battery storage (battery costs have dropped 88%
Governments have invested in charging point infrastructure to encourage and enable use, and incentivized vehicle purchase through rebates and other subsidies. Companies like Tesla have invested for years (often at a loss) as they sought to build a market for electric cars. In 2021, a wide range of carmakers are releasing over 200 electric models (including popular sport utility vehicles), encouraging mass adoption by making it easier for consumers to find a model they like.

- **Political and public will.** Public and private sector actors advocated for electric vehicle adoption as part of a necessary transition to a sustainable way of life.

Many of these actions amplify or enable each other, each positive step forward encouraging others and speeding the “flywheel” of progress:

- **Over 80% of our energy still comes from fossil fuels. Changing this will require a rewiring of the entire global economy.**

since 2010 and electric vehicle range, driven by both private and public sector investment and research, have increased electric vehicles’ feasibility, affordability, and appeal.

- **Market-making.** Government and private sectors have both helped to create a functioning market for electric vehicles.

How to accelerate the flywheel of progress on net zero

<table>
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<tr>
<th>PROBLEM Sticking Points for Progress</th>
<th>SOLUTION Accelerators of Progress</th>
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<td><strong>INNOVATION &amp; PRODUCT DEVELOPMENT</strong></td>
<td>Lack of market-ready, affordable, appealing green options</td>
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<td>Invest in (early stage) R&amp;D and proof of concept development</td>
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<tr>
<td><strong>POLICY &amp; REGULATION</strong></td>
<td>Policies discourage or fail to incentivize green transition</td>
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<td></td>
<td>Reporting requirements, e.g. carbon pricing</td>
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<td></td>
<td>Subsidies and incentives</td>
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<tr>
<td><strong>MARKET-MAKING</strong></td>
<td>Infrastructure lacking</td>
</tr>
<tr>
<td></td>
<td>Set reporting standards</td>
</tr>
<tr>
<td></td>
<td>Align business strategy with net zero transition</td>
</tr>
<tr>
<td></td>
<td>Leverage net zero market opportunities</td>
</tr>
<tr>
<td></td>
<td>Proactively explore and act on company risks and opportunities related to net zero transition</td>
</tr>
<tr>
<td><strong>POLITICAL AND PUBLIC WILL</strong></td>
<td>Difficult to marshal political will to act</td>
</tr>
<tr>
<td></td>
<td>Marshal, amplify and demonstrate vocal support and leadership on net zero</td>
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We chose the metaphor of a flywheel because a flywheel collects and amplifies momentum. The flywheel model helps us unpack some of the complexities and sticking points that must be navigated on our way to net zero. And the model helps us map the roles the public sector and private sector can play in navigating these
complexities and pushing the flywheel forward. For example, here are some challenges on the way to achieving net zero, and some ways the public and private sectors can help:

The flywheel model can help us solve discrete sub-problems on the way to net zero. For example, take the problem of greening rented housing. Buildings such as housing contribute nearly 40% of greenhouse emissions (including building construction and operation). Over a third of the world’s population lives in rented housing, so we need to green our rented housing stock.

Here’s the problem: who has the incentive to green rented housing? Landlords can lack incentives to invest in greening buildings when tenants often pay the energy bills. Tenants typically lack incentives to invest in green upgrades for a building they don’t own.

Both the private and public sectors could play a role in breaking this market impasse. For example, the government could institute green standards for new and existing buildings. Private and public sectors could work together to create new financing models that share the energy-saving benefits between landlords and tenants. The government could fund early-stage R&D innovation to lower the cost of greening buildings; the private sector could productize, market and scale these innovations.

The flywheel needs time to reach critical speed. The sooner we act, the greater the number of shoulders pushing the wheel, the faster we can gain momentum and efforts can amplify each other, further speeding our momentum. We must aggressively pioneer and scale carbon neutral alternatives, both to maintain public support for the transition and to help ensure a just transition that minimizes negative effects on the lives and livelihoods of billions of people.

We will close with three questions to keep in mind. To accelerate progress toward net zero, public and private sectors should ask themselves:

– What change do we need?
– Why isn’t it happening?
– What can government and business do together to break the logjam and build momentum toward net zero?

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<td>INNOVATION &amp; PRODUCT DEVELOPMENT</td>
<td>Green options like solar panels and heat pumps require high initial investment and long payback period</td>
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<th>SOLUTION Accelerators of Progress [Flywheel]</th>
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<td>Green standards for rental housing</td>
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<tr>
<td>Create green standards for rental housing</td>
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<tr>
<td>Work with private sector to create new financing models that share energy savings between landlords and tenants</td>
</tr>
<tr>
<td>Take leadership, explaining need for change and building support</td>
</tr>
<tr>
<td>Chart realistic path to change that is sensitive to effects on landlords and tenants</td>
</tr>
<tr>
<td>Support and enable green rented housing standards</td>
</tr>
</tbody>
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Note: The above are examples only.

2 See Mariana Mazzucato’s The Entrepreneurial State for an exploration of the government’s ability to fuel innovation, entrepreneurship and progress.


4 https://arstechnica.com/science/2020/12/battery-prices-have-fallen-88-percent-over-the-last-decade/

5 https://architecture2030.org/why-the-building-sector/

6 https://www.rentcafe.com/blog/rental-market/renting-landscape-30-countries-around-world/

7 See PwC’s analysis of how to activate a green recovery through infrastructure: https://www.pwc.com/gx/en/issues/reinventing-the-future/take-on-tomorrow/green-recovery.html

8 Green building standards must be carefully designed to navigate the differing needs of retrofitting old housing vs building new green housing, and with constant attention to unintended consequences.

9 Some landlords, for example the UK real estate group Segro, have started buying utilities for their tenants to make sure they can get sight of the Scope 3 emissions, help source green electricity, and analyse and help improve consumption.

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Climate transition plans of developing countries: Feasibility and implementation capacity

A call for equitable responsibility

Policy brief

ABSTRACT
The COVID-19 pandemic has critically harmed the world economy with significant consequences affecting all individuals, communities, and countries. The current health crisis represents a disruption to the global economy and retreat of progress in several social aspects, such as poverty, inequality, and climate change. While the current crisis is not over yet, remodeling the global approaches to economic development and ways of doing economic activity is crucial when outlining a systematic course to recovery from the pandemic. In parallel to putting effort into resolving the short-run challenge of the current crisis, coordination by global leaders has been seen in attempt to resolve a long-term issue such as climate change.

While several initiatives have been seen towards addressing climate change, such as G20 and COP26, it is also becoming more apparent that tackling climate change is a complex matter. The agenda to pursue a net zero emissions target could have an asymmetrical impact on different types of economies. Many developing countries which still rely heavily on “brown sector” energy, might experience severe damage from the current plan proposed to achieve net zero emissions during the transition process. Challenges faced by developing countries in the attempt to shift towards a greener economy are related to crucial socioeconomic aspects, such as poverty and inequality. Even without committing to a drastic climate transition plan, the shock to the economy brought by COVID-19 has already had a detrimental effect on the poverty alleviation and inequality reduction progress in many developing countries. Thus far, the potential for an asymmetrical outcome among different types of countries has not been adequately addressed in the global leaders’ forum.

Going forward, global coordination will be even more crucial than before to address these challenges, as the agenda to fight climate change requires collective action and commitment. A more concrete policy framework accommodating the variety in countries’ characteristics and stages of development is of importance to ensure the feasibility and willingness to commit to the plans by all countries.

BACKGROUND
The world not only experienced lower economic growth due to the COVID-19 pandemic, but it also faced an uncomfortable reality that socio-environmental progress regressed during this time. Extreme poverty rose for the first time in 2020, reverting to 2016 levels as estimated by the World Bank (World Bank, 2021). The dip in CO₂ emissions associated with the economic downturn was only temporary; as economic activity returned, CO₂ emissions rebounded (UNEP, 2021). The impact of the pandemic is not identical for every country, as those with fewer resources have less capability to mitigate it.

The pandemic has forced a global rethinking of economic activity and policy. Both developed and developing countries have enacted unprecedented economic measures, with its size multiple of those seen in the 2008 financial crisis (Carpentier, C. L., D’Alelio, D., Zuccolo, B. C., Combe, O., and Landveld, R., 2020). The use of unconventional instruments spread, as can be seen by the increasing number of central banks (including those in emerging markets) conducting quantitative easing.
An aggressive climate transition plan, which requires cutting energy subsidies, could potentially hurt millions and result in people falling back into poverty as well as a widened inequality.«

(English, Forbes, and Ubide, 2021) or the increased coverage of cash transfers and wage subsidies (Weber & Newhouse, 2021). Furthermore, the “Build Back Better” spirit shows that economic responses consider longer-term challenges, such as inequality or climate change. Seventeen of G20 countries doled out support to green industries in their stimulus spending in 2020, while large economies committed themselves to net-zero emissions (NZE) targets.¹

There has also been an emphasis on international coordination and cooperation concerning the global nature of the pandemic. This is backed by an increased flow of funds; the OECD reported that official development assistance reached an all-time high in 2020,² while multilateral institutions like the IMF and World Bank doled out funds to developing countries. A prime example of international cooperation is COVAX, the vaccine-sharing scheme that has shipped over 1 billion doses to 144 countries and territories by January 2022 (World leaders, 2022). However, some of these spendings are also directed to economic recovery, many in line with the aforementioned longer-term challenges.

Such international coordination and cooperation is not unique to COVID-19; it is also a main feature of global response to climate change. The climate change issue began to gain weight in the late 1980s, with the establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988 and the Rio Earth Summit in 1992 (Maslin, 2021). One of the Rio Summit’s important outcomes was the United Nations Framework Convention on Climate Change (UNFCC), which underlies the principles and negotiations to limit global greenhouse gas emissions. Through its Conference of Parties (COPs), nations attempted to formulate international agreements on limiting emissions, most notably the Kyoto Protocol in 1997 and the Copenhagen Accord in 2009. Both had their flaws; the former only encompassed developed countries, while the latter broke down as developing and developed countries diverged. Both flaws were addressed in the 2015 Paris Agreement, calling for nationally determined contributions from all countries to keep global warming well below 2°C by the end of the century, pursuing to limit the increase to 1.5°C. While the COPs have become the ultimate forum for global climate negotiations, this issue is discussed in other multilateral, regional, and bilateral forums such as G20 or APEC. There is also coordination between non-state actors, such as NGOs, regional governments, businesses, and individuals.

**NET ZERO AND ITS ASYMMETRICAL IMPACT**

Net-zero emissions, i.e. a balance between emissions produced by human activity and emission reductions, have become a key goal of climate action. The world exults this goal through the 2015 Paris Agreement. In this agreement, hundreds of countries agreed to pursue a roadmap to reach net-zero emissions by 2050. In that roadmap, governments commit themselves to transition into clean energy, close quickly the energy gap, increase inclusion in the energy sector, and mobilize financing and innovation towards energy efficiency and developing alternatives (IISD, 2021). A combination of those efforts would hopefully create a sustainable condition to fulfill the world’s energy needs.

The International Energy Agency (IEA) has highlighted some key milestones to reach net-zero emissions, which require a socio-economic transformation in generating and using energy. The IEA predicts that wind and solar will become the two primary sources of renewable energy should we commit to reaching net zero, meaning that the world should phase out all coal power plants by 2040.³ Furthermore, a majority of our buildings need a revamp to become energy-efficient. Global car sales need to be 60% electric by 2030 and 50% of heavy truck sales by 2035 (Hook, Bernard, and Campbell, 2021).

On paper, these sets of agendas look innocuous. However, if they are not pursued carefully, this could potentially leave many countries behind. On the one hand, not doing enough increases climate risk. This would have a worse impact on southern countries (UNCTAD, 2021) that already have to overcome many more challenges and crises, including the impact of climate change, food scarcity, wars, refugee situations, etc. Climate change also contributes to increased migration, conflict, and military confrontations, thus leading to more sociopolitical problems. On the other hand, a sole focus on cutting emissions would inflame transition risk.

Cutting emissions abruptly entails risks for developing countries, whose economies rely heavily on carbon-intensive sectors. Fossil fuel, for instance, is regularly used to satisfy domestic demand for energy and provide national income through the margin obtained from sales. The reliance is also present in agriculture and industry to produce intermediate and final products. Such dependence on fossil fuels makes it much harder for developing countries to transition towards greener energy.

One may think of cutting subsidies for fuel and electricity as a solution to accelerate the energy transition. However, the pandemic has taught us that certain types of non-renewable energy, such as oil and natural gas, are still needed and aggressively moving away from brown energy may prove to be double-edged. In the grand scheme of things, the stark contrast on how developing and developed nations view the climate issue could not be more different. While the major powers have started to look at the issue from a visionary point of view, economic minnows still largely treat the climate issue as a luxury good given their current battles with issues of, inter alia, basic infrastructure, poverty, healthcare, and energy subsidy. An aggressive climate transition plan, which requires cutting energy subsidies, could potentially hurt millions and result in people falling back into poverty as well.
as a widened inequality. These nations, therefore, need time to readjust their transition strategy.

Even if such an aggressive plan does not bring negative consequences, non-renewable energy still reigns supreme in our world today. Take a look at our efforts against the pervading virus, wherein the aviation and shipping industries, still heavily dependent on non-renewables, have played a crucial role in distributing vaccines around the world. The pandemic has also taught us that the inability to satisfy a demand shock with supply reinforcement will result in an extreme situation. Without pretense, our current state of green energy is not well-prepared to provide a sufficient energy supply, let alone satisfy a sudden demand shock. As a result, non-renewables would probably remain as they are in the foreseeable future. Therefore, cutting investment and subsidies in these crucial commodities abruptly would ultimately raise energy prices for the developing world and lead to even more burning of other, dirtier non-renewables.

According to UNFCCC (Owen-Burge, 2021), USD 125 trillion of climate-related investment is needed to achieve NZE by 2050. Not only that, but there’s also work to be done as the world must triple the current investment level in the coming three years to stay on track. This is equivalent USD 32 trillion annual investment in six key sectors, accounting for a third of the world’s 2021 GDP.

Additionally, the financing gap of the green economy between developing countries and developed countries is too wide. Developing countries’ economic capacity is naturally lower than that of their developed counterparts. It is not surprising that they possess smaller fiscal and monetary capacity. The pandemic has further taken up the space and made the climate transition action more fraught with consequences.

There is also a stark contrast between countries in the northern and southern hemisphere in terms of financial power, as proxied by the depth of financial market. Developing countries tend to possess a shallow financial market as opposed to more developed countries. According to the IMF, only 36 countries have a financial markets depth index of more than 0.5. The list is dominated by Western household names, rich Middle Eastern nations, and Asian economic powerhouses.  

Thus far, the potential of asymmetrical outcome among types of countries has not been adequately addressed in global leaders’ forums. The common but differentiated responsibilities have been widely known in regard to accommodating provisions for developing countries. One question, however, is still lingering: Is it enough? So far, these kinds of initiatives are still lacking concrete actionable and binding plans on global leaders’ forums, such as G20 and COP26. It is becoming more critical to change before it is too late.

Table 1 illustrates the urgency for developed nations to spearhead the climate transition. While a deficit will increase both groups’ government debt, the developed countries enjoy a greater reputation standing in front of potential investors compared to the developing ones, thus making them more likely to sustain the long-term fiscal pressure. In contrast, more deficits for developing countries will render them unable to pursue an aggressive energy transition and thus they lag behind when it comes to use of re-

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On that account, what can be expected to address the issue? First, it requires more concrete commitments. In this case, political will takes an extremely crucial role in ensuring the transition commitment. In the last COP26 summit, the British government required potential private sponsors to commit to subscribing their business to a more sustainable model. Such a stance needs to be amplified in the future. Second, more cooperation and collaboration are needed to push developed countries in assisting developing countries as all countries are facing the common enemy. Gone are the days of wealthy countries pledging to pour money to their less-developed counterparts and falling short of it. A more concrete policy framework accommodating the varieties in countries’ characteristics and stages of development is of importance to ensure the feasibility and willingness to commit.

The previous section shows the difference in financing, technical and institutional capacities to achieve net zero emissions between developed and developing countries are big. Without the aspect of “just” in climate transition, the agenda of net zero emissions will only widen the global inequality between developed and developing countries.

This is a case where developed countries have a moral obligation to catalyze a just climate transition. Historically speaking, the now-developed countries enjoyed lax regulation which enabled them to grow into their current state today. In addition, the world’s economic powerhouses have consistently recorded higher per-capita emissions than their developing counterparts have done. We are of the opinion that utilitarianism should be held dear, and as developed countries have the adequate capacity compared to developing ones, they should take a stronger role in assisting the world to undergo a smoother transition. This is also a case where we must be pragmatic. Since climate change is a global problem, developed nations’ presence will massively reduce the global climate and transition risk, if done right.

Cutting emissions is important and is becoming increasingly urgent. However, such a goal should not leave wealthy nations kicking down the ladder and suffocating developing countries. A global coordination and more concrete framework must be established in order to ensure a “just” climate transition, reaching the goal to make a better environment while helping countries prosper.

Figure 1 shows that developing countries struggle to incorporate the use of renewables into their energy mix while developed ones have not fully committed to taking up a greater share of renewables in their energy mix.

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For more information, see: https://www.climate-transparency.org/g20-climate-performance/the-climate-transparency-report-2020

2 See Foreign aid reached record high of $161.2bn during COVID | World Economic Forum (weforum.org)

3 See https://www.ft.com/content/f9a03568-1cb1-4218-a519-5fcbe528d03a

4 See IMF Financial Development Index Database on https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B

5 See https://iea.blob.core.windows.net/assets/59268647-0b70-4e7b-9f78-269e5ee93f26/Energy_Efficiency_2020.pdf

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UNCTAD. (2021, October 28). Green industrial policies key for developing countries to adapt to climate change | UNCTAD. https://unctad.org/news/new-green-industrial-policies-key-developing-countries-adapt-climate-change


1 For more information, see: https://www.climate-transparency.org/g20-climate-performance/the-climate-transparency-report-2020

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4 See https://iea.blob.core.windows.net/assets/59268647-0b70-4e7b-9178-269e5ee93f26/Energy_Efficiency_2020.pdf
Paving the way for carbon neutrality

How G20 countries can use sustainable digitalization

Opinion piece

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The German Federal Environmental Foundation
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Institution:
The German Federal Environmental Foundation
(Deutsche Bundesstiftung Umwelt DBU)
is one of Europe’s largest foundations. It funds innovative, exemplary and solution-oriented projects for the protection of the environment, with special consideration of small and medium-sized enterprises. The funding activities focus on environmental technology and research, nature conservation, environmental communication and protection of cultural assets.

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Keywords:
sustainable digitalisation, transformation, carbon neutrality

Nowadays, nearly every country is saying the same thing: It’s time for us to finally become leaders in terms of digitalization! It’s time to take charge – after all, pursuing digitalization at full speed will make everything faster, easier and better. The G20 countries and their economies are the most influential actors in this arena. And the race among the leading G20 nations to be number one in the digital sphere has been underway for quite some time – and is extremely dynamic, as illustrated by the “Digital Riser Report 2021.”

Two questions:
Why do we even want to be leaders in the first place?
What, exactly, is our goal?
The first question is relatively easy to answer: Everyone likes to win, be it a game, a discussion or a competition. Winning is simply a nice feeling. We idolize extraordinary athletes like Usain Bolt, Simone Biles and Michael Phelps because of their wins. At the same time, they inspire us to strive for excellence, provide us motivation and reveal to us what’s possible. They push the limits of feasibility.

And that is precisely what we need when we consider the second question: What is our goal? In light of the crises of climate change, loss of biodiversity and excessive resource consumption, discomfort with calls for “higher, faster, further” is growing. The vital importance of living and working in harmony within the natural planetary boundaries is becoming increasingly clear. In order to address the issues of our time, we need a digital transformation that is also a sustainable one.

On the path to carbon neutrality, we cannot afford to ignore the opportunities presented by the digital transformation in terms of the economy, society and the environment: Digital technologies have the power to fundamentally transform practically every economic sector and facilitate green innovation. At many companies, the conversion to the (Industrial) Internet of Things is well underway – and the opportunities for sustainability are becoming more and more urgent.
In order for sustainable digitalization to gain momentum, we need to shape the digital transformation accordingly. In particular, companies need support, favorable conditions and feasible courses of action. Politicians are urgently called upon to take action.«

clear: whether that means using fewer resources or less energy or increasing environmental and climate protection.

Germany offers an example of just how great these opportunities can be: According to a study carried out by Bitkom, the German ICT sector association, in autumn 2020, digitalization can account for nearly half of the “work” required for Germany to achieve its climate goals of 2030 by reducing CO₂ emissions by as much as 120 megatons. This enormous potential for cutting carbon emissions lies mainly in the areas of industrial manufacturing, mobility, and energy production and distribution. However, this will require significant acceleration. If digitalization proceeds at its current, moderate speed, Germany will only save 78 megatons of CO₂, which corresponds to only one-third of the savings required by 2030. The study takes into account not only the positive effects of digitalization, but also the ecological costs, meaning the carbon emissions resulting from digitalization itself. After all, the manufacture and operation of end devices such as smartphones, computers, and tablets, in particular, but also the operation of the network infrastructure and data centers all generate considerable CO₂ emissions. A study carried out by the Borderstep Institute came to the conclusion that 1.8 to 3.2 percent of global greenhouse gas emissions in the year 2020 were the result of the production, operation, and disposal of digital end devices and infrastructures. Therefore, the challenge will be to pursue digitalization while maintaining a sense of proportion. Overall, according to the Bitkom study, the potential CO₂ savings of digital technologies is around five times greater than the emissions generated by these technologies. Furthermore, the study also shows that accelerated digitalization not only contributes to climate and environmental protection efforts, but also increases the competitiveness of the German economy.

While key industry players have the capital and personnel to actively shape these kinds of radical transitions, the digital transformation poses a challenge for small- and medium-sized enterprises (SMEs) in G20 countries. Therefore, together with co-sponsor B.A.U.M. e. V., the German Federal Environmental Foundation (DBU) is using the platform nachhaltig.digital [sustainably.digital] to provide German SMEs with a path towards sustainable digitalization by offering concrete examples and a powerful network. As part of the 2020 nachhaltig.digital Monitor, 500 decision-makers were asked about the current state of sustainability and digitalization in German SMEs. From the decision-makers’ perspective, digitalization is creating greater market access and facilitating the decentralized production of goods, for example through cloud-based additive manufacturing. At the same time, 75 percent of respondents pointed to more efficient use of resources and 51 percent to reduced energy consumption as potential ecological benefits of digitalization. On the whole, 55 percent of respondents feel that the digital transformation will increase corporate sustainability. However, this potential can only be unlocked if the necessary infrastructure is in place – this is the foundation of every digitalization and manufacturing strategy in the age of the (Industrial) Internet of Things. At the moment, the major hurdles to dedicated sustainable digitalization are a lack of knowledge (67 percent) and concrete, real-world examples and solutions (both 65 percent), coupled with a lack of infrastructure and financial support (53 percent). Currently, only 7 percent of respondents feel that digitalization poses a risk to sustainability – from the DBU’s perspective, greater awareness of this potential risk is required in order to prevent digitalization from further exacerbating the growing demand for energy and resources as well as increasing greenhouse gas emissions, as the German Advisory Council on Global Change (WBGU) noted in its 2019 flagship report.

As an enabler of this transformation, the digital industry must also be driven by sustainability and climate protection.«

As an enabler of this transformation, the digital industry must also be driven by sustainability and climate protection. As pioneers, major technology corporations can set the tone for a “green” transformation and motivate other actors to take more decisive steps. At the same time, with their efforts they can also serve as enablers for the digital transformation of small- and medium-sized enterprises. From sustainable digital infrastructures in both urban and rural areas, green data centers or decentralized computing power: there is much to do – and much to be gained!
The opportunity to actively shape the digitalization process while at the same time advancing the interests of your company should be available to the many, not the few. Whether start-ups, SMEs or industry giants; no one can afford to miss out on the digital transformation. However, always in proportion and as a tool for green innovation. The G20 countries represent nearly two-thirds of the global population, around 80 percent of the annual global GDP and around 80 percent of global CO₂ emissions: they need to leverage the enormous potential of a sustainable digital transformation, thereby paving the way for carbon neutrality.


2 Bitkom study “Climate Effects of Digitalization”, carried out by Accenture (German version): https://www.bitkom.org/sites/default/files/2021-03/bitkom_studie_klimaefekte-der-digitalisierung_final_210318.pdf

3 Bitkom study “Climate Protection through Digital Technologies – Opportunities and Risks”, carried out by the Borderstep Institute (German version): https://www.bitkom.org/klimaschutz-digital


Towards a circular economy transition

Challenges and way forward for small and medium enterprises in G20 emerging economies

Policy brief

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The GIZ project “Initiative Resource Efficiency and Climate Action—IREK II”, financed through the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), promotes issues of resource efficiency and climate action in international dialogue and cooperation processes, and in G20 emerging economies. GIZ is Germany’s development agency providing services in the field of international development cooperation.

The EU Resource Efficiency Initiative (EU – REI), is an EU-financed support project for the Government of India in the implementation of the UN global Sustainable Consumption and Production (SCP) agenda by way of adapting international standards and best practices in business on resource efficiency and fostering the efficient and sustainable use of natural resources.

Note:
This article is a contribution by the GIZ, a partner in the Circular Economy Solutions Dialogues. These findings reflect experiences from various projects with GIZ as implementing organisation.

Keywords:
G20, resource efficiency, cleaner production, circular economy

How to advance a resource-efficient circular economy is a recurrent agenda topic in many high-level fora, including since 2017 at the G20. For example, a high-level “G20 Resource Efficiency Dialogue” has been organized regularly by G20 presidencies since 2017, discussing challenges, public and private sector good practices and the role of the G20 in advancing national resource-efficient circular economy policies. The upcoming G20 presidencies of Indonesia (2022) and India (2023) plan to continue these deliberations.

The private sector is the key implementer of a transition towards a resource-efficient circular economy. And in most countries, including emerging economies, small and medium companies (SMEs) are the backbone of the economy for such a transition. Two case studies from G20 emerging economies (India and Mexico) provide insights into current discussions about the challenges and opportunities SMEs are facing in adopting such business models, and which challenges are specific to each country. While in India the inclusion, and (skill) development of the vast informal workforce is considered a particular challenge, in Mexico the challenges of integrating SMEs more effectively into (global) value chains are at the forefront of public policy concerns.

INSIGHTS FROM INDIA

Since 2015 when it constituted the Indian National Resource Panel (InRP), India has witnessed an impressive development of public policies towards mainstreaming Resource Efficiency (RE) and a Circular Economy (CE). Taking note of the InRP’s recommendations, in 2017 the Indian government think tank NITI Aayog launched...
Business sector stratification and the role of MSMEs

The Indian MSME sector contributes about 29% to GDP (IBEF 2021). In 2021, India’s Ministry of Micro, Small and Medium Enterprises (MSME) registration portal registered nearly 5.8 million MSMEs, with 5.4 million micro, 0.29 million small and 33,054 medium-sized enterprises. The Indian MSME sector is highly heterogenous and dynamic and divided into a formal, semi-formal and informal workforce. For a resource-efficient circular economy transition, the MSME sector is considered key given its dynamic and innovative nature. However, the sector still requires a massive transition to undertake CE measures, including practices to enhance traceability of materials and production efficiency with technological support. A critical challenge is how to address, integrate and support semi-formal and informal sector businesses and workers.

Major challenges for MSMEs

The regulatory and policy framework for CE is evolving. On the positive side, there are already policies in place, and a larger cultural understanding exists towards reuse, repair and extended use of products supported by a semi-formal/informal repair economy. However, CE development is still at an early stage. It needs a strong push through policy and incentives for industry, including access to environment-friendly and safe technology and the formalisation of informal sector actors who are primarily engaged in resource recovery through collection, aggregation, dismantling and recycling.

The proposed National Mission on Circular Economy and draft National Resource Policy have the potential for strengthening MSME capacities to adopt CE as a new business model across different life-cycle stages. The highest potential is seen for eco-design, repair, remanufacturing, recycling and decentralized sharing platforms for different resources.

Around 80-90% of CE-related activities in India, like end-of-life collection, dismantling, and resource recovery, are undertaken in the informal sector. The supply chains across the MSME sector are often segregated and face disruptions due to migration. The precarity itself inhibits skill building and capacity building on CE measures at all levels. Obsolete and inefficient technologies also lead to leakages and lower levels of effectiveness and pose health-hazards to workers devoid of sometimes basic occupational and health safety equipment and insurance. Also, the lack of government approved infrastructure and access to clean technologies remains one of the key barriers. Support towards the formalization of the workforce, capacity building, skills training and infrastructural support will be key for the CE transition.

MSMEs often face barriers with respect to accessing timely and collateral-free financing. Challenges with client acceptance and informality in the value-chain lead to uncertainty of repayment concerns among the lenders, including banks and financial institutions. Convincing lenders of the economic viability of untested CE models is a challenge. Innovation in CE financing is needed to support technological, structural and transition support to the MSME sector in India.

The current system of goods and services taxes (GST) has a higher percentage of taxation on many CE products, including, for example, in the construction and demolition sector, or on raw material procurement, which leads to severe cost implications. There is a strong need for redesigning such fiscal instruments. Transportation costs are another barrier that make many secondary raw materials costly in the absence of co-location of facilities. Subsidies or incentives such as those for the use of fly-ash are needed for all classes of secondary raw materials. Also, accessibility to subsidies and incentives needs to be greatly enhanced. For the MSME sector, even short-term capital in the absence of incentives and subsidies is difficult to access for CE activities. Without incentives, MSME CE-related products and technologies cannot compete in the market.

The uptake of circular economy models still faces acceptance problems due to a dominant linear economic mindset among business owners.

»The private sector, particularly SMEs, is the key implementer of a transition towards a resource-efficient circular economy.«

»The uptake of circular economy models still faces acceptance problems due to a dominant linear economic mindset among business owners.«
support for emerging CE business models through the development of certifications and labelling. Low market acceptance of CE products due to a lack of certifications and standards for materials, products, processes and services affects business viability. The MSME sector requires information sharing, capacity building and financial support to undertake often expensive certification processes.

Way forward
There is still need for harmonization of policies. While the 2016 revised Solid Waste Management Rules and Plastics Waste Management Rules take into account the role played by the informal sector and also provide a framework for formalization, the E-waste Rules (2016) do not recognize the extensive informal sector engagement in e-waste recycling. The Central Pollution Control Board Guidelines for collection and storage of e-waste again provide for the inclusion of the informal sector managed by producers for collection of e-waste.

It is imperative for any successful resource-efficient CE strategy to recognize and include the informal sector (workforce). This will depend on developing new or reforming existing policies. The RE Sectoral Strategies recognize the crucial role played by the informal sector in providing CE-related services, which are good policies to build upon.

INSIGHTS FROM MEXICO
The sustainable use of natural resources and the decoupling of resource consumption from economic development have first been named as important goals in Mexico in the National Program on Sustainable Production and Consumption (2014–2018).11 A more recent general law on climate change also includes explicit references. Currently, a General Circular Economy Law is being discussed by the Congress to establish a legal framework with the necessary elements for an orderly transition from a linear to a circular economy. The Secretariat of Environment and Natural Resources (SEMARNAT) has among its objectives to foster a pollution-free environment by promoting sustainable production patterns, including the implementation of CE practices.

Business sector stratification and role of SMEs
According to the 2019 Economic Census where Mexican establishments12 are stratified, there were 4,800,157 economic units in the country, of which 94.9% correspond to micro enterprises, 4.9% to small and medium-sized enterprises and 0.2% to big enterprises. In 2018, 1,899,812 enterprises were part of the services sector, 2,248,315 were in charge of commercial activities and just 579,828 were related to manufacturing activities. Of these three economic branches, the manufacturing sector has the highest relevance in Mexico for both industrial production and impact on the environment. Despite representing only 12.1% of companies, this sector generates 48.2% of the national production (10,800,994 million Mexican pesos) and has the biggest potential to cause a change towards more resource-efficient consumption and production that includes an efficient use of materials, by-products and waste, at company and consumer levels.

The industrial sector of Mexico, especially manufacturing enterprises in the automotive, textile, electrical, chemical, construction and aerospace sectors, among others, depend on local and global supply chains. SMEs have an important role by supplying essential components, parts and materials used in these subsectors, but do not operate very resource-efficiently yet.

Major challenges for SMEs
In Mexico, the adoption of resource and climate-friendly measures by SMEs is still limited, mainly due to a lack of knowledge, understanding and capacities, and in some cases, few financing options and incentives. A performance and progress gap towards adopting resource-efficient practices can be observed between, on the one hand, transnational enterprises and, on the other hand, SMEs. Transnational enterprises, which often already follow international sustainability or environmental guidelines, have begun to act to improve their environmental performance. However, these companies represent less than 1% of the manufacturing sector in Mexico, compared to SMEs (5.5%) and micro companies (93.7%).

Many of the Mexican SMEs are essential elements in the supply chains of big (often transnational) companies. This industrial structure represents both a particular challenge and an opportunity moving towards more resource-efficient value chains. The major challenge lies in finding the right methodologies to assess the actual use of resources and define strategies that facilitate their efficient use and monetize the benefits of their implementation. The potential lies in the fact that in the manufacturing sector, many supply chains converge to produce stock and materials for different industrial processes, as well as consumer products that are part of national and global markets. This gives SMEs the chance to work more closely with big enterprises for improved and coordinated actions towards a more efficient use of resources and materials across the value chains.

Taking this into account, it is key for Mexican SMEs to establish solid relations with big companies operating in the same supply chain(s) and work together to define common needs and strategies for a better use of resources, a reduction of waste generation, and alternatives to capture materials that can be reused in multiple production chains. Also, a better integration with global production chains can bring benefits to SMEs because it offers access to training and technical assistance, to industrial and environmental certifications, to better sustainable practices and standards, to green and sustainable financing options and to the possibility of participating in international markets. However, SMEs must also be enabled to establish priorities according to their economic resources. For some, this is the acquisition of raw materials, inputs and machinery or the payment of salaries.
A progress gap towards adopting resource-efficient circular economy practices can be observed between transnational enterprises and SMEs.«

while for others, it could be investment in development, innovation and technologies to improve their processes and products.

Way forward

The role of the public sector, particularly at the federal government level, is to provide appropriate incentives to SMEs to ease such a transition to resource-efficient production practices. A national strategy related to circular economy, implemented together by different ministries, could define the approach that Mexico’s public sector should have to assure the participation and responsibility of these enterprises in this transition.

Positive national experiences already exist, and their lessons should be adopted, such as the Environmental Leadership for Competitiveness Program of the Federal Attorney for Environmental Protection (PROFEPA). This program sought to improve the environmental performance of SMEs through the promotion of resource efficiency, environmental compliance on a voluntary basis beyond national regula-

What’s next?

India and Mexico are about to adopt and/or further develop a national circular economy strategy, policy or law. The further reform or improved implementation of existing sector policies and strategies and incentives for industry, in particular SMEs, will be key steppingstones to move from linear to resource-efficient circular economy business practices.

The Italian G20 presidency (October 2021) has updated the G20 Resource Efficiency Dialogue Roadmap (first launched under the Japanese presidency 201914), putting this G20 workstream on a more permanent basis. This G20 Roadmap identifies key areas of action, requests G20 countries to intensify knowledge exchange at national level, among each other for peer learning, and to advance activities internationally towards a resource-efficient circular economy future through new partnerships and cooperation. The mandate is there for G20 countries to keep moving, both nationally and internationally.

1 Kindly note that in both national and international fora, the terms “resource-efficiency”, “circular economy” are increasingly used in an interchangeable way given their ultimately common objectives. For the purpose of this article, “resource-efficiency” and “circular economy” are understood as compatible approaches/concepts, which serve to achieve sustainable production and consumption pattern.


4 Indian Government’s Think Tank (erstwhile Planning Commission)


9 See transcript: PM’s address at G20 Summit, Session III: Sustainable Development | Prime Minister of India (pmindia.gov.in)

10 MSME Industry in India – Market Share, Reports, Growth & Scope | IBEF


14 See the original 2019 G20 Resource Efficiency Roadmap at https://g20re.org/pdf/Roadmap_for_the_G20_ Resource_Efficiency_Dialogue.pdf
Smart and green recovery from the pandemic

Imperatives for new global South-South cooperation

Research paper

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The Economic Research Institute for ASEAN and East Asia (ERIA), based in Jakarta is an international research organisation established in 2007 by a formal agreement among 16 Heads of Government in 2007. It works closely with the ASEAN Secretariat, policy makers and research institutes from East Asia to provide intellectual and analytically sound evidence-based policy recommendations. ERIA conducts research under three pillars: Deepening Economic Integration, Narrowing Development Gaps and Achieving Sustainable Development Goals. In order to disseminate its research findings and solicit inputs from various stakeholders, ERIA organises seminars and symposia which nurture a sense of community in the region. The policy recommendations are intended to help in the deliberation of the annual summit leaders and ministerial dialogues.

Keywords:
ASEAN, Climate change, Green Investments, Pandemic recovery, Stimulus packages

Almost two years into the COVID-19 pandemic, the crisis has structurally transformed developing and advanced economies around the world. The cumulative economic and financial impacts on developing countries in the Global South are estimated to be much worse than those of the 2008 global financial meltdown (Engström et al, 2020). As countries around the world rush to repair their battered economies, G20 leaders must decide what type of economic recovery they want to promote. Will they choose policy measures that reinforce old economic structures, particularly those which will further lock in carbon-intensive development? Or will they see COVID-19 as a once-in-a-generation opportunity to build a better future that significantly improves smart, green and inclusive growth outcomes? As this paper argues, policies that support the transition to a low-carbon circular economy are crucial to ensuring an economically resilient future, especially for developing countries in the Global South.

Resetting long-term policy measures during the pandemic recovery

Resetting long-term policy measures in support of green and inclusive growth during the pandemic recovery is critical for three reasons. First, developing countries in the Global South need to regain ground in their battle against climate change which was interrupted by the Covid-19 pandemic. Heat waves, droughts, floods, and cyclones have become more intense and frequent in developing countries. Recent research found that the impact of climate change on agriculture, tourism, energy demand and labor productivity will collectively result in a loss of about 8–11% of the world’s combined annual economic growth by the end of the century (IPCC, 2017). Second, stimulus pol-

» Economic recovery measures announced by several developing countries in the Global South are not well harmonized to combat climate change and achieve co-benefits such as job creation. This lack of harmonization is not a result of ignorance, but rather due to the complex nature of policymaking and implementation.«
future (ETC, 2020). However, economic recovery measures announced by several developing countries in the Global South are not well harmonized to combat climate change and achieve co-benefits such as job creation. This lack of harmonization is not a result of ignorance, but rather due to the complex nature of policymaking and implementation (ERIA, 2021). Fig 1 shows the categorization of policy initiatives undertaken during the emergency and recovery phases of the pandemic in the Association of Southeast Asian Nations (ASEAN). The global pathway to meet Paris Agreement targets by 2030 and net-zero emissions by 2050 requires all governments, particularly those of developing countries in Global South, to significantly strengthen and then successfully implement their energy, climate, economic and fiscal policies. At their first summit in the aftermath of the 2008 financial crisis, the leaders of the G-20 countries promised to use fiscal measures to stimulate consumer demand in green products and services as well as the rapid recovery of the global economy, especially as conventional policy appears to have reached its limits in many countries then and now. During the pandemic, leading G20 economies have announced economic stimulus packages that will pump approximately USD 3.7 trillion directly into sectors that have a large and lasting impact on carbon emissions and nature, namely agriculture, forestry, industry, waste and energy and transport (Vivid Economics, 2021). However, the Greenness of Stimulus Index (GSI) shows that developing economies in the Global South to date have largely failed to harness the opportunity (Aylward et al, 2021). Packages in parts of Europe, South Korea and Canada offer more promise for green growth. Regardless of economic structure or past performance in meeting the climate stabilization goals, each country in the Global South can steer its own recovery and stimulus packages to support low-carbon green growth with the following three sets of policy tools.

**DESIGNING TRANSFORMATIVE ELEMENTS THAT BRING IMMEDIATE INCLUSIVE GROWTH CO-BENEFITS**

The quality, content and strength of the stimulus investments will determine both socio-economic and environmental outcomes for decades to come. Developing countries in the Global South have a unique opportunity to design recovery packages that create the right jobs and build a better future. The right investments will need to be fast, labor-intensive in the short run, and have higher multiplier co-benefits in the long run. Investments with these characteristics include low-carbon energy infrastructure such as renewable assets, building energy efficiency, smart transport, innovations in green technologies, urban waste management, and restoration of degraded forests. Implementing investment decisions on those assets will maximize co-benefits in at least three major ways, namely boost-

»A well-articulated smart and green growth strategy has the potential to bring tangible long-term benefits. It is designed to harness emerging digital technologies and principles of a circular low carbon economy, with strategic policy directives for inclusive growth and capacity building.«
green technology solutions available to them, their commitment to the Paris Climate Agreement and their existing fiscal situation. But there are challenges and trade-offs in aligning short term stimulus measures with long-term sustainability goals. In countries with inadequate or less ambitious climate mitigation targets and financing policies, new short-term investments are likely to reinforce unsustainable trajectories. Almost all developing countries in the G20 entered the pandemic emergency phase still producing significant carbon emissions, air and water pollution. Many countries also lack sectoral targets to absorb targeted technology interventions. As a result, current recovery packages announced during the exit phase risk reinforcing the status quo, which is significantly tilted towards negative environmental outcomes, and may amplify climate risks in the medium term (Anbumozhi, Kalirajan and Yao (2022)). But challenges common to both developed and developing countries include the required behavioural changes by households and the affordability of new low-carbon technologies (Cable, 2016). For developing countries in the Global South, the challenges are that stimulus packages should have balanced the implementation of climate change adaptation and emissions reductions measures, while improving economic growth and poverty reduction.

**UPSCALING INVESTMENTS BY ESTABLISHING A GREEN FINANCE-CATALYSING FACILITY FOR THE GLOBAL SOUTH**

Economic recovery and stimulus packages in developing countries are to be implemented in an ecosystem where several large-scale, low-carbon infrastructure investments have already been cancelled or postponed due to the pandemic (Anbumozhi, 2021). Governments in developing countries can assess these projects and restart them, which will help limit cost-overruns for projects that have been interrupted. There are also many smaller-scale projects that have strong multiplier co-benefit effects, such as their long-term sustainability and climate payoffs, and can be implemented fast. «There are also many smaller-scale projects that have strong multiplier co-benefit effects in terms of local economic growth, employment, and climate payoffs, and can be implemented fast.»

The Green Finance Catalysing Facility (GFCF) is a global partnership to support green finance and accelerate the delivery of the Paris Agreement and Sustainable Development Goals. It is designed to harness emerging digital technologies and principles of green and sustainable development, and accelerate the implementation of the Paris Agreement and Sustainable Development Goals. The GFCF aims to catalyse and mobilise substantial new and additional finance to support the implementation of the Paris Agreement and Sustainable Development Goals, particularly in developing countries. The GFCF will focus on scaling up green finance by connecting green projects with green finance, and by fostering partnerships and innovative solutions. The GFCF will also work to improve the availability and affordability of green finance, and to enhance the capacity of developing countries to access green finance. The GFCF will be governed by a Governing Council, which will include representatives of the G20, the World Bank, and other stakeholders. The GFCF will be implemented in collaboration with other international institutions and partners, and will be closely aligned with the work of the UN Framework Convention on Climate Change and the United Nations Sustainable Development Goals. The GFCF will begin operations in 2023.
ciity (LCFCF) will help to mobilize all pools of finance, public, private and international development aid.

Once established, an LCFCF with developing countries in the Global South as members could have the following objectives: (i) to directly catalyze a pool of small scale bankable low-carbon projects (ii) to assist low-carbon investors in creating financially viable portfolio of projects that meet the NDC targets and SDG goals (iii) to strengthen national low-carbon green growth policies, allowing a gradual reduction of national fiscal burdens, (iv) to mitigate project risk through concessional sovereign risk and development finance, and (v) to access private finance. In contrast to common infrastructure finance approaches, establishing an LCFCF will also help mitigate risk and enable investment for small-scale, high-risk projects.

**ENHANCING POLICY FRAMEWORKS FOR MOBILIZING PRIVATE CAPITAL**

Delivering on international climate finance at the scale required was the stickiest point of contention between developed and Global South developing countries at the 2021 COP 26 meeting in Glasgow. That is because most of the NDC targets pledged by countries as part of the Paris Agreement are conditional, that is, subject to the availability of an estimated USD 1 trillion (IEA, 2021). Developing countries are grappling with a long-term debt and liquidity crisis, aggravated by the pandemic. But the run-up to COP 26 witnessed extraordinary support from the global finance industry. The world’s largest investors called for a robust, transparent, and fair climate deal and promised that they would make money available. Banks promised to find ways to promote and channel tens of billions into low-carbon investments.

But private finance will not flow in a vacuum. There is a close relationship between the way incentives are handled and an increase in investments. So, the public sector needs to focus on the efficiency of the finance industry to help channel private savings into investments. This will not only give investors a return in the short run, but it will also ensure that those returns are economically sustainable in the long run. The good news is that the financial industry is not short of savings to invest. At the global level, some USD 300 trillion is represented in capital markets, a little more than half from commercial banks, the rest from insurance and institutional investors.

The motivation for private financing of low-carbon infrastructure is not strong. If a carbon-intensive investment gives a greater return than that of a clean and green alternative, investors cannot ignore the business case for making profits. That is why over 300 financial institutions urged world leaders at COP26 to reach an agreement on climate financing. They are ready to pay a price for carbon if it makes their investment relatively more attractive. These financial institutions have not suddenly become climate activists. They gradually understood that unless the climate is stable, the economy in which they invest will be at risk.

**These financial institutions have not suddenly become climate activists. They gradually understood that unless the climate is stable, the economy in which they invest will be at risk.**

For new investments with retained profits. There could be huge economic rewards if they were steered towards low carbon investment through carbon-pricing in the markets.

There is also new momentum for Environmental, Social and Governance (ESG) investments in Asian bond and stock markets. For example, signatories to the Principles of Responsible Investment (PRI) represented USD 50 billion in 2020–21. The green bond market, where countries and companies borrow for climate projects, grew at 12% in developing Asia during the pandemic in 2020 (LSE, 2021).

Though many activities are taking place in finance systems, there is still a long road to mobilize the IUSD 1 trillion funding needed to support the clean energy transition and a green recovery. A major reason is that financial institutions themselves are not well structured to accelerate financial flows in the right direction. They inadvertently give preference to carbon-intensive investments over low-carbon investments. For example, credit rating agencies, which determine whether a bond is investible, do not consider risk beyond three years. So, a bond backed by a fossil fuel power plant can receive the same rating as a renewable energy plant driven by solar or wind.

The same is true for accounting standards. Even though they claim to be prudent, they do not question the value of stranded assets. The risk measures used to manage banks are backward looking and are ill adapted to foresee climate risks that lie ahead. Investment institutions, which owe a fiduciary duty of care towards their stakeholders, often ignore the effects of climate change on the population for which investment decisions are made. Shareholders, citizens, and policy makers alike need to ensure that financial systems are fit for purpose to achieve net-zero targets. In short, a significant, coordinated effort is necessary among developing countries in the Global South to drive future investments towards climate change mitigation and adaptation.

In any case, the world was on an unsustainable path, vulnerable for the climate, even before the pandemic crisis. Thus, the recovery must avoid the dangers and fragilities of the past, regarding not only environmental and planetary boundaries, but also increasingly inequitable growth and a lack of social cohesion. Developing countries in the Global South will not be forced to return to the “old normal” if the abovementioned interconnected actions are taken up during the pandemic recovery phase. The Indonesian G20 Presidency in 2022 will be an opportunity to bring this Global South cooperation agenda to
the table for discussion. The Indonesian Presidency marks the beginning of a series of G20 presidencies located in the Global South, with India in 2023 and Brazil in 2024. It is thus a chance to strengthen the international cooperation agenda for smart, green, and inclusive growth at the global level.

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Decolonizing our mindset, rebuilding our trust

A matter of political will

Opinion piece

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WECF International is a civil society, feminist and not for profit organization working to advance the rights and leadership of women and girls in all their diversity. We co-facilitate the engagement of feminist organizations through the “Women’s Major Group” in the United Nations 2030 Agenda for Sustainable Development and the Women and Gender Constituency at the United Nations Framework Convention on Climate Change (UNFCCC).

Aluna Minga is a collective that focuses on social and cultural action in Latin America and its connection to Germany. Together we generate spaces to inform and discuss challenges as migrants, especially for those who come from countries in conflict. We support and empower the Latin American migrant community in Germany with the development of education, cultural and psychosocial activities, as well as promote the positive values of our countries with an emphasis on diversity, peace, respect for life and nature.

Given the alarming climate crisis, factors such as the degradation of ecosystems, increasing inequality, and the lack of coherence between the discourse and timely implementation of actions by governments have fuelled a sense of distrust and discontent among citizens of all ages. In the words of the Swedish activist Greta Thunberg: “The empty promises are the same, the lies are the same and the inaction is the same” (BBC News, 2019). New generations are growing up with psychological distress as they live in permanent fear of an expected threat in the future. This anxiety emerges as an emotional response to the increasing threats associated with the effects of climate change (Hickman et al., 2021). Growing up in a state of anxiety linked with the perception that there is no future, and that humanity is doomed because of state neglect, is cruel and dangerous.

In the last years, marches led by youth, women, Indigenous and BIPOC communities around the world have united citizens to demand ambitious commitments and solutions for a more sustainable and just future. As an example, since 2019 – even amid the pandemic – Latin America has been the epicentre of massive protests and social outbursts, with participants claiming the right to a life of dignity and a safe, healthy and clean environment for all (BBC, 2019; CNN, 2021). In these marches, people show their dissatisfaction with governments and reclaims issues of climate, gender and social justice, while rejecting development models based on the destruction of natural resources, corruption and the exacerbation of violence (Cárdenas & Cortés, 2021). It is through a decolonial, intersectional and feminist approach that we can transform such structures and find an inclusive way to fight climate change and restore society’s trust in political leadership and institutions.

FROM WORDS TO ACTIONS, QUITE A LONG WAY TO GO

Throughout modern history, colonialism has been a form of domination based on a monocultural understanding of the world that has altered previous social and cultural structures (Hernández, 2020). The occupation of land and the exploitation of resources characterized the beginning of a way of perceiving, understanding and implementing strategies of progress. Since colonization, the displacement of Indigenous and Afro-descendant communities, as well as the imposition of norms underpinned by a hegemonic discourse that emphasized gender inequalities has curtailed fundamental rights and placed women in an inferior status to men (Alvarado, 2019; OAS, 1987). Since then, militarism, understood as a country’s desire to strengthen its armed forces to make itself more powerful (Collins, 2021), has been used to preserve arbitrary boundaries disrespecting the ethnic, cultural, natural and religious diversity of a given place. Militarism is still deployed as an important state institution with a very strong political, social and economic influence, putting at risk the livelihoods of local communities (Salihu, 2017; Woodward, 2009).

War economy profits from natural resource devastation. It is a problem that exists around the world: from the Democratic Republic of Congo, to Yemen, Syria or Colombia. Despite the severe limitations that militarism imposes on achieving peace, governments continue to include
war within their national spending (Lopes et al., 2021). World military expenditure in 2020 is estimated to have been USD 1.981 billion – the highest level since 1988. Military expenditure by the top 15 countries reached USD 1.603 billion in 2020 and accounted for 81 percent of global military spending (Lopes et al., 2021). In this list of countries, 14 out of 15 are part of the G20. It is worth mentioning that these expenses do not consider the life environmental cost of military technology, activities and risks. Such entails the emission of GHG by aircrafts flying at high altitudes, military training exercises, waste, among others (Cottrell, 2021).

Lack of coherence between the discourse and a timely implementation of actions by governments have fuelled a sense of distrust.«

As previously mentioned, the extraction of resources, particularly fossil fuels, has been the driving force behind the concept of development (Ritchie & Roser, 2020). However, those countries now assumed to be developed, mainly from the Global North, made indiscriminate use of these resources, causing not only the deterioration of the social and cultural fabric of communities that previously inhabited those territories but also the beginning of an environmental crisis (Ghosh, 2021; Turner, 2021). The updated synthesis report of the Nationally Determined Contributions (NDCs) from 2021 confirms that the total global greenhouse gas (GHG) emission level in 2030 is expected to be 16% above the level in 2010 – if all the latest NDCs are implemented. According to the Intergovernmental Panel on Climate Change (IPCC), this could lead to a temperature increase of about 2.7°C by the end of the century. The IPCC has stressed that we require a reduction of 45% in CO2 emissions by 2030 to limit the global average temperature increase to 1.5°C (UNFCCC, 2021). However, this does not seem urgent enough for many countries.

According to the International Monetary Fund (IMF), in 2020, global fossil fuel subsidies were USD 5.9 trillion or about 6.8 percent of GDP and are expected to rise to 7.4 percent of GDP in 2025 (Parry et al., 2021). Recent reports expose that G20 countries and the multilateral development banks (MDBs) they govern provided at least USD 63 billion per year between 2018–2020 in international public finance for oil, gas and coal projects. This fossil fuel finance was 2.5 times more than their support for renewable energy, which averaged only USD 26 billion per year (Tucker & DeAngelis, 2021).

As developed countries direct resources towards fossil fuel proliferation and war, they have failed to deliver on their collective commitment promised back in 2009 in Copenhagen: to mobilize jointly at least USD 1.3 trillion per year by 2030, based on the principles of climate justice. However, this ambitious finance goal was quickly removed in subsequent drafts – mainly by developed countries (Schalatek, 2021b). During the same climate summit, rich countries blocked the proposal for the creation of a Glasgow Loss and Damage Finance Facility. This facility aimed to support countries that have experienced permanent and irreversible losses to lives, livelihoods, homes and territory, as well as non-economic impacts, such as the loss of culture, identity, ecosystem services and biodiversity (Heinrich-Böll Stiftung, 2021).

It is the time for countries to direct their political will towards the well-being of the people and the planet.«

The demand from the youth: It’s now or never! Take action!
Photo credit: Annabelle Avril / WECF
and resource exploitation threatens the full enjoyment of human rights. As during colonialism, this is forcing communities to adopt different strategies of resistance and adaptation to survive in a context of chaos that was not propitiated by the local communities themselves (Alvarado, 2019). The waste and deterioration of valuable and irreplaceable natural resources increase social tensions in which conflicts are occurring more and more frequently (Alvarado, 2019; Cárdenas & Cortés, 2021). This is what fuels mistrust of governments and institutions. This illogical, incoherent narrative is a source of fear and anxiety.

The COVID-19 pandemic has shown how quickly huge sums of money can be mobilized when developed countries have political will to do so (Schalatek, 2021). It is time for countries to direct their political will towards the well-being of the people and the planet.

GENDER-JUST CLIMATE ACTION: A DECOLONIAL AND INTERSECTIONAL APPROACH TO ADDRESS CLIMATE CHANGE

The IPCC has been clear: Human influence on climate change is unequivocal. Immediate, rapid, deep and large-scale GHG reductions involving societal and systems transition are required. As the G20 countries represent two-thirds of the world population and generates almost 90% of global GDP and approximately 80% of the world’s annual GHG emissions, their role is crucial for limiting global warming to below 1.5°C (G20 Engagement Groups, 2021; Tucker & DeAngelis, 2021). Wealthy and industrialized high-emission countries have a historic contribution to climate change that must be addressed under the principle of Common But Differentiated Responsibilities (CBDR), formalized in the United Nations Framework Convention on Climate Change (UNFCCC) (Lindvall, 2021).

The transformation needed requires collective action from the local to the global scale, recognizing that not only geographical location, but gender, race and class determine the impacts of climate change (Goreki, 2021). This climate crisis is not an equal crisis.

A decolonial, intersectional, and feminist approach to addressing climate change allows us to propose alternatives that direct efforts towards a care economy – not a war economy. It proposes and demonstrates with successful experiences from around the world alternative models that respond to local and community needs, with a focus on human rights and gender equality. It is through a decolonial approach that we can address the root causes of poverty and marginalization that results in exclusion and multi-layered vulnerabilities (Nera-Lauron, 2021). It is through an intersectional perspective, understood as a prism for seeing how various forms of inequality often operate together and exacerbate each other, that we can better generate solutions for a more equitable and just system for all.

As an exemplary case, the Coalition of Women Leaders for the Environment and Sustainable Development (CFLEDD, its French initials), based in the Democratic Republic of Congo, has reached a milestone in granting women access to land through the adoption of ground-breaking new land and forest legislation in eight provinces of the country. Engaging 480 trained women advocates in participatory mapping and dialogues with customary chief, community members and local authorities, they overthrew one of the biggest barriers to women’s participation in climate action. This supported women farmers to develop agroforestry activities and in identifying illegal industrial activities to be replaced by forest conservation solutions, demonstrating their ability to implement climate mitigation and adaptation activities and to guide the revision of the national climate roadmap (Women and Gender Constituency, 2020a).

Real solutions and responses to the climate crisis already exist on the ground. Women in all their diversity have proven they can develop climate adaptation and mitigation strategies that respond to the specific needs of their communities. They have promoted the use of traditional knowledge for resilient agriculture, water source protection, energy production and economic diversification. This has enhanced access and control over resources, decent employment and equal participation of men and women in all their diversity in decision-making processes (Women and Gender Constituency, 2020b). Gender-just climate solutions are bottom-up initiatives that are decentralized, safe, context-based, affordable, sustainable, replicable, promote equal access to benefits, do not burden women, entail multiple benefits and center local decision-making and women’s role within it (WEDO, 2016).

The G20 countries and beyond have the opportunity to take action and leadership against climate change by supporting,

Gender justice is climate justice
Photo credit: Annabelle Avril / WECF
No more false solutions, we need real zero now!
Photo credit: Annabelle Avril / WECF

financing, promoting and strengthening such initiatives in their national planning and rebuilding of more inclusive, equitable, resilient and sustainable societies (G20 Engagement Groups, 2021). To scale up and replicate gender-just climate solutions we must talk about concrete actions.

Nationally Determined Contributions must ensure that economic policy measures for post-COVID response are just, climate-compatible and prioritize support for the well-being of all people. And for accomplishing such national plans, increased and balanced climate finance for adaptation and mitigation is key. The COVID-19 pandemic has exacerbated the growing debt, particularly in developing countries. Public climate finance is currently being mainly provided as loans, instead of grants, imposing an unfair cost for those countries that have contributed the least to global warming and are facing the major costs (Schalatek, 2021). To address this, G20 countries, especially the high-income members, should ensure they are not acting as a barrier to a rapid and globally just climate action. This means providing debt relief, including timely, transparent and comprehensive mechanisms and methodologies that ensure adequate access to resources for Global South countries to local low-carbon development pathways (Tucker & DeAngelis, 2021).

Narratives promoting false solutions, such as developed countries claiming to reach Net Zero by offsetting their emissions with questionable projects in the Global South, without cutting their emissions and polluting industries at home, impose a threat that allows the continuation of colonial and extractivist models (ActionAid et al., 2020). Unproven techno-fixes, risky technologies, and offsetting mechanisms have been promoted as a facade to evade responsibility and disguise inaction or harmful action on climate change, instead of aiming for real zero commitments (ActionAid et al., 2020; Women and Gender Constituency, 2021). Therefore, the conversation should centre on comprehensive models already showcasing cross-cutting benefits and the long-overdue transformation of our exploitative and destructive economic systems (Schneider & Santos, 2021). Specifically, on those practices that protect ecosystems and biodiversity, and secure the rights, lives, and livelihoods of local communities.

A CALL TO REGAIN OUR TRUST
This is a call to rebuild trust in governments and institutions by demonstrating coherence between state priorities and the well-being of those communities they serve. It is a call to pick up the rubble of democracy and multilateralism to pave a new transformation based on solidarity actions that recognize common but differentiated responsibilities in this climate crisis. It is time to be bold. To build a society that is not afraid to challenge corrupt systems and narratives rooted in colonialism and patriarchy.

Restoring trust breaks down imaginary boundaries to make way for collaboration to fight hand in hand against challenges such as climate change and the COVID-19 pandemic, and to achieve common well-being. A reality in which the pillars of development are based on the principles of trust, solidarity and dignity. One in which the constant struggle of egos is not the cause of warlike conflicts, exploitation of natural resources and the end of the dreams of future generations.

It is time to come together across borders and uphold intergenerational, gender, and climate justice.

It is time to decolonize our mindset, take responsibility for our history and act in solidarity.

Now!

»It is time to come together across borders and uphold intergenerational, gender, and climate justice.«

»Real solutions and responses to the climate crisis already exist on the ground.«
Economic Transformation

Beyond green
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Recoupling globally through impact
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Economic growth through social development
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Measuring economic integration within the G20
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Beyond green

Convergence towards internationally applicable corporate reporting for a systemic evaluation of sustainability performance

Opinion piece

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The Value Balancing Alliance’s objectives are to create a global impact measurement and valuation (IMV) standard for monetizing and disclosing positive and negative impacts of corporate activity. The alliance represents large international companies, including Anglo American, BASF, BMW, Bosch, Deutsche Bank, DPDHL, Dräger, Holcim, Kering, Kirchhoff Automotive, Michelin, Mitsubishi Chemical, Novartis, Otto, Porsche, Sana Kliniken, SAP, Schaeffler, Shinhan Financial Group, and SK. The VBA is supported by Deloitte, EY, KPMG, PwC, the OECD as a policy advisor, and leading academic institutions, such as the Impact-Weighted Accounts Initiative of Harvard Business School.

INTRODUCTION
Over time, investors and shareholders have been driven by their desire to maximize yield and financial returns. In response, companies tuned their way of doing business toward primarily profit-maximizing business models, eventually overstretching our planetary boundaries. This shareholder orientation also resulted in a dominance of financial performance in external reporting by companies. But with a growing awareness of the damage caused by our economy’s overly narrow scope of incentives, international efforts to guide business actors towards sustainability have evolved. Most prominently, the United Nations Sustainable Development Goals (UN SDGs) and the Paris Agreement on climate change urge companies to conduct their businesses in a sustainable manner – economically but likewise socially and environmentally. Fueled by these developments, policymakers continuously introduce new sustainability-related legislation, requiring companies to adapt their business models and strategies. Moving away from a pure profit-maximizing focus towards balanced stakeholder-centric business models, reporting of sustainability performance and external disclosure have become central for external stakeholders to understand a company’s overall value contribution. To achieve this, not only is information on the enterprise value necessary but also information on the value to society, incorporating the concept of so-called “double materiality.”

For more than two decades, an abundance of Environmental, Social, and Governance (ESG) reporting frameworks proliferated to meet informational requirements of the public, investors and
Both perspectives are fundamentally important to support decision makers (internal or external) with relevant information that empowers them to better understand and manage impacts. Now more than ever, recipients of sustainability information require a holistic backward and forward-looking view to set new, ambitious targets for companies. However, sustainability indicators across the entire range of ESG can only be defined and operationalized when a common impact language is found, which is so far not available via traditional reporting frameworks. Monetary valuation – converting measures of social and environmental impacts into a single monetary unit – offers the opportunity to create this common language for the concept of double materiality and enhances the comparability of different impacts. Furthermore, monetary valuation has the potential to facilitate impact-oriented internal stakeholders. To facilitate oversight and mitigate greenwashing in the very fragmented reporting environment, establishment of the IFRS/ISSB in Frankfurt and Montreal aims at reversing the trend of fragmentation. The IFRS/ISSB merges several initiatives (the Value Reporting Foundation – SASB and IIRC – as well as the Climate Disclosure Standards Board) and considers recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD), among others. At the same time, regulators around the globe are fueling the trend towards corporate sustainability reporting and acknowledging its potential by developing national sustainable finance taxonomies. Especially the EU, with initiatives like the Sustainable Finance Disclosure Regulation (SFDR), Corporate Sustainability Reporting Directive (CSRD) and the EU taxonomy, to name just a few, there is a strong focus on sustainability-related corporate reporting and enabling responsible investment with a dedicated sustainable finance strategy.  

MAKING DISCLOSURE MORE TANGIBLE

Many of the existing reporting initiatives focus primarily on enterprise value and target investors as a main recipient of information. The target group, without a doubt, has the needed leverage for change. Enterprise value, however, is just one side of the double materiality coin. The other, increasingly relevant, side is the impact an enterprise and its associated value chain have on the environment (society and nature). This second perspective is increasingly relevant for stakeholders who think about risks and opportunities in a more holistic sense.

Reporting on corporate sustainability performance must be concise and tangible, in a language that is easy to digest and intuitive – that is what monetary valuation can achieve.»

A ROADMAP FOR FUTURE SUSTAINABILITY DISCLOSURE

To fill the gaps in current ESG reporting and facilitate the transformation of existing business models toward greater sustainability, disclosure in the future will need to incorporate general information on risk management and governance along with three specific components that provide backward-looking and forward-looking information (see Figure 1). Such a framework will enable both cross-border and cross-industry comparability, allowing investors and other stakeholders to derive more robust conclusions about the future development and resilience of a company.

GOVERNANCE STRUCTURE AS BASIS FOR MEANINGFUL DISCLOSURE

Although sometimes derided, there is no chance of establishing a meaningful reporting and disclosure without a robust and consistent governance structure. It is a fundamental prerequisite for the successful integration and effective management of sustainability matters at a company and should be adequately accompanied by a committed leadership, a clear direction, and a strategic influence. Beyond the mere implementation of this structure, the disclosure of information exchange between stakeholders, from a firm’s managers to its investors and other regulators.

FIGURE 1: The three components of holistic sustainability disclosure
about the company’s governance around sustainability-related risks and opportunities is of great importance. Content-wise, such disclosures should reflect the requirements accepted by consensus among the leading sustainability standard setters and published in the climate-prototype of the Technical Readiness Working Group (TRWG) of the ISSB.8

A RISK MANAGEMENT PERSPECTIVE

While monetary valuation of impacts is essential when it comes to sustainability reporting and disclosure to stakeholders, there are prior steps to be considered and disclosed in conjunction with a company’s overall impact. Investors should first be provided with general information on corporate activity with respect to the inclusion of sustainability topics in risk management and the overall governance structure. Companies should be encouraged to focus on the nature, type, and extent of identified risks and opportunities arising from the sustainability matters to which the company is exposed. A differentiation between different types of risks and opportunities for each sustainability matter would be advantageous since a consistent categorization and disaggregation will enable investors and other stakeholders to perform a more targeted assessment of a company’s ESG status. Usually, risks and opportunities related to sustainability matters vary depending on the region, market and industry in which companies operate.9 To account for these important disparities, a proper reporting and holistic disclosure would also include an explanation of potential differences in risks and opportunities in certain regions, markets or industries.10 Furthermore, investors and other stakeholders are keen for companies to disclose information about the identification, assessment and management of sustainability-related risks and opportunities. Such a process should also include a narrative on how companies integrate these into their overall risk management.

DOUBLE MATERIALITY – TWO PERSPECTIVES ON VALUE CONTRIBUTION

Value-to-Business (Enterprise Value)
The first component of future sustainability disclosure should represent backward-looking information with a focus on enterprise value. To promote consistent and comparable sustainability reporting, this section should provide investors and other stakeholders with relevant quantitative information about the ESG performance of the company for the current and previous reporting period. Like the three-layered logic proposed by EFRAG,11 this component should differentiate between Universal, Sector-Specific and Company-Specific disclosure.

Value-to-Society (Impact on Society)
Incorporating the double materiality perspective, sustainability disclosure should provide external stakeholders with a more detailed picture of a company’s value contribution to society.12 This second component should illustrate positive as well as negative impacts of corporate activities on socio-economic and environmental dimensions. For each dimension, a set of indicators with standardized calculation rules should be reported, displaying impacts driven by companies’ production inputs and outputs (e.g., water consumption or GHG emissions for the environmental dimension, or occupational health and safety for the social dimension).13 Further, companies should report all socio-economic and environmental impacts occurring in their value chain, including impacts of their own operations as well as impacts occurring in upstream and downstream activities. Environmental and social impacts are based on different metrics, e.g., environmental impacts can be based on tons of CO2 equivalents, social impacts in occupational health and safety on number and severity of injuries. This makes it difficult for external stakeholders, such as investors, to compare impact dimensions and form investment decisions. Thus, valuing and disclosing all reported impacts in monetary terms ensures comparability across different dimensions.

STRATEGY AND TARGET-SETTING

Component III represents the final component and focuses on forward-looking information that informs investors and other stakeholders about the strategy and how management approaches certain sustainability matters. First, companies should disclose their strategy and emphasize how the progress towards the respective objectives is measured. In order to provide more specific information, it would be relevant to investors and other stakeholders to list and explain the activities that contribute to the defined strategic targets. This explanation should include the capital and operating expenditures (CapEx and OpEx) incurred in the current reporting period in relation to each activity.14 Furthermore, each activity should be accompanied by a specific activity target and a corresponding evaluation of the progress.

Existing frameworks for sustainability reporting already oblige companies to disclose information on their sustainability strategies, but they lack further requirements with respect to an assessment of impacts.15 Meanwhile, it is evident that investors are interested not only in understanding whether the management has a strategy with clear and precise objectives and activities, but also what consequences this strategy is bringing about. Reporting about these consequences should focus on Value-to-Society and Value-to-Business and should be activity-specific disclosures, if possible, without too many redundancies. For an activity’s impact, a company should disclose all qualitative and quantitative information necessary to understand the activity’s impact on society and business. The Value Balancing Alliance (VBA) has developed and continues to refine methodologies that support impact measurement and valuation from both a backward-looking and forward-looking perspective.16

Hence, the proposed structure establishes a clear link between the sustainability strategy, the activities needed to achieve the strategic targets and the estimated impact on the society [Val-
ue-to-Society) and on the enterprise value (Value-to-Business). Investors will be able to evaluate the progress of certain activities and their contribution to the overall strategic objective.

WHY AND FOR WHOM MONETARY VALUATION MAKES A DIFFERENCE – THE ROLE OF FINANCIAL MARKETS

While the intrinsic motivation of corporate frontrunners and regulation are driving forces behind the transformation of businesses and the economy, financial market players also have a pivotal role as enablers and facilitators of sustainable transformation. In line with the overall objectives of the European Commission’s Renewed Sustainable Finance Strategy and the G7 Impact Task Force, financial market participants – particularly investors and banks – are crucial when it comes to (re)allocating capital into sustainable activities and undertakings. For them, comparability is an essential precondition to evaluate and assess the long-termism and resilience of business models and strategies. While most company disclosure is sophisticatedly prepared and diligently reported, the risk remains high that most reported non-financial information will not be comparable even within the same industry. This considerably reduces the value of sustainability reporting and might put its overall usefulness and relevance at risk.

Ensuring the meaningfulness, comparability and usability of sustainability-related performance data requires a standardized framework that renders abstract performance metrics more tangible. For better-informed risk management and investment decisions and to derive adequate measures, the focus must be on the overall resilience and transformation of a company (investee), extending the scope from a single KPI-driven assessment to a holistic evaluation of the company’s value contribution. Not only must this evaluation take economic components into account, it also needs to account for the ecological and social dimensions. While traditional reporting stops at quantifying environmental and social outputs (e.g., tonnes of greenhouse gas emissions), valuing impacts caused by these outputs would allow for a clearer understanding as to the scale of consequences. It would also enable a direct comparison of different impact dimensions.

Measuring the social and environmental impact is still a core challenge in Impact Investing. By monetizing the environmental and social footprint of companies, the VBA methodology provides an approach that enables stakeholders to translate their impacts on nature and society into comparable financial data, making it more transparent, tangible, and easier to understand and use.

Monetary units are widely used in the global market space. They are the language that business decision makers and financial market actors understand and which they are accustomed to. Corporate and investment decisions – on both equity and debt – are based primarily on monetary values and returns, as are the heuristics to evaluate business risks and opportunities. Monetary valuation provides a tangible, quantitative unit and eases complexity for financial market actors to better assess and evaluate the sustainability performance and risks, but also the opportunities, of a company compared to qualitative narratives. Monetary valuation of non-market priced impacts provides a single unit to consolidate various categories of business impacts and dependencies among business activities and the capitals on which they depend. Presenting a monetary unit for impacts also allows direct integration into existing models and can serve as a basis for shareholder engagement or other active engagement strategies.

CONCLUSION

Although – or perhaps because – corporate reporting has significantly evolved, we currently have an alphabet soup of reporting frameworks. This creates barriers to informed investor decisions and effective company steering and necessitates harmonization (e.g., via the ISSB). To date, much of the sustainability information reported by companies remains difficult to compare and interpret. A lack of common language in the field and finding the right level of meaningful information seem to be the greatest challenges.

This is why holistic approaches that consider companies’ embeddedness in their context, along the concept of double materiality, can offer a solution and enable the balancing act between impact-oriented governance, risk management and strategy. Impact measurement and monetary valuation ultimately provide stakeholders, in particular financial market players, with the information they require to make informed decisions. Such holistic sustainability disclosure will thus eventually contribute to harmonizing financial return on investment and tangible impact return on investment.

»Sustainability disclosure should enable a holistic evaluation of a company’s value contribution to allow investment decisions in line with the transformation of businesses and the economy.«


10. SASB Standards often require a discussion of potential differences in strategies, plans, and/or reduction targets for different business units, geographies or emissions sources. See, for example, Iron & Steel Producers – Sustainability Accounting Standard, Greenhouse Gas Emissions, EM-IS-110a.2. Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets, note no. 4.

11. European Reporting Lab @ EFRAG – Proposals for a relevant and dynamic EU Sustainability Reporting Standard-Setting (February 2021), p. 9.


14. Under rare circumstances or for specific industries there might be cases where there is no alignment between CapEx and OpEx listed in the Strategy & Target Setting disclosure and the classification of sustainable investments according to the EU-Taxonomy Regulation. In such cases, a company should be required to explain why the referring activity is not considered sustainable according to the EU-Taxonomy Regulation. If this is the case, a corresponding explanation should be disclosed.

15. See Sustainable Accounting Standards of the investor-orientated Value Reporting Foundation that will merge into the ISSB by June 2022.


Recoupling globally through impact

The power of impact for resilience. An example from the healthcare industry

Opinion piece

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Novartis is a multinational pharmaceutical company headquartered in Switzerland. It is one of the largest pharmaceutical companies in the world. The Novartis purpose is to reimagine medicine to improve and extend people’s lives.

Novartis was created in 1996 through a merger of Ciba-Geigy and Sandoz. Novartis and its predecessor companies trace roots back more than 250 years, with a rich history of developing innovative products.

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The COVID-19 crisis has revealed the intimate relationship between health and wealth. While early political action sought to strike a balance between protecting health and protecting the economy, the pandemic has demonstrated that the two are not in tension. Far from it. Nations that have most successfully protected their citizens’ health are those that appear to have fared the best economically.

While this idea is certainly not new, the pandemic has shed new light on the inextricable connection between health and wealth. It has also underscored the urgent need to build resilience into any health system to protect both public health and the economy – a principle taken up at the 2021 Global Solutions Summit in the webinar “Health investments for social and economic prosperity.”

Central to the notion of learning from the teachings of the pandemic is the need to address increasing social disparity and rising inequities, as well as the looming climate crisis. This idea of “recoupling” on different levels shines through the various calls for renewed resilience, as evidenced by the United States’ Build Back Better plan, the World Economic Forum’s White Paper “Building Back Broader,” and the motto of the G20 Presidency of Indonesia 2022, “recover together, recover stronger.”

MEASURING IMPACT

In September 2021, the G20 Global Health and Development Partnership put forward a policy proposal to the 2021 G20 President, Mario Draghi, aimed at integrating resilience into health systems. Underpinning these measures is the paper “If we can’t measure it, we can’t fix it,” a report to the G20 Presidency and B20 Health Taskforce by the WiFOr Institute. The report argues that it is essential the health sector is assessed through the lens of a social return on investment (SROI). This enables governments to assess continuously how successfully the ambitious target of resilient health systems is being achieved. The policy brief comes with implications for the private sector. To understand the SROI of health, governments need to ask the sector and its companies to articulate their impact on society.

»To understand the SROI of health, governments need to ask companies in the sector to articulate their impact on society.«
»A clear understanding of impact serves to recouple business and social interests.«

assessing impact, even suggesting that these impacts should be valued, for example in monetary terms. The principle is that by converting social, environmental and economic impacts into a common monetary unit, they can be more easily compared.

The notion of impact resonates broadly, including among some governments. At the Impact Finance Forum in Bern in September 2021, Swiss Federal Councillor Ueli Maurer made clear that measuring impact will be essential for the credibility of sustainable finance in Switzerland. Australia has applied regulatory impact assessments on all larger policy decisions for a while now, and so too have Canada and a number of other countries.

MANAGING IMPACT
This growing interest at national level fits with a range of other supranational efforts that express an ambition to look to impact as a means of better understanding the positive and negative effects an activity or a decision can have on a broad range of stakeholders. The United Nations, the Organisation for Economic Co-operation and Development, the Capitals Coalition, the Global Impact Investing Network, the Global Reporting Initiative, Social Value International, the Value Reporting Foundation and others jointly launched the Impact Management Platform to set standards and issue guidance to bring the practice of impact management into the mainstream for organizations and investments.

While regulators are working on the frameworks for impact metrics, practitioners in the private sector (investors and corporations alike) have already evolved their impact approaches to considerable maturity. Take, for example, the Dutch pension fund PGGM and the Liechtenstein banking group LGT. Both investors make sustainability central to their corporate strategy and apply the impact lens consistently to their portfolio of investees.

On the corporate level, the Value Balancing Alliance – an affiliation of multinational companies focused on creating a way of measuring and comparing the value of business contributions to society, the economy and the environment – has shown feasibility and relevance by standardizing impact valuation.

Their efforts have been instrumental in proposing impact valuation standards for corporates and its application in business. Based on their work, it is revealing to see how a clear understanding of impact serves to recouple business and social interests. For that, let’s zoom into a concrete example of Social, Environmental and Economic (SEE) impact valuation at Novartis.

IMPACT VALUATION IN ACTION
The use of SEE impact valuation across Novartis global operations began with a clear hypothesis: that it would enable broader and deeper engagement with stakeholders; that it would support decisions in favor of improvements deemed positive by all stakeholders; and that it would contribute to more meaningful corporate disclosures. At its core, it would provide a means of reconnecting the business with the communities in which it operates, and of articulating the effects of the business – positive and negative – beyond the operational need to employ people and beyond the legal obligation to pay taxes.

This was the DNA of the movement right from the start, when in 2015 and 2016, pilots were conducted in Kenya and China covering direct, indirect and induced environmental and human capital impacts, immediately followed by South Africa, introducing the social impact of medicines.

By 2021, more than 30 Novartis country organizations were drawing on local impact valuation results to derive insights and engage with stakeholders. In total, data is now available for 189 countries, covering both actual and forecast results for the company’s own operations and its supply chain.

Over the six years of its application, the approach has successfully confirmed the initial hypothesis, serving to deepen engagement with stakeholders internally and externally. Country reports are used as the basis for multi-stakeholder dialogue and interactions with government, providing crucial data on which to base business decisions across a range of topics. Increasingly, country organizations are asking for forward-looking reports on their projected national impact, recognizing the opportunity they offer to make improvements as they go. For example, in India, where sickle cell disease continues to represent a major burden on the health system in several states, Novartis country representatives sought impact projections to demonstrate how a new treatment would affect public health. These projections then formed the basis of discussions with health authorities and payers, ensuring access for patients.

And there is evidence that the tone of the conversation is starting to change, as more external bodies start proactively to seek impact data from healthcare companies. In Saudi Arabia, the government has set out a strategy detailing its plans to support the UN Sustainable Development Goals to the end of the decade. As part of these goals, it is asking companies like Novartis to articulate how they will contribute to achieving them. The SEE impact reports provide the data needed to answer this question.

IMPACT AS A DRIVER FOR CHANGE
The implementation of impact valuation at Novartis has demonstrated that improved awareness leads to improved decision-making. Enabling corporations to consider elements that are traditionally considered outside the boundaries of the business, the approach offers a means of measuring these so-called externalities, converting once vague impacts on society and the environment into tangible metrics that can be applied in day-to-day business decisions.

Indeed, it is interesting to note that as soon as internal stakeholders are equipped with concrete data and a systematic approach to measuring impact, their thinking rapidly evolves – as demonstrated by the experience at Novartis. Moving beyond an awareness of risk (which tends to be the basis for considering environmental externalities in particular), the approach inspires instead a focus on areas for improvement and business opportunities.
Recognizing the value of this mindset, and the role it can play in recoupling corporate and social interests, Novartis is working to educate employees in how and why to integrate impact into business decision-making, for example through use of a digital game.

»Future progress in recoupling industry and society will depend on our ability to understand, measure and act on impact.«

In turn, engagement with external stakeholders is strengthened by improved internal dialogue and awareness. Understanding and measuring impact provides a tangible set of values that can form the basis of more constructive dialogue, helping to engender a shared perspective and create the bedrock for shaping a common future forward.

WHAT NEXT FOR IMPACT VALUATION?
The notion of impact evidently resonates strongly across geographies. The Co-Creating Impact Summit 2021, which combined external perspectives from groups including the Access to Medicines Foundation, Oxford University and OECD with an account of impact valuation and materiality experiences within Novartis, attracted more than 1,800 registrants from 55 countries.

It is also encouraging that the external landscape is increasingly receptive. With large supranational organizations making the expression of impact a requirement in reporting, and identifying measures of inclusiveness, well-being and social responsibility as an imperative in both the pandemic recovery and the path to net-zero, impact reporting is becoming a shared lexicon. As a result, the balance is shifting from a “push” by companies like Novartis to a “pull” from organizations like the OECD and G7, ensuring the conditions are right for impact reporting to become a recognized benchmark in assessing the intersection of corporate and social imperatives.

Certainly, many questions remain unanswered. The Aspen Business and Society webinar (December 8, 2021) asked whether environmental, social and governance (ESG) metrics are improving corporate performance and achieving social and environmental goals. For now, the answer is no, because until ESG metrics fully embrace impact – and ideally monetized impact at that – they cannot express what matters to society or the environment, and thereby make a difference. However, with interest growing in the area, intensive study and more resources, the right approaches will emerge as standards. And as data becomes available, significant gaps will be closed.

For years it has been clear that sustainability and ESG considerations for industry are here to stay. With corporations embracing the opportunity to better understand and take accountability for their impact, the movement is gathering pace.

Impact has emerged as a critical measure of performance, and a better understanding of it will play a vital role in overcoming the geographical and social disparities made greater by the pandemic and set to grow on the path to net-zero.

The road ahead may not always be comfortable for industry. Impact valuation represents a new level of scrutiny that requires all stakeholders to challenge the status quo. But future progress in recoupling industry and society, in overcoming barriers at every level and shoring up resilience in health systems worldwide will depend on our ability to understand, measure and act on impact.

Impact metrics are here to stay.

1 OECD COVID-19 Recovery Dashboard
3 The Build Back Better Framework | The White House
4 Building Back Broader: Policy Pathways for an Economic Transformation | World Economic Forum (weforum.org)
5 Indonesian G20 Presidency
6 Open_Letter_Prime_Minister_Mario_Draghi_H20_Summit.pdf (h20annualsummit.com)
7 Microsoft Word – G20_Health_Metrics_R01_G20_B20.docx (wifor.com)
8 Reports | Impact Taskforce (impact-taskforce.com)
11 Regulatory impact assessment – OECD
12 Impact Management Platform — Manage sustainability impacts
13 Impact investment | PGGM
14 Impact Investing (lgtcp.com)
15 Piloting results – Our Work – Value Balancing Alliance (value-balancing.com)
16 https://www.cci-summit.com/
17 https://www.aspeninstitute.org/events/esg-reporting/
Economic growth through social development

India’s approach to sustainable prosperity

Opinion piece

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“Each nation has a destiny to fulfill, a message to deliver, a mission to accomplish. … The mission of India has been to guide humanity.” Swami Vivekananda (1863–1902), abridged composite quote.¹

Driving transformative socio-economic development with the consensus of almost 1.4 billion citizens in the world’s largest, most diverse democracy is a challenge at the best of times. In early 2020, as the COVID-19 pandemic swept the world, causing millions of casualties and financially devastating even the most developed countries, India was faced with an epic humanitarian and financial crisis.

At its outset, the novel virus could have decimated India’s densely packed population, especially given the inadequate healthcare infrastructure. This acute vulnerability forced the government to impose one of the world’s strictest lockdowns,² distressing citizens with abrupt losses of employment and income, and displacing millions of poor from urban hubs.

It is now 2022, and the pandemic continues unabated. In the interim, India has battled a second deadly wave of the virus; developed a homegrown vaccine and scaled up production of a licensed one; administered over 1.64 billion vaccine doses³ to residents (January 2022); and supplied 138+ million vaccine doses⁴ and other assistance to over 150 countries.

Equally remarkable, is the survival – and ongoing revival – of its economy. Despite the odds, India has continued reforms in financial inclusion, social inclusion and security, access to digital and physical connectivity, and public-private partnerships.

In 2021 – the 30th anniversary of its economic liberalization in 1991 – India received its highest-ever foreign investment of USD 81.72 billion,⁵ a global recognition of its robust economic fundamentals and democratic governance. The International Monetary Fund predicts India’s GDP growth to rebound to 9% in FY2021–22 and FY2022–23⁶ given the wide-ranging fiscal, monetary and health responses to the pandemic, and policy-led reforms.

CATALYZED BY CRISIS: THE EVOLUTION OF INDIA’S SOCIO-ECONOMIC POLICIES

Several national and global crises have shaped – and catalyzed – India’s social and economic evolution since its Independence from British rule in 1947. The socialism-fuelled policies of the next four decades eventually led to a financial collapse, triggering economic liberalization and globalization in 1991. The fall of the “Asian Tigers” in 1997,⁷ the Great Recession of 2008,⁸ and the ongoing pandemic have all influenced dramatic reorientations in India’s policies.

India has evolved a unique developmental model by unifying the tenets of market economics with social welfare to grow from an impoverished colonial relic, to an inward-looking socialist republic, to today’s globally integrated emerging economy.

This effort to build the economy by improving the quality of the lives and livelihoods of its masses – and vice versa – draws upon the Indian society’s civilizational inclination towards social equity. This temperate approach to governance, instead of either “winners-take-all” capitalism or stifling state-imposed socialism,
India’s people-centric yet market-oriented ideas and initiatives are becoming a valuable export in an increasingly fractured world. Adopting similar principles of inclusive growth, rooted in the socio-cultural milieu of each nation, could help build a more harmonious and equitable global order.

India’s post-colonial history reveals some valuable learnings that are shaping this “New India”.

**CONQUERING COLONIALISM: INDIA’S RISE FROM THE ASHES OF ITS PAST**

In 1947, India won hard-fought freedom from centuries of British colonial oppression and exploitation that began in early 1600s. The East India Company, a monopolistic mercantile behemoth, subjugated the country using administrative and trade machinations, and was succeeded in 1858 by the harsh, direct rule of the British crown.

India’s unique developmental model unites the tenets of market economics with social welfare.«

Economist Utsa Patnaik, in her 2016 book *A Theory of Imperialism*, estimates that Britain drained over 9.2 trillion pounds (about USD 45 trillion today) from India between 1765 and 1938. Historian Angus Maddison notes that India’s share of world GDP – 22.4% compared to Western Europe’s 21.9% in 1700 – fell to 4.2% by 1950. Systematic de-industrialization by Britain using the export of raw materials and import of finished goods, punitive taxation, misuse of India’s people and resources for wars, and other depredations made India one of the world’s poorest countries by mid-20th century.

The intangible costs of the colonial occupation are immeasurable, and their impact, indelible. It led to the catastrophic partition of India and Pakistan in 1947 and left India, once revered by the British as the ‘Jewel in the Crown’ due to its vast wealth and resources, in social disarray, communal disharmony, and economic ruin.

It has been a long and arduous journey for India and its citizens to rise once more from those ashes.

**A STATE OF CONTROL: THE RISE AND FALL OF SOCIALISM**

After Independence, India set up a parliamentary system of governance and its Constitution defined it as a sovereign democratic republic. The post-colonial economy was still controlled by foreign firms, poor agricultural output was forcing food grain imports, there was almost no infrastructure, and the population was destitute.

The government’s response was to institute socialist policies that vested near-full control of India’s socio-economic development with the state.

It set up a Planning Commission in 1950 to devise Soviet-style five-year plans to centrally develop national priority areas from inception to resource allocation, implementation, and appraisal. The First Plan, launched in 1951, prioritized agricultural output; the Second Plan tried to set up the public sector as the industrial core.

The Industrial Policy Resolution of 1956 allocated all key industries to the state, including defence, iron and steel, heavy machinery, oil, coal, mining, rail and air transport, telephony, and power. Several other “scheduled industries” required convoluted licensing.

This aggressive and pervasive government control over industry scuttled the private sector and stifled India’s economic growth between 1950 and 1990.

Redirection of funds from agriculture to industry exacerbated food shortages and import dependence. The currency was devalued in 1966 in a failed attempt to balance the trade deficit. In 1969, several private banks were nationalized to control their lending. Income tax rates peaked at up to 97.75% in the highest slab in 1973–74, leading to massive tax evasion. A Planning Commission study on the Public Distribution System noted that only 16 paisa of each rupee (100 paisa) reached the targeted poor.

Unfavorable regulatory regimes, red-tape wielding bureaucracy, lack of accountability of job-secure public sector workers, companies crippled by rampant trade unionism and strikes, protectionism against imports, lack of foreign investment, and the dreaded “license raj” – the rule of licenses – led to high-cost, low-quality goods and services, cronism, deep corruption, and an exodus of skilled workers to the West. Hostile policies made most multinational corporations exit India.

By the 1980s the middle class was Restore due to the lack of growth, and their poorer counterparts, dejected from all-round socio-economic deprivations. In 1991, a balance of payments crisis pushed India to the brink of bankruptcy. With only enough foreign exchange to pay for a few days of imports, it pledged 67 tons of gold to foreign banks for funds and devalued the rupee twice in three days.

Though the gold was reclaimed by the year-end, this was the death knell for India’s socialism-riddled economics and led to a drastic shift in the role of the government in nation-building.

**THE L-P-G CONNECTION: INDIA’S EXPERIMENTS WITH LIBERALIZATION, PRIVATIZATION AND GLOBALIZATION**

In 1991, the government introduced bold fiscal and market reforms, a watershed fiscal and market reforms, a watershed «

...
raj; removal of public sector monopolies; privatization of sick public sector units; tax and tariff reforms to entice private and foreign investors; and India joining the World Trade Organization.

It was a risk to allow foreign companies back into a country in economic distress and ill-prepared for global competition, but the gambit worked. India’s GDP (at current prices) jumped from USD ~275 billion in 1991 to USD 3.1 trillion by end-2021. Today, India is the third largest economy by GDP (PPP, USD), after China and the US.

**ECONOMIC GROWTH THROUGH SOCIAL DEVELOPMENT: THE MANTRA FOR NEW INDIA**

Even as India was recovering from the setbacks of its socialist past, the world was rocked by the 2008 financial crisis caused by reckless capitalism. The government realized that pure capitalist or socialist economic models are unsuitable for the large population comprising a sizeable poor segment. Only a solid public-private economic bedrock could efficiently support the scale of its welfare schemes.

The pandemic has reinforced this idea to grow economic activity to enhance social equity, creating a virtuous cycle. India’s social and economic realignments now have complementary and interlinked reforms and initiatives built upon four pillars: financial inclusion, social inclusion and security, digital and physical connectivity, and efficient implementation through public-private partnerships (PPP).

A major initiative is the JAM (Jan Dhan, Aadhaar, Mobile) trinity, which has led to unprecedented financial, social, and digital inclusion at the grassroots through public-private collaboration. Over 430 million Jan Dhan (people’s wealth) bank accounts (August 2021) are providing poor beneficiaries Direct Benefit Transfers (cash deposits) of welfare schemes and access to low-cost financial products and services, freeing them from middlemen and moneylenders. Over 1.3 billion biometric Aadhaar identity cards (October 2021) akin to the US social security identification number, provide residents verifications and welfare claims. Affordable mobile telephony, digitalization of citizen services in local languages, and online payments are making routine transactions accessible, convenient and corruption-free.

The government is improving the social inclusion and security of the masses by delivering essentials like housing, water, energy, and healthcare via national missions. In 2005, it started a national rural employment guarantee scheme to provide 100 days’ wage employment per year as “right to work”; this has ~152 million active workers today and has led to significant poverty alleviation. All villages and willing households were electrified by 2021, with the aim to provide 24x7 power for all; almost 9 million free LPG cylinder connections have been given to poor households between 2016 to 2021 for safe and clean cooking; 19.25 million rural homes will have piped water by 2024; and India now has the world’s largest public-funded healthcare program with 500 million beneficiaries.

Major strides in physical and digital connectivity have improved citizens’ access to goods and services. Telecom sector liberalization and privatization since the 1990s have led to positive competition and the proliferation of mobile and digital connectivity even in rural areas, making India the world’s second-largest telecom market with 1.16 billion subscribers. This proved invaluable during the pandemic, allowing millions to work, learn and shop from home, and facilitating nationwide vaccination.

PPP has also been key to expanding road, freight and air networks. India’s 6.2 million km road network (November 2021, up from 0.4 million km in 1950) is the second largest in the world, while Indian Railways ferried over 8 billion passengers and 1 billion MT of freight even in 2020. A cross-country network of airports is being built to make commuter flying affordable.

PPP is helping 63+ million medium, small and micro enterprises, which employ 40% of India’s 450-million strong workforce, integrate into the economic mainstream by improving their credit-worthiness and business processes. Entrepreneurship-oriented initiatives are driving the financial inclusion of new businesses, women-led enterprises, and local industries and artisans.

Collaboration with corporates is bringing efficiencies into government programs and creating new markets. India’s globally acclaimed LED lighting scheme saw LED prices reduced by ~90% between 2014 and 2017 due to economies of scale created by bulk government orders from private firms; this in turn hiked domestic manufacturing of LED bulbs from 0.1 million to 40 million units per month. A similar public-private model has been adopted by the national housing mission to provide affordable high-quality materials to poor beneficiaries.

The government is maturing into its role to create favorable policies and provide large procurement and deployment avenues for the private sector, which is then offering high-quality goods and services, made affordable through economies of scale, even to micro-markets via public channels.

However, despite many advancements, major challenges remain.

**VESTIGES OF THE PAST, CHALLENGES OF THE FUTURE**

Agriculture, which employs about half the population, is still mired in socialist politics preventing its modernization, and contributed barely 20% to India’s GVA in 2020–21. The freebie-afflicted power sector is also in the doldrums, with distribution companies owing INR 1.2 trillion to power producers (January 2022). India needs to fix its food basket; climate-proof its communities and infrastructure; properly manage land, water and other resources; improve access to, and quality of, education and healthcare; and serve the gender
equity, social dignity, and upward mobility aspirations of its citizens.

Building a post-pandemic prosperous and resilient economy needs a new social contract between the state, citizens, enterprise, and global allies to use capital, skill and innovation to achieve the trinity of jobs, growth and sustainability.

For example, the Green Revolution, started in 1968 with the sole aim to solve food scarcity, has led to haphazard development of the agri-sector. India is now self-sufficient in select cereals and sugar – at the cost of excluding most other produce from the food basket, degraded topsoil, poor crop yields without heavy fertilizer use, and depleted groundwater and biodiversity. Low, uncertain incomes are pushing small and marginal farmers to non-farm activities, mostly low-wage labor work in cities.

Increasing convergence of sensible public policy, increasing public-private financing and innovation, grassroots action, and overall better economic conditions of citizens are changing this. India is among the top 15 global exporters of agricultural and allied products (USD 41.25 billion in FY21), the world’s sixth largest food and grocery market, and third in agri-tech funding, with USD 30–35 billion expected by 2025. Food grain production for FY2022 is targeting a record ~307 MT (~303.34 MT in FY21).

Sustainable agricultural practices like organic farming (currently only 2% of India’s net sown area), natural farming (practiced by less than a million of approximately 100–150 million farmers) and integrated farming also offer opportunities for India and its G20 allies to boost the sector’s economic output and provide social and ecological safety nets for the ecosystem.

**BEATING THE BINARIES: THE VALUE OF INDIA’S PEOPLE-CENTRIC CAPITALISM**

Governance models espousing unbridled personal freedom and enterprise come with the caveat of a lack of social support. Pure capitalism breeds remarkable – but unequal – growth, eventually creating huge economic disparities that lead to social disquiet. The rise of populism in capitalistic societies is a sign of people’s frustration with only materialistic definitions of prosperity.

At the other extreme, socialism, even by India’s experience in a democratic set-up, represses people and pushes them to economic and intellectual penury – and dissent. This underscores the inherent desire of people to use their agency to build constructive societies and enriched, meaningful lives.

Every nation should, therefore, dismiss these dogmatic definitions of governance systems and choose its developmental pathways according to its unique priorities – with social good at the centre.

India’s people-centric capitalism, balanced by its electoral democracy, encourages entrepreneurship and industry without infringing on social and cultural freedoms. The ambition is to be Aatmanirbhar i.e., self-reliant – neither owned by the state nor at the mercy of corporates – a nation that is truly of the people, for the people, and by the people, as envisaged in the Constitution.

India has learned the hard way to beat the binaries, and blend the traditional and the modern, the urban and the rural, the industrial and the social, and the spiritual and the rational, in its quest for progress. As it celebrates the 75th anniversary of its Independence in 2022, battling a pandemic while nurturing the dream to become a USD 5 trillion economy by 2025, India is emerging as a beacon for humanity.
Scaling impact through responsible leadership

Creating the future we want by fostering “tech for good”

Opinion Piece

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The BMW Foundation Herbert Quandt promotes responsible leadership and inspires leaders worldwide to work towards a peaceful, just, and sustainable future in line with the United Nations 2030 Agenda. It inspires leaders across communities, cultures, and countries and connects them through its global Responsible Leaders Network. The BMW Foundation invests in the future by supporting economic and financial system transformation within the framework of the UN Sustainable Development Goals, with the aim of achieving a healthy balance of economy, society, and environment.

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Keywords:
Responsible leadership; Tech for good; Sustainable business models; Impact investing; Radical collaboration

Global challenges, from social inequality to the climate crisis, although daunting in their magnitude, can be solved. How? By mobilizing “tech for good” solutions in line with the UN’s Sustainable Development Goals, which act both as an enabler for advancement and as a framework to create bridges between disparate corners of the globe. Key to this will be that technology and business work together seamlessly and symbiotically, and align to a higher purpose. To achieve this, three conditions must be met.

1. Responsible leaders must adopt a “dare to act” and “dare to change” mindset.
2. Tools to enable progress, such as accelerator programs and impact investing, must be leveraged.
3. Deep and meaningful collaborations should reverberate across sectors and geographies.

If these conditions are met, systemic change may just be within reach.

Let me give you a personal example.

“Do you want to advance in engineering and science, or do you want to have social impact?” This was the question my sister Yasmine Aguib and I faced from peers in Europe, back in 2014 when we both found ourselves on the cusp of a career change. And it’s a misguided question still asked today.

Yasmine is a molecular biotechnologist and I, a biomedical engineer, but we craved more. Our work was important but we had a deep conviction that it could have exponentially more impact if only we could apply our technological and scientific expertise to the greater good.

Then I met Professor Sir Magdi Yacoub. The world-renowned cardio-thoracic surgeon based out of Imperial College London had founded the Aswan Heart Centre in 2009. Situated on the banks of the Nile, the center provides state-of-the-art health-care services free of charge – a lifeline for vulnerable Egyptian communities. When Prof. Yacoub invited me to set up a center for translational, integrated heart disease research there, it was clear this was what we had been seeking.

Within two years we had set up the Aswan Heart Research Centre – and led a gender balanced team of gifted biologists, engineers, bioinformaticians and the like, united in their quest to advance cutting-edge interdisciplinary research for the benefit of those who need it most. This was not development work, this was geographically relevant, world-class science and technology, with social purpose at its heart.

ENGINEERING CHANGE ON A GLOBAL LEVEL

Today, I am an executive at the BMW Foundation Herbert Quandt, responsible for RESPOND, the first accelerator program to promote both responsible leadership and sustainable business models in line with the UN 2030 Agenda. I also head up our sustainable finance and impact investing work area. I tell this story because it’s at the core of what needs to change within technology and the way we do business. Although the two fields often work hand in hand, an underlying higher purpose is often missing from both.

While racial and social injustices rage on, the climate crisis is reaching a fever pitch, and global threats such as runaway viruses threaten to topple fragile economic systems. We’re 100 seconds to midnight, say the Bulletin of Atomic Scientists, and...
yet many of the world’s leaders continue to drag their heels.

»Technological solutions can affect systems change – that is, change that serves all stakeholders, not just shareholders.«

But there are solutions. The UN 2030 Agenda and its 17 Sustainable Development Goals (SDGs) provide a comprehensive, universal framework to address global challenges, and transboundary political institutions such as the G20 and G7 are uniquely positioned to engineer change. There is no shortage of talent and solutions, but rather a shortage of responsible leaders – changemakers who are willing to abandon the either/or complex.

This ingrained, restrictive state of mind doesn’t allow for ‘outside-the-box’ thinking. It dictates, for example, that if you do science and tech, you don’t work for the good of society, that the Global North and South are economically incompatible, or that big corporates have nothing to learn from small startups. It is a mentality forged through siloed education systems, outdated notions of progress and success, and lack of foresight as to the potential of tech for good.

I believe that there does not need to be an either/or. By concentrating on interconnectness and inclusivity – not just between technology and business, and higher purpose, but between the global village – sustainable solutions for those who need them most, can proliferate. Technological solutions can affect systems change – that is, change that serves all stakeholders, not just shareholders. Because when tech for good solutions are applied to environmental and social problems, the potential to create impactful change is nearly limitless. From FACILit4, the French start-up making the internet accessible to all, regardless of cognitive, visual or physical impairments, to the Nigerian startup Brickify, which makes affordable homes from bricks made of waste plastic, inspiring solutions are emerging. But the ecosystem behind them needs to be bolstered.

RESPONSIBLE LEADERSHIP STARTS WITH A MINDSET

Developing a responsible leadership mindset means rejecting the either/or complex and re-writing the status quo. For example, in the construction industry, the prevailing mindset is “new is better,” a dangerous view to have when the industry accounts for 38% of global greenhouse gases.7 In the past, buildings were constructed to last at least 100 years. Today, the average lifespan is around 40 years and only around 1% of materials8 in older buildings are reused. But this doesn’t need to be the case.

German startup Concullar4 is pioneering a circular economy approach in the construction industry, by carrying out assessments of older buildings due to be demolished, identifying materials that can be reused, and selling them on to architects for use in new buildings. In creating this sustainable model, founders Dominik Campanella and Julius Schäufele actively turned away from the dominant narrative in their industry.

On the flipside, as well as internalizing a mindset shift, responsible leaders must encourage other stakeholders to adopt this approach. Belgium-based startup Resortecs10 has created dissolvable stitching and buttons for the fashion industry, a technology that could greatly increase recycling rates of textiles. Buttons, zippers and the like are usually removed by hand, greatly slowing down the recycling process. According to co-founder Cédric Vanhoeck, the fashion industry could reduce its carbon footprint by half with better recycling, and investors are very interested in their innovation. But it’s proving to be challenging getting brands on board. “We need to see a shift in how brands look at sustainability,” he said.11 “They need to stop treating these things as small pilots. They need to see it as the gateway process to revolutionize their industry. We need a mindset shift.”

TOOLS AND VEHICLES TO IMPLEMENT CHANGE

Mindset will only go so far. The mass shifting of capital towards the public good is an imperative, so are visionary entrepreneurial programs such as business accelerators.

Even before the COVID-19 pandemic, financing for the SDGs was in short supply. Now there is a projected USD 4.2 trillion financing gap12 annually for emerging economies; ironically, this amounts to just 1% of the total assets held by banks, institutional investors, and asset managers. At the same time, countries with emerging economies hold just 20% of financial assets while also being home to 80% of the global population.13 This also means that the people contributing to the global economy through resources and labor necessary for production, are not seeing sustainable financial return.

Encouragingly, there are signs of change. Investments that integrate environmental, social and governance (ESG) criteria, continue to gain traction. “It’s the big story of the last few years, the rise and rise of ESG,” said Catherine Howarth, CEO of ShareAction,14 in a recent talk on sustainable finance for the Transform Europe conference.15 indeed, when the largest asset manager in the world – Blackrock – commits to integrating ESG into 100% of their portfolios,16 it feels safe to use the word “mainstream.” Funds such as WorldFund17 and Scottish Mortgage,18 which acquire holdings in future-thinking businesses like EV battery manufacturer Northvolt,19 are making a name for them.
selves. And the David-and-Goliath story of Engine No. 1, the tiny, activist hedge fund that succeeded in getting three members elected to the board of ExxonMobil, is cause for optimism.

Additionally, accelerators such as RESPONSE and organizations like SPRIND,20 which fund “disruptive innovations” in Germany, offer tangible pathways for entrepreneurs to break ground. There are inspiring examples from government as well. Germany’s Future Fund21 is facilitating the flow of billions of euros worth of capital to innovative startups, and the “funds of funds” AfricaGrow,22 set up by KfW Development Bank and Allianz Global Investors on behalf of the German government, will “finance 150 innovative small and medium-sized enterprises (SMEs) and startups in reform-oriented African countries through local funds by 2030 in order to promote sustainable economic and social development.”

Yet further power for change lies in understanding impact. Through impact measurement, companies identify their positive and negative effects on the world around them, and seek to elevate the former while mitigating the latter. Impact investing, similarly, zeros in on the net effects of finance. Just like entrepreneurs whose profits are inseparable from their positive net impact on the world, the financial returns linked to impact investments are intimately connected to socially and environmentally-driven results on the ground. And like ESG, these types of investments are booming. According to the Global Impact Investing Network, impact funds managed USD 715 billion in 2020, up from USD 8 billion in 2012.23 And importantly, policymakers are taking note.

RADICAL COLLABORATION

At the G7 Summit in the UK last year, the Impact Taskforce was convened.24 Made up of a multi-sectoral group of business and policy stakeholders, including senior figures from Blackrock, Schroders, the World Bank and the European Commission, the independent taskforce will seek to create financial vehicles that deliver benefits for people and planet. Crucially, impact investment in low- and middle-income countries hit particularly hard by the pandemic, is a focus.

The first results of the taskforce have been presented in a new report,25 which the German government should advance during its G7 Presidency in 2022. This year will be critical to the long-term success of the recommendations, which include but aren’t limited to: a call to mobilize institutional capital to create positive outcomes in line with the SDGs, particularly in emerging markets, and strengthening the voice of local communities, for a just transition.

Such multilateral efforts are prime examples of radical, meaningful collaboration, which is the third ingredient needed if tech for good solutions is to thrive, and is one of the unifying forces behind the BMW Foundation Responsible Leaders Network.26 Leaders from all walks of life and corners of the globe are linked together through their sense of shared purpose and values. And through their interdisciplinary talents, seeds of change grow. For instance, out of the collaborative spirit of the network, The Gender Alliance27 was born. This group of 30 women and men are leaders in fields as diverse as cyberlaw and diplomacy,28 and now work together to accelerate gender equality. Without radical collaboration and an agenda-pushing mindset as their foundation, they would not be doing this meaningful work.

SYSTEMIC SUSTAINABLE TRANSFORMATION

Achieving wholesale systems change won’t be straightforward. In addressing the root causes of geographically-contextual environmental and social problems, many rules will need to be re-written. And there will be winners and losers. But complex global systems require complex, globally focused solutions. Luckily, there are some shining examples from the corporate, entrepreneurial and finance sectors.

B Corp29 certified companies balance purpose and profit, and are legally required to consider the impact of their decisions on workers, customers, suppliers, community and the environment. Indeed, if you’re looking for a group of companies that have torn up the rulebook and are rewriting it step by step, B Corp companies certainly fit this bill.

The number of certified companies since 201729 has grown over 46%.30 And no wonder: studies have found that being certified sends a credible signal to stakeholders about the sustainability of the business. Not only that, becoming a B Corp has a positive effect on turnover growth.32 Big and small companies in tech sectors, from WeTransfer to sustainable banking platforms such as Tomorrow,33 have joined the force.

Armin Steuernagel’s Purpose Economy,34 likewise, seeks to create a new economic narrative from the ground up, by supporting alternative ownership and financing models for businesses. The “think-and-do tank,” Sistemiq,35 meanwhile, is working at the forefront of deep, transformative economic change.

But the movement needs to swell further. Key to this will be a generation of responsible leaders ready to take on the challenge; responsible leaders who are unafraid to go against the grain of conventional “wisdom” and see the world not in binary terms but as an interconnected ecosystem, ripe for transformation.

IN THIS SPIRIT, I IMPART FOUR KEY TAKEAWAYS.

First, the SDGs are an invaluable framework for tackling the world’s challenges, in a trans-geographic way. Technological solutions leveraged with the Global Goals in mind, can thus act as a significant enabler of all that they represent. And importantly, tech for good can help G7 and G20 policymakers not just to align with the Goals, but meet them.

Let’s use the momentum and rally behind the UN 2030 Agenda in order to build a sustainable world by the end of the decade, and far beyond.«
Second, responsible leaders, although growing in number, are still too few and far between. They must be forged through a breaking down of the either/or complex. This can be achieved through focused vehicles for change such as accelerator programs, and continued collaboration between diverse industries, education, and government. Such measures can strengthen and empower innovation ecosystems.

Let’s tear down silos and scale our collective impact.

Third, impact investing and impact measurement must continue to be built up. Ideals alone will not be enough. We are excited to see how the recommendations from the G7 Impact Taskforce play out this year and encourage more leaders to develop such multilateral, multi-sectoral initiatives to further push the financial sector towards a framework that is truly sustainable, on paper and in practice.

Let’s make money work harder for all.

Finally, we need to celebrate our successes more. The new storyline should be “it’s not news unless it’s good news.”

Let’s change focus to change, champion the collaborators, and nurture those who dare to disrupt.

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4. RESPOND accelerator programme, https://respond-accelerator.com
6. FACILiti, https://www.faciliti.com
27. The Gender Alliance, https://thegenderalliance.com
31. Figure calculated by using 2017 level found in reference #26 and current figure, taken from bcorporation.net.
35. Sistemiq, https://www.sistemiq.earth
Measuring economic integration within the G20

The G20 needs to contribute to active cooperation in reducing trade tensions

Policy brief

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Economic integration, Trade tensions, Open regionalism, Trade intensity index

InTRA-G20 TRADE INTENSITY

OVERALL INTENSITY
First, intra-G20 trade intensity was below 1.0 for most of the period, showing that trade relations of G20 member countries were slightly biased toward trading with extra-G20 partners for those decades [see [Figure 1]]. Second, it exhibited a downward trend before the inception of the G20. The downward trend is likely to have been driven by the G20’s increased extra-G20 exports and imports. As the incomes of non-G20 emerging countries grew faster in the early 2000s, exports to non-member countries rose. For the import side, member countries with big manufacturing sectors began to import raw materials more from non-G20 countries. Third, the index shows a steady rise after 2012. The momentum, however, weakened from 2017, and weighed down afterwards. Trade tensions, geopolitical risks, and the corresponding rise in trade costs and non-trade barriers are likely to have affected this recently reversed trend.

INTRODUCTION
The Group of 20 (G20) summit, launched as the “Global Premier Economic Forum” in 2008, has played a key role in solving “global problems.” It has contributed to implementing necessary reforms for the global economy, responding to global crises, and creating an environment for sustainable global growth. In fact, the G20 has enough economic significance to lead global economic policy agendas due to its size and ownership; the member countries produce over 80% of global output and they also have large share of voting rights in most major international organizations.

In spite of its role as “global problem solver,” the G20 has paid less attention to issues regarding the G20 itself. Protectionism has resurfaced over the last three years, fueled by trade tensions between the United States and China, and the United Kingdom withdrew from the European Union in 2020. In this age of global value chains, these developments can significantly hamper economic relations between member countries via heightened trade costs, policy uncertainties, and non-trade barriers.

In this paper, we try to shed light on the development of economic integration within the G20 countries and discuss ways forward to improve economic cooperation. In order to do that, we calculate an intra-G20 trade intensity index over the decades to compare trends before and after the inception of the G20. The intra-G20 trade intensity measures the G20’s bias for trading with the member countries as opposed to trading with countries outside the G20. Simply put, the index tells us the preference of the G20 member countries’ intra-G20 trade compared to the world’s; a unit index implies a neutral intra-G20 trade preference.

InTRA-G20 TRADE INTENSITY

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First, intra-G20 trade intensity was below 1.0 for most of the period, showing that trade relations of G20 member countries were slightly biased toward trading with extra-G20 partners for those decades [see [Figure 1]]. Second, it exhibited a downward trend before the inception of the G20. The downward trend is likely to have been driven by the G20’s increased extra-G20 exports and imports. As the incomes of non-G20 emerging countries grew faster in the early 2000s, exports to non-member countries rose. For the import side, member countries with big manufacturing sectors began to import raw materials more from non-G20 countries. Third, the index shows a steady rise after 2012. The momentum, however, weakened from 2017, and weighed down afterwards. Trade tensions, geopolitical risks, and the corresponding rise in trade costs and non-trade barriers are likely to have affected this recently reversed trend.

The economic integration within the G20 member countries moderately increased until 2017 when trade tensions resurfaced.«
The trade intensity of the intra-American and intra-European regions shows a contrasting trend compared to that of the intra-Asia-Pacific region (see [Figure 2]). The American region is the most active for intra-regional trading. This trade intensity has been greater than 2.0 from the beginning and trended to 2.5. We attribute the American region’s particularly active intra-regional trade to the countries’ complementary characteristics in terms of the level of economic development and types of industry. The passage of NAFTA in 1994 seems to have contributed to increasing the proportion of the Americas’ intra-regional trade by having a comparative advantage in price over external regions. Europe shows the second highest intra-regional trade intensity hovering around 1.3, and it also gradually trends upwards as observed in the Americas. Europe’s high intra-regional trade is because many member countries in Europe are also members in EU. This one market environment benefits from no tariffs or borders and low transaction costs, resulting in high trade intensity. Additionally, the expansion of the EU has led to the inclusion of geographically larger regions and increased diversity in member states, increasing the complementarity of trade.

The G20 needs to increase its efforts to ease trade tensions within the G20 member countries.«

»And it also needs to reach open regionalism to provide additional growth engines for the global economy.«

In contrast, Asia-Pacific is an area with rapidly decreasing intra-regional trade intensity. This difference is likely driven by the following reasons: (1) unlike other groups, this region does not have tariff benefits for regional trade, (2) most Asian member countries rely on the export-led economy, so their exporting goods are more supplementary to one another, (3) the political systems between member states are different, and (4) political conflicts stemming from historical background have not been sufficiently overcome, acting as an obstacle to trade.

Except for Asia-Pacific vis-a-vis the Americas, inter-regional trade gradually intensifies after the G20 inception. Despite relatively higher trading costs and non-trade barriers in inter-regional trade, Americas-Europe and Europe-Asia-Pacific trade intensities has grown steadily, suggesting a positive impact from the cooperation between G20 countries. By contrast, recent trade tension between China and the US seems to strengthen the case for Asia-Pacific and Americas decreasing trend.

Conclusion
Since the inception of the G20 in 2008, economic integration within the G20 member countries increased moderately until 2017 when trade tensions, geopolitical risks, and the corresponding rise in trade costs and non-trade barriers resurged. The G20 needs to increase its efforts to ease trade tensions within G20 member countries. This would reverse the recent weak trend in economic integration by reducing trade costs.
and corresponding uncertainties. It would also encourage cross-border investments, which can help reduce global imbalances.

Intra-regional economic integration within the G20 member countries has changed little, with the Americas showing the highest trade intensity followed by Europe. Asia-Pacific’s intra-regional trade has been rapidly decreasing, even after the inception of the G20, due to fewer tariff benefits, lower complementarity of exports, higher political heterogeneity and tensions from historical background. This contrasting pattern suggests that an institutional approach, such as regional FTA, has a greater impact than geographical proximity. Therefore, member countries in Asia need institutional cooperation, such as active promotion of regional free trade agreements. It is also necessary to move toward an open regionalism in Europe and America that gradually expands free trade to offshore regions.

Inter-regional economic integration of Americas-Europe and Europe-Asia-Pacific suggests a positive impact from the cooperation between G20 countries, however, the US-China trade tensions since 2017 seem to have a negative impact on Americas-Asia-Pacific economic integration.

Since its launch, the G20 has succeeded in solving many urgent and important “global problems” and helped to contribute to enhancing the soundness of the global economy and strengthening the stability of the global financial market. However, the overall picture of economic integration within the G20 member countries has not changed much. Most countries stick together regionally and turned their regional markets to provincial markets without active market opening. The G20 needs to contribute to active cooperation in reducing trade tensions and reaching open regionalism to provide additional growth engines for the global economy.

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1 The index is obtained by dividing the share of intra-G20 trade in the G20’s overall trade by the share of its trade in global trade. It has advantages over the simple trade share because it does not suffer from size bias.
2 Theoretically, inter-regional trade intensity is identical for cross region; inter-regional trade intensity of Asia-Pacific vis-à-vis Asia-Pacific should be equal to that of America vis-à-vis Asia-Pacific. However, errors and omissions in data produce discrepancies for cross-region trade intensity.
Tackling accounting

The missing piece for sustainable finance
Policy brief

I. INTRODUCTION
We are entering a new era of sustainabili-
ty and enterprise value reporting. There is
heightened attention on sustainability-re-
lated risks and opportunities, as well as on
corresponding items and changes in finan-
cial statements. The projects of the newly
established International Sustainability
Standards Board (ISSB) as well as the Eu-
ropean Union’s draft on new sustainability
reporting rules provide evidence for this
change in thinking.

However, without tackling the current
issues and difficulties of accounting at
times of deep structural economic change,
new sustainability initiatives are unlikely
to succeed.

This discussion document aims to draw
attention to these accounting deficiencies.
It encompasses issues linked to new EU
and ISSB reporting guidelines, as well as
to the debates about national performance
measures beyond GDP.

II. ACCOUNTING: THE MISSING PIECE
Climate change and efforts to mitigate
it and manage its impact are affecting
the business model, cash flow, financial
position and performance of companies
across all sectors. These factors also
have a crucial effect on the investors and
banks that provide corporate finance.

One source of impact relates to physical
risks resulting from climate change,
which may lead to direct damage of as-
sets or indirect impacts from disruptions
in supply chains, operations or transpor-
tation. Other impacts relate to transitory
risks as well as opportunities from poli-
cy, legal, technology or market changes
in response to mitigation and adaptation
requirements.¹

As a result, investors and other stake-
holders are increasingly requesting that
climate-related issues should be inte-
grated into financial accounting.² Current
International Financial Reporting Stan-
dards (IFRS) do not explicitly address en-
vironmental and climate-related matters.
Nevertheless, entities are required to con-
sider these issues in their IFRS financial
reporting.³ The same applies to European
accounting of non-publicly traded com-
panies for which the Accounting Directive
provides a regulatory framework.

Climate-related matters, among oth-
er things, may affect the recognition and
measurement of provisions or may cause
impairments (‘stranded assets’). For ex-
ample, a decline in demand or increase
in cost for high-emission products could
lead to a production facility being consid-
ered impaired, which would require that
the asset should be tested for impairment.
External information – such as significant
adverse changes in the corporate environ-

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ment including actual or expected legislative changes – would represent further indications of impairment.4

Accounting rules and procedures need to be updated to allow financial data to reflect adequately the radical upheavals taking place in economy and society. However, only descriptive sustainability and enterprise value reporting issues have been advanced worldwide during the last 20 years. The latter refers to the TCFD framework that sets a global standard of risk- and opportunity-based sustainability disclosures. It provides a basis for the frameworks being built by the ISSB,5 national regulators and the EU.6 The new enterprise value reporting system lays down common elements on how income and cash flow statements and balance sheets should reflect climate-related issues. However, the reflection of financially relevant sustainability aspects in accounting itself has not been pursued further, neither in practice nor on a broad scientific and political level.

The consequences are potentially problematic: Financial reporting does not adequately depict climate risks or any other sustainability risks.7 Stakeholders and investors have to rely on descriptive sustainability reporting only, which is insufficiently standardized in terms of subjects and measurements and is based on unaudited data.8 Furthermore, there is a danger that larger companies with better data processing capacities will have advantages over smaller competitors.

Indeed, in a recent study of financial statements of global companies in carbon-intensive sectors, over 70% of companies have not considered or disclosed climate matters in accounting.9 Yet the focus of supervision authorities appears to be intensifying. The European Securities and Markets Authority (ESMA) has set climate issues as one focus of enforcement in the European Union for 2021 annual financial reports.10

Preparing new forms of enterprise value places emphasis on sustainability issues in the numbers in the financial statements. Guidance is needed on how sustainability has to be considered practically in accounting – for large as well as small and medium-sized companies. Hence, tackling accounting is the missing piece for gaining momentum in sustainable finance.

III. TODAY’S ACCOUNTING DEFICITS AND HOW TO SECURE A TRUE AND FAIR VIEW IN ACCOUNTING

1. Basic assumptions of financial accounting

Many people think that financial information in annual financial statements simply contains “historical data.” This is a frequently voiced criticism of financial reporting, from which it is then concluded that more “future information” must be provided beyond the scope of financial reporting – for example, via descriptive sustainability reporting. However, balance sheet data is actually based on fundamental future assumptions and estimates from the perspective of a balance sheet date, such as future cost and price developments and regulatory or market expectations.

Disclosure with respect to the applied accounting policies is therefore a key element of the notes to the financial statements. According to EU accounting law as well as the International Financial Reporting Standards, such disclosure has to include, in particular, the basic measurement assumptions and judgements applied to various items.11

This is particularly important against the background of structural economic change towards climate neutrality. Key assumptions and judgements with significant effects on accounting include the extent to which various countries are expected to implement the Paris Climate Agreement and the effect on the carbon price path for companies operating in such jurisdictions. This is especially important for Germany because of constitutional requirements.12 Based on these data, e.g. impairment tests are performed to determine whether, for example, machinery assets are still profitable as originally expected or need to be impaired (“stranded assets”). Decisions are also needed on adjustments to the estimated useful life of such assets.

In practice however, the assumptions and judgements behind these decisions are hardly disclosed. As a result, accounting data lose comparability. Lack of clarity on such basic accounting assumptions hinders effective analysis. The position is comparable with two ships travelling to the same port, but assuming different weather conditions and therefore taking different courses. Each crew will say they are “on course” but will arrive at different times and incur different costs. Unless the basic assumptions behind each course are disclosed, it is impossible to compare the vessels’ current and expected performance before they arrive.

Future regulations that can already be expected at present may already have to be taken into account in the accounting. An expected ban on vehicles with internal combustion engines, for example, could therefore cast a shadow over the balance sheet data even before it is finally regulated and comes into force. In this regard, accounting does not only reflect results of the reporting company, but also political decisions and the degree of information efficiency.

»New, politically neutral structures and processes are necessary to provide reporting entities with sustainability-related basic assumptions for accounting practice at each reporting date.«

The importance of disclosure of climate-related assumptions, estimates and judgements has also been recognized by the European Securities and Markets Authority (ESMA), the EU’s securities markets regulator.13 However, transparency on key measurement assumptions, by itself, would not lead to a sufficient level of comparability. To return to the example of the two ships, unless they set their course according to the same reliable weather report, perhaps issued by government agen-
cies in cooperation with the private sector and scientific research bodies, there will be no adequate basis for comparing the two vessels’ performance.

For accounting to work and provide useful information at times of transformative structural changes, forecasts and assumptions are required that are too complex to be left to individual companies, auditors and different supervisors. New, politically neutral structures and processes are necessary to provide reporting entities with sector-specific short-, medium- and long-term basic assumptions for accounting practice at each reporting date. This requires broad research and development and shall serve to support reporting entities with their accounting practices during this time of transformation.

2. A deeper look at single accounting issues

Many companies have publicly made “climate pledges” [e.g.: “We will halve our greenhouse gas emissions by 2030 and achieve net zero by 2050,” with further details]. Depending on the applicable accounting standard, a provision for a constructive obligation may have to be recognized for such published voluntary commitments and in the notes the estimated amount of the corresponding investment may have to be indicated. However, these climate pledges are not reflected in the companies’ financial statements.

This may be because they are not sufficiently credible or that there are failures in accounting. Further research is needed to assess different pledges and their accounting effects. Disclosing the pledges in the financial statements would require them at least to be classified as a serious, credible constructive commitment to the public, whereas unbelievable pledges would not be disclosed in the notes or balance sheets. Here lies a great potential for exposing greenwashing through unbelievable pledges.

It would also be necessary to examine whether the recognition of environmental protection provisions – e.g. provisions to remedy environmental damage – in accounting is discriminated against other provisions. To the extent that particularly strict accounting criteria are applied to the recognition just of environmental provisions, corresponding economic burdens do not appear in the financial statements. Such a special law applies, for example, in Germany. 14

Unbelievable climate pledges cannot be disclosed in the notes or balance sheets. Here lies a great potential for exposing greenwashing. «

Under different accounting standards, the criterion of an “external obligation” is typically required to introduce a provision for expected future spending. Internal adaptation obligations – such as for maintenance backlogs that have to be made up for in future – can typically be accounted for only under narrowly defined circumstances under national GAAP. Introducing a provision commonly requires a creditor or at least a group of persons to whom the reporting entity owes a commitment. Pension obligations, for example, are owed to employees, warranty obligations to customers, and tax provisions to tax authorities. However, at times like now when companies have to adapt to deep-seated changes in the external environment, internal adaptation obligations – like climate adaption measures under flood risks or crop failure risks – may prove to be just as unavoidable as external obligations. Here lies a field for possible accounting reforms, with the aim of ensuring that balance sheets reflect a true and fair view of economic performance.

Furthermore, large parts of transformative investments and restructuring that improve a company’s sustainability and make it also economically more resilient (e.g. investments in net zero) are typically depicted as pure expenses in the balance sheet, although they really are an investment in the future with a value creation beyond the balance sheet date. 15 This has the absurd effect that companies that carry out deep restructuring to operate in line with the Paris goals suffer disadvantages in terms of a weaker balance sheet – with corresponding detrimental effects on the financial markets.

The examples discussed here highlight some important deficiencies in accounting and auditing practices and standards. Accounting towards climate neutrality as well as economic sustainability requires considerable attention, research and reforms.

3. Building the bridge to national accounts

Accounting – including sustainability-related financial issues – influences national accounts data including GDP. If accounting rules better reflected structural changes, standard GDP figures would reflect these issues – even before improved alternatives to GDP are explored.

The production value included in the GDP calculation is determined by the value of changes in inventories of goods from production and from the value of internally generated assets. If for example a farmer’s humus build-up and fertile land is not accounted for as an internally generated asset, this financial value added cannot be included in the calculation of GDP. Similarly, the destruction of fertile soil by intensive farming would not be transparent as depreciation in net domestic product.

Neither gross nor net measures of national accounts of countries can be properly measured and compared without...
data input from accounting and its proper development. This requires a true and fair view of economic positions and performance that takes sustainability considerations fully into account.

IV. CONCLUSION
Reforms for accounting and accounting governance procedures are urgently needed to provide accurate and objective company information at times of profound structural change. In particular, regulators must provide the data for assumptions on how sustainability risks should be assessed in companies’ balance sheets. Such an accounting reform also provides additional benefits and opportunities: it may uncover greenwashing practices of companies and would help to provide more accurate macro measures of economic activity (GDP).

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3 See IFRS Foundation, Effects of climate-related matters on financial statements, Nov. 2020; ESMA, European common enforcement priorities for 2021 annual financial reports, October 2021.
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5 TRWG, General Requirements for Disclosure of Sustainability-related Financial Information and Climate-related Disclosures Prototype, Nov. 2021.
7 Deutsche Bundesbank, Finanzstabilitätsbericht 2021, 107; this also represents a major weakness in the conduct of climate stress tests by central banks.
9 See Flying blind, The glaring absence of climate risks in financial reporting, September 2021.
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11 Article 16 1 [a] EU Accounting Directive; Recital 24; IAS 1; IFRS Foundation, Effects of climate-related matters on financial statements, Nov. 2020.
12 BVerfG, 1 BvR 2656/18, 24 March 2021.
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15 See Forsa, ESG-Herausforderungen für Großunternehmen in Deutschland, Juni 2021.
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Governing the internet for the global common good

A roadmap for the G20 and G7

Policy brief

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The Hasso Plattner Institute (HPI) in Potsdam is Germany’s university center of excellence for digital engineering. With its Bachelor’s and Master’s degree programs in “IT Systems Engineering”, the Digital Engineering faculty at the University of Potsdam offers a unique and particularly applied computer science degree program throughout Germany. In the CHE university rankings, HPI consistently occupies top positions. The HPI School of Design Thinking is also Europe’s first innovation school for students modeled on the Stanford d.school and research schools on all continents.

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Global Governance; Internet Fragmentation;
Digital Infrastructure; Cybersecurity; G7/G20

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INTRODUCTION

The internet is the backbone of our digital world. It creates the conditions for economic development and prosperity worldwide. Yet, this critical common good – the open, global, and trustworthy internet – is under threat. As digital connectivity penetrates every aspect of economic, political, and social life, it has become a central object of geopolitical maneuvering. Amid the heightened competition between the United States and China and a push towards greater “digital sovereignty” by the European Union, India, Russia, Turkey, and other players – the meaning of which varies greatly –, regulatory divergence, increasing tensions in cyberspace, political disinformation, and surveillance hamper the free flow of information. Private power on the internet has also concentrated to an unprecedented degree, undermining economic competition and dominating governance institutions.

Even more concerning is that geopolitics are trickling down from the upper layers of internet usage to the internet’s underlying infrastructure. Whereas issues such as data privacy, surveillance and platform regulation are at the top of policymakers’ agendas, the daunting prospect of a fundamental splintering of the internet along national borders down to its very core demands serious and immediate attention. And yet, the internet’s physical (e.g., submarine cables) and logical (e.g., TCP/IP protocol family, DNS) infrastructure represents its foundation as a “network of networks” that enables any device to exchange data packets with any other device worldwide. A splintering of this infrastructure would be difficult to reverse.
Preserving an open, global, and trustworthy internet infrastructure must thus be a priority for global leaders. The technical bodies that govern the internet are currently ill-equipped to address the political fault lines that put the global internet at risk. The G20 and G7 should actively work to mitigate these political fault lines so that technical bodies can continue to effectively administrate and develop an internet that works for the global common good.

A GLOBAL COMMON GOOD CAUGHT IN POLITICAL CROSSFIRE

Fragmenting the internet at the infrastructural level would effectively dismantle the digital roads that enable global economic growth and development. Global e-commerce in 2019 amounted to no less than USD 26.7 trillion. A series of temporary internet shutdowns have cost the global economy an estimated USD 16.9 billion since 2019. Modern transnational supply chains and business operations depend heavily on the ability to exchange data freely and securely. Worryingly, developing countries are likely to be hit hardest by the negative effects of internet fragmentation. Their integration in global supply chains would effectively curtail.

HOW GEOPOLITICS IS TRICKLING DOWN TO THE INTERNET’S CORE

Physical communications infrastructure

At the most fundamental level, the internet connects users through a network of submarine cables. Even as companies are making a significant push into satellite technologies to provide internet access even to remote and underserved locations on the globe, cables will remain the main pipelines of cyberspace for the rest of the 2020s. Today, an estimated 436 submarine cables transport approximately 99 percent of all international traffic. International communications and the global economy depend on them.

However, the physical communications infrastructure that the internet uses is on the verge of a paradigm shift. Concerns about the insertion of backdoors and surveillance at landing stations and fears of sabotage render these cables’ construction, operation, and geography politically salient. Since the Snowden revelations, trust in global internet traffic has taken a hit, and submarine cables have received increasing attention as a geopolitical factor. Brazil reacted by pushing ahead on an undersea cable that would connect it directly to Europe and reduce the risk of man-in-the-middle snooping from the US. This EllaLink cable was launched in mid-2021 and is the first of its kind between the two continents. The physical communications infrastructure is also moving to the center of the US-China rivalry. Chinese and US companies are rapidly growing their market share. By 2018, Amazon, Facebook, Google, and Microsoft alone already owned or leased more than half of the world’s undersea bandwidth. Huawei Marine Networks (now rebranded as HMN Technologies) has become one of the biggest vendors in the submarine cable market. European companies are also represented among the major players that operate global submarine cables, including Alcatel Submarine Networks, Nexans Norway AS, NKT A/S, and Prysmian Group. As a result, the privately owned and operated internet infrastructure is ripe for the projection of geopolitical tensions. Lately, Huawei’s participation in the “Peace Cable”, running from China to France, has led to intense US pressure on European partners to abort participation. Last year, US authorities recommended blocking a 12,800-kilometer cable connecting the US and Asia, built in a partnership between Google, Facebook, and other companies. What will be the “highest-capacity trans-Pacific route” ever built will now link to Taiwan instead of Hong Kong. It is the first time that a planned undersea cable connection to mainland China has been rerouted in response to national security concerns.

Internet communications protocols

Even as the physical infrastructure is only beginning to align with geopolitical fault lines, the communications protocols that underpin the global internet are already at the center of political contestation. The internet’s communications protocols are placed on top of the physical cables and satellites that connect devices. They encompass the technical protocols, notably the Transmission Control Protocol/Internet Protocol (TCP/IP) family of network protocols, regulating how devices communicate as well as the Domain Name System (DNS), the internet’s address book. In addition to these, cryptographic protocols, such as Transport Layer Security (TLS), which ensure the secure transmission of data, are essential building blocks to a trustworthy internet.

»The internet is the backbone of our digital world.«
be difficult, not least due to the expensive nature of protocol migrations that are slowing the migration from IPv4 to IPv6. Yet, while the controversy around NewIP is currently stalled in the International Telecommunication Union, there is an acute risk that states will pursue the adoption of preferred protocols unilaterally where no viable agreement can be reached. Indeed, an alternative vision of the internet is already being tested within China but may well be rolled out through outbound infrastructure investments, especially in developing countries.

The internet is also at risk of further fragmentation because states starkly vary in how strongly they implement cryptographic protocols. In some parts of the world, implementation of key protocols is lagging or outright opposed, undermining secureness to facilitate greater surveillance over domestic populations. TLS 1.3 and Encrypted SNI are crucial to preserving the anonymity and privacy of internet users across the world. At the same time, they make it harder for states to know what web pages citizens are viewing. Therefore, China and Russia have restricted their implementation domestically. This contrasts with the US, UK and the EU, which rely on strong and ubiquitous cryptographic protocols.

Therefore, it is concerning that the US, UK and the EU have also signaled that they aim to weaken end-to-end encryption (E2E) for national security reasons. If they were moving ahead with their announcements, it would severely weaken the internet’s trustworthiness. This is because there is no technical way to undermine E2E encryption that would only allow law enforcement access to messages that are E2E encrypted. Any weakening of encryption protocols also means an increased risk of criminals using the same vulnerabilities. Updating cryptographic protocols used on the internet is essential since it ensures the privacy and anonymity of users. At the same time, it protects states from snooping or malicious activity by other state actors or cybercriminals.

REVIVING MULTISTAKEHOLDERISM IN 21ST CENTURY INTERNET GOVERNANCE

The institutions that govern the internet currently struggle to address these challenges to the world’s digital nervous system. Multistakeholderism is deeply engrained in the internet’s origins. In this model, players from the technical community, business, civil society, and governments jointly drive forward the development of the internet in specialized institutions, usually based on “rough consensus”. The Internet Engineering Task Force (IETF), for example, establishes protocols and standards. The Internet Corporation for Assigned Names and Numbers (ICANN) manages central functions such as the DNS mentioned above. The Internet Society (ISOC), a non-governmental organization, forms the focal point for coordinating the maintenance and further development of the internet.

These institutions have demonstrated an exceptional capacity to develop and administer the internet technically, but they stand unprepared for the geopolitical pressures that are now building up. Institutions like the IETF, which came to life when the internet was under development, was mainly the concern of a technocratic community of computer scientists and engineers. Today, technical decisions have significant political implications. Yet, there is currently no functioning mechanism for bridging technical and political considerations. The Internet Governance Forum (IGF), created precisely to structure dialogue among all stakeholders from government to civil society – has so far failed to develop the fluidity and authority to mitigate tensions among parties and inform internet governance. As a result, political frictions are not channeled into productive deliberations among concerned stakeholders but translated into institutional powerplay. The NewIP proposal is a case in point, with its proponents attempting to shift internet development from the multistakeholder IETF to the intergovernmental ITU.

The lack of an adequate political process and institutional powerplays are damaging the prospects of retaining an effective ecosystem to develop and administer an internet that remains open, global and trustworthy. A clear division of labor among governance bodies fundamental to a well-functioning governance ecosystem is being eroded. Within institutions as well, fault lines are becoming more entrenched. The 2022 elections of a new ITU Secretary-General are descending into a geopolitical haggling between those that defend a limited role of the ITU and those that seek its transformation into a centralized and intergovernmental internet decision-making body.

Digital geopolitics is proving a potent destabilizing force to internet governance because it preys on multistakeholder institutions’ lack of inclusion and representativeness. Internet institutions like the IETF and ICANN were created mainly throughout the 1980s and 90s. At that time, the internet was very US-centric. In fact, the US Department of Commerce’s oversight over ICANN and its functions was only removed as late as 2016. China and Russia, major cyber powers today, occupied only marginal positions in internet governance at the time. Since then, the internet has changed significantly. Most of today’s internet users are situated outside of Western industrialized countries. China alone boasts over a billion internet users. At the same time, internet governance institutions have adapted slowly. Organizations like ICANN
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- Inclusive multistakeholderism: reaffirm its commitment to inclusive multistakeholder governance of the internet and pledge to provide funds supporting the technical community and civil society representatives from the Global South.
- Digital human rights: pledge their joint support for a secure and trustworthy internet that strengthens digital human rights, notably by refraining from undermining end-to-end encryption and fostering the fast roll-out of the latest cryptographic protocols, such as TLS 1.3 and Encrypted SNI.

In view of the above, the G7 should lead by example with actions in these areas:

RECOMMENDATIONS TO THE G20 AND G7

The G20 should take action in the following areas:

- Global internet opportunities: emphasize that an open, global, and secure internet is a critical enabler for inclusive economic growth and addressing global challenges, including those laid out in the UN Sustainable Development Goals.

- Inclusive multistakeholderism: reaffirm its support for complementing multilateral engagement on digital cooperation with an inclusive multistakeholder approach, involving civil society, academics, businesses, and governments, echoing the recommendations of the UN High-level Panel on Digital Cooperation.

- Physical infrastructure integrity: declare their ambition to initiate a multistakeholder dialogue on ways to increase the trustworthiness of physical infrastructure (i.e. undersea cables) in the interest of advancing global connectivity.

- Interoperability by design: limit public funding to domestic and international digital infrastructure investments that

and ISOC remain domiciled in the United States and are subject to US law.29 The IETF’s leading figures are employed by Western companies and universities.30 In that sense, the internet institutions were never genuinely global — a deficit that is becoming more severe every day that the internet expands.

Multistakeholderism, which originated in a close-knit community of technical experts and academics, is also struggling with the concentration of power in the hands of few actors, particularly private companies. A key strength of internet governance institutions is their technocratic nature and focus on devising the best possible technical (as opposed to political) solution. On the flip side, active engagement consumes expertise, time, and capital that is disproportionally in the hands of dominant technology companies. Their involvement is essential, but the lack of broader geographical and civil society representation, including from developing countries, fuels the contestation of multistakeholderism and creates incentives to flock to an alternative state-centric and multilateral model. Moreover, multistakeholder formats can give rise to unrepresentative, insular communities that exclude new entrants.

Internet governance institutions like the IETF and ICANN have shown their exceptional capacity to administer one of the fastest growing and most complex infrastructures in human history. Preparing for the coming decades, however, will require a process of reform that is unlikely to come from within alone. Governments thus have a constructive role to play in working with multistakeholder institutions to increase their global inclusion and representativeness as the next billion users come online.

RECOMMENDATIONS TO THE G20 AND G7

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- Global internet opportunities: emphasize that an open, global, and secure internet is a critical enabler for inclusive economic growth and addressing global challenges, including those laid out in the UN Sustainable Development Goals.

- Inclusive multistakeholderism: define concrete steps to strengthen the Internet Governance Forum (IGF), drawing on the follow-up recommendation to the UN Secretary General’s initiative for strengthening global digital cooperation (IGF “Plus”).

- Human-centric digital connectivity: agree to expand investment in digital connectivity in the Global South while committing to protect users’ privacy and rights, including freedom of expression, from overreach by both businesses and governments.

In view of the above, the G7 should lead by example with actions in these areas:

- Inclusive multistakeholder governance: reaffirm its commitment to inclusive multistakeholder governance of the internet and pledge to provide funds supporting the technical community and civil society representatives from the Global South.
- Digital human rights: pledge their joint support for a secure and trustworthy internet that strengthens digital human rights, notably by refraining from undermining end-to-end encryption and fostering the fast roll-out of the latest cryptographic protocols, such as TLS 1.3 and Encrypted SNI.
Comparative analysis of financial inclusion programs in developing countries

Comparison of bank, telco, and hybrid-based financial inclusion programs

Policy brief

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Institute for Economic and Social Research University of Indonesia, or better known as LPEM FEB UI, is a research institute under the Faculty of Economics and Business, and the largest community of academic researchers at the University of Indonesia. For more than 60 years, LPEM FEB UI has become one of Indonesia’s leading educational institutions, which plays an essential role in contributing ideas through research, consulting, and education.

Keywords:
Financial inclusion, bank, telecommunication, developing countries

ABSTRACT
There has been tremendous development in providing formal financial services to the unbanked in developing countries since the Global Partnership for Financial Inclusion (GPFI) was established in 2010. Nevertheless, there is no universal agreement on how developing countries approach their financial inclusion programs. Kenya, for example, mainly depends on telecommunication companies (telco-based) to act as drivers of the financial inclusion program, while Indonesia chose the banks (bank-based). After years of the ongoing program, there is evidence that the success is primarily due to the countries’ approaches. This policy brief elaborates the critical features of telco-based, bank-based, and hybrid-based financial inclusion programs in developing countries. Finally, it summarizes indicators that need to be taken into consideration for choosing the suitable model of the country.

BACKGROUND
Significant progress has been achieved toward financial inclusion, with 1.2 billion individuals globally now having access to a bank account. About 69% of adults now have an account. However, over one-third of adults – around 1.7 million – remain unbanked, without a financial institution or mobile money provider account (Demirguc-Kunt et al., 2018). Due to the near-universal ownership of accounts in high-income nations, almost all unbanked adults live in developing countries. Indeed, nearly half of the world’s population is concentrated in only seven emerging economies: Bangladesh, China, India, Indonesia, Mexico, Nigeria, and Pakistan. According to the World Bank Global Findex 2017 study (Demirguc-Kunt et al., 2020), one in five said they did not have an account with a financial institution due to distance.

Since the launch of the Global Partnership for Financial Inclusion (GPFI) in 2010, there has been significant progress in the provision of formal financial institutions to the unbanked in developing countries and improvements in governments’ financial regulation and the provision of inclusive financial institutions (Hannig and Jansen, 2010; Tambunan, 2015; Ozili, 2018). An international practice for financial inclusion is divided into three categories: (1) bank-led financial inclusion, (2) telecommunications company (telco)-led financial inclusion, and (3) hybrid financial inclusion. Since 2015, the Indonesian government has used Laku Pandai as one of many bank-based programs to increase financial inclusion. Laku Pandai is sometimes referred to as an agency banking program. Its objective is to reach out to and expand financial access to underserved people. Additional financial inclusion programs include the Reserve Bank of India’s (RBI) policy of allowing telecommunications companies to function as payment banks, Kenya’s mobile money

» Empirical data shows that bank-led agency banking policies may lag behind telco-led policies regarding financial inclusion.«
According to Bank Indonesia, electronic money transactions would expand from roughly 536 million in 2015 to more than 4.6 trillion in 2021, or nearly 7.6 times. Likewise, the value of electronic money transactions grows by 3.8 times, from around IDR 5.3 trillion in 2015 to IDR 205 trillion in 2021. Furthermore, the number of accounts registered through LKD agents is expected to increase from 1.15 million in 2015 to 20.82 million in 2020 (Bank Indonesia, 2020).

**M-PESA, Pakistan’s EasyPaisa, and Bangladesh’s bKash.** Moreover, several countries have implemented financial inclusion initiatives through collaboration between banks, telcos, and third-party applications, such as the CIB e-wallet in Egypt (a result of cooperation between Commercial International Bank, Mastercard, and Fawry, the electronic payment network), mobile money in Ghana (as a result of a partnership between Fidelity Bank Ghana and MTN, a mobile network provider), and Airtel Money wallet as a result of a partnership between Fidelity Bank Ghana and Airtel (Nano credits loan provider).

**BANK-BASED FINANCIAL INCLUSION INITIATIVES: THE CASE OF INDONESIA’S LAKU PANDAI**

Through Laku Pandai (Layanan Keuangan Tanpa Kantor Dalam Rangka Keuangan Inklusif/Smart Act Branchless Banking Service for Financial Inclusion), the Indonesian government promotes the branchless banking trend. Laku Pandai offers banking and other financial services in partnership with other parties (bank agents) and with the use of information technology. The services offered include savings with the features of a Basic Savings Account (BSA), credit or financing for micro clients, and other financial products such as micro-insurance. Laku Pandai is also used to directly distribute government subsidies, namely the Welfare Family Savings Program (PSKS).

As a consequence, Indonesia’s financial inclusion status improved. Access to financial services increased to 48.9% of the population in 2017 from 19.6% in 2011. Bank agents have increased from 3,734 in June 2015 to 1,146,131 in September 2019.

The mobile money experience in Kenya and India yields varied outcomes. Evans and Pirchio (2014) maintained that mobile money schemes have been generally successful in countries with less regulation in nearly every instance. It has failed in almost every case in countries with more regulation and advocated that regulated}

**TELCO-BASED FINANCIAL INCLUSION INITIATIVES: THE CASE OF KENYA’S M-PESA AND INDIA’S RBI**

In other developing countries, mobile money usage is a popular method of increasing financial inclusion since it enables low-cost, secure, and convenient financial transactions. It is comparable to Laku Pandai in that it distributes its services via agent networks and provides customer cash-in and cash-out services (Suri, 2017). M-PESA in Kenya is one of the country’s largest telecommunications companies (Demirguc-Kunt et al., 2018). Users may conduct peer-to-peer transfers, payments, merchant transactions, charitable contributions, and international remittances. It has changed Kenya’s financial landscape dramatically since 2006. Only 26% of the bankable population in Kenya had access to formal financial services in 2006; by 2013, that percentage had climbed to 67% (Muthiora, 2015).

Observing Kenya’s success, India attempted to adopt the mobile money strategy in order to aid in the country’s financial inclusion. The Reserve Bank of India (RBI) began removing the need for mobile transaction owners to have a bank account in 2013, enabling telecommunication companies to commence mobile money programs. This policy reform encouraged the country’s adoption of mobile money. By 2017, fourteen mobile network carriers in India offered mobile money services to their consumers as a value-added service. India’s mobile money sector has stalled despite mobile money service developments. Potnis et al. (2019) found that customers without a bank account are less likely to use mobile money services than their banked counterparts, hence extending rather than closing the Indian market’s pre-existing financial gap (Shashidhar et al., 2019).

**»Each nation should tailor its financial inclusion to the country’s economic and social circumstances and reinforced by infrastructure provision.«**

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Due to the near-universal ownership of accounts in high-income nations, almost all unbanked nations live in developing countries.

The recent introduction of a nano-loan product in Ghana through the Airtel Money wallet results from a three-way agreement between Fidelity Bank Ghana, Airtel, and Tiata. In Ghana, the nano-loan agreement allows qualifying Airtel Money members to rapidly borrow up to GHC 200 (USD 51) for unexpected expenses such as an emergency buy (Africa Airtel, n.d.).

**COMPARISON BETWEEN INDONESIA AND OTHER DEVELOPING COUNTRIES’ FINANCIAL INCLUSION PROGRAMS**

Telco-based and hybrid-based are more common as the front line of financial inclusion programs among the developing countries with equal distribution of phone signals, mobile phones, and internet availability. For example, M-PESA in Kenya (the Telco-based financial inclusion program) almost doubled the financial inclusion rate from 42.3% in 2011 to 81.6% in 2017. The previously unbanked people can do financial transactions such as peer-to-peer transfers, merchant payments, and social disbursement by using a mobile phone only. The coverage of users reached about 500,000, with 48 million accounts in 2021. In addition, in Egypt, Smart Wallet (as the hybrid-based financial inclusion program) combines the bank and telco as financial services providers, facilitates digital payments, transfers of money, deposits, and withdrawals without a bank account. According to the countries’ constraints, regulators and financial services providers should take into account people’s financial and digital literacy, know-your-customer (KYC) infrastructure, a clear and consistent view of public and private capital in financial inclusion, digitalizing social assistance through basic savings accounts, enhancing regulatory coordination, consumer protection, and credit risk assessment to ensure the secure and sound financial ecosystem.

Each nation should tailor its financial inclusion to the country’s economic and social circumstances and reinforce it by infrastructure provision. In the context of Indonesia, due to the scarcity of bank branches in the targeted regions and the firm reliance on bank agents’ liquidity management, the decision to promote financial inclusion through a bank or telecommunications-based channel seems dubious. In Indonesia, the penetration of telecommunications devices and the internet is still low, with around 53.7% of the population owning telecommunication devices and 69.8% of the population having internet access (Demirguc-Kunt et al., 2020). Additionally, APJII (2020) indicated that Java Island accounts for 56% of internet penetration, followed by Sumatra Island (22.1%), indicating a divide in internet access between western and eastern Indonesia. Thus, Laku Pandai or branchless bank agents are projected to serve as a stable basis for increasing financial inclusion in Indonesia, particularly in rural, isolated, or impoverished regions.

Since Laku Pandai is a bank-led effort inextricably linked to bank regulation, empirical data shows that bank-led agency banking policies may lag behind telco-led policies regarding financial inclusion (African Development Bank, 2013). In Indonesia, M-PESA is referred to as LinkAja.

Table 1. Comparison of bank, telco, and hybrid-based financial inclusion programs

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Bank-based</th>
<th>Telco-based</th>
<th>Hybrid-based</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program</strong></td>
<td>Laku Pandai (Indonesia)</td>
<td>M-PESA (Kenya)</td>
<td>Smart Wallet (Egypt)</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td>Basic Savings Account (BSA), credit or financing to micro customers, micro insurance, direct payment of government benefits</td>
<td>Peer-to-peer transfers, merchant payments, social disbursements, foreign remittances</td>
<td>Make payments and purchases, transfer money, deposit, and withdrawal. These can be done without a bank account</td>
</tr>
<tr>
<td><strong>Fee</strong></td>
<td>No administrative fees, but cash withdrawal fees amount to IDR2,000 per transaction</td>
<td>Based on the amount of transfer or withdrawal, ranging from free to around 300 Kshs</td>
<td>No admin fee, but there are fees charged based on each transaction</td>
</tr>
<tr>
<td><strong>Rate of Financial Inclusion Changes (Account ownership)</strong></td>
<td>From 19.6% in 2011 to 48.9% in 2017</td>
<td>From 42.3% in 2011 to 81.6% in 2017</td>
<td>From 9.7% in 2011 to 32.8% in 2017</td>
</tr>
<tr>
<td><strong>Number of accounts</strong></td>
<td>22 million (2018)</td>
<td>48 million (2021)</td>
<td>Over 500 thousand (2021)</td>
</tr>
<tr>
<td><strong>Number of agents</strong></td>
<td>1 million (2018)</td>
<td>Over 500 thousand (2021)</td>
<td>-</td>
</tr>
</tbody>
</table>
Indeed, it is the partnership between state-owned firms, notably Telkomsel and state-owned banks (Nuryakin, 2019). The cooperation with LinkAja to develop an M-Shwari-like product may very well be contingent on the profit-sharing framework between organizations and between telecoms and banking.

"In other developing countries, mobile money usage is a popular method of increasing financial inclusion."

However, Indonesia’s willingness to embrace the telco-based financial inclusion scheme is questionable. BI and the Financial Services Authority (OJK) may have emphasized consumer protection and microprudential regulation more than financial inclusion since these are their principal aims. Thus, the government must pay attention to several indicators, including telecommunications infrastructure, financial literacy, KYC infrastructure, regulation in financial inclusion programs, removing friction between institutions, improving credit infrastructure, and increasing awareness (Oliver Wyman, ADB, & Microsave, 2017).

Table 2. Analysis of Indonesia key constraints for financial inclusion programs
Source: Oliver Wyman, ADB, and Microsave (2017) with author’s modifications.

<table>
<thead>
<tr>
<th>Area of Constraints</th>
<th>Entry Barriers Indicators</th>
<th>Examples of Best Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand-side Constraints</strong></td>
<td>Financial and digital literacy</td>
<td>Defined NFIS with DFS component and consistent rollout across the nation (both urban and rural)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The majority of the population has adequate financial and digital literacy.</td>
</tr>
<tr>
<td></td>
<td>Know-Your-Customers Infrastructure</td>
<td>National IDs that are unique and subject to real-time verification National IDs that are connected to financial services accounts for electronic KYC and transaction authentication.</td>
</tr>
<tr>
<td><strong>Supply-side Constraints</strong></td>
<td>Clear and consistent view on the role of Public and Private capital in Financial Inclusion</td>
<td>Defined FI goals and rules, backed up by support and legislation that encourage equity among different types of DFS participants.</td>
</tr>
<tr>
<td></td>
<td>Regulator and public policy equivalence in treatment of different players</td>
<td>– Alternative distribution channels (e.g., agent networks) are available to various supply-side companies.</td>
</tr>
<tr>
<td></td>
<td>Cost-effectiveness of last-mile distribution</td>
<td>– An efficient and accessible operating platform that enables agent-to-service provider communication and agent-to-customer communication.</td>
</tr>
<tr>
<td><strong>Payments</strong></td>
<td>Enabling critical volume</td>
<td>– Digitization of social cash distribution programs</td>
</tr>
<tr>
<td></td>
<td>Removing Friction – Reliability</td>
<td>– Digitization of government payment receipts [e.g., taxes, tolls, fees/lines for government services, and so forth]</td>
</tr>
<tr>
<td></td>
<td>Extending access – Points of physical access</td>
<td>Very high network availability (99%+) and low transaction failure rates [less than 1–2%] in retail payments; may require regulatory support.</td>
</tr>
<tr>
<td><strong>Savings</strong></td>
<td>Embedding savings in product structure and enabling contextual savings habit, increasing savings awareness</td>
<td>– Large-scale agent network equipped with digital devices/applications that operate in accordance with well-defined legal guidelines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Government-led cashless plan to increase online/offline merchant payments [e.g., incentives such as tax breaks, lower levels of authentication requirements for small transactions, etc.]</td>
</tr>
<tr>
<td></td>
<td>Savings access and convenience</td>
<td>– Providers regularly promote integrated savings and savings-habit-enabling solutions with nationwide coverage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– The target demographic recognizes the need for saving and actively saves extra disposable income.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Low-cost, highly dependable, and frictionless replenishment and withdrawal methods connected to savings accounts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Partnership with community-based organizations such as cooperatives to digitize and formalize member savings [e.g., migrant workers, women entrepreneurs, garment workers, etc.]</td>
</tr>
</tbody>
</table>
### Examples of Best Practice

<table>
<thead>
<tr>
<th>Area of Constraints</th>
<th>Entry Barriers Indicators</th>
<th>Examples of Best Practice</th>
</tr>
</thead>
</table>
| Credit              | Credit Infrastructure     | – Establishment of a central credit bureau with universal reporting of credit lines and open access to all lending businesses (for a charge).  
|                     |                           | – Enhanced credit bureau reporting [e.g., utility payments] that expands possible coverage to the unbanked.  
|                     | Credit risk assessment    | – Credit bureau checks are required prior to the release of microloans [to avoid over-leveraging].  
|                     |                           | – Utilization of non-traditional credit scoring/assessment models [e.g., based on airtime usage, mobile money usage, bill payments history, social media usage, etc.] that are consistent among the unbanked/underbanked.  
| Customer Protection | Data governance, privacy laws, and enforcement mechanisms | – Creating a regulated environment for data sharing.  
|                     |                           | – Establishing guidelines for data standardization that enable cross-platform data consumption.  
|                     |                           | – Enforcing defined data privacy regulations.  
|                     | Dispute resolution mechanisms | – An extensive definition of commonly used dispute resolution mechanisms in multi-party transactions [e.g., mobile money account to bank account payment].  
|                     |                           | – Customer awareness is high, and customers have access to dispute resolution channels.  
| Coordinated Oversight | Regulatory coordination | All relevant regulators [e.g., telecommunications and financial authorities] participate in, are consistent with, and coordinate their regulatory activities.  
|                      | The unified vision, strategy, and understanding of financial inclusion | – Developed in conjunction with all relevant agencies, the National Financial Inclusion Strategy.  
|                      |                           | – Government agencies and working groups that are involved in the plan and routinely monitor the financial institution’s progress/systems updates.  

### References

G7 and G20 transitions in 2022

Implications for governance and for transformational change

Opinion piece

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Institutions:

The Global Solutions Initiative (GSI) is a global collaborative enterprise to envision, propose and evaluate policy responses to major global problems, addressed by the G20, through ongoing exchange and dialogue with the Think20 (T20) engagement group. The GSI is a stepping stone to the T20 Summits and supports various other G20 groups. The policy recommendations and strategic visions are generated through a disciplined research program by leading research organizations, elaborated in policy dialogues between researchers, policymakers, business leaders and civil society representatives.

The China-West Dialogue (CWD) was founded on the premise that the bilateral US-China relationship is leading the world toward a bipolar competitive era and that a plurilateral process that involves Europe, Canada, China, Japan, and the US would create complexity and dynamics that focus more on substance and less on rhetoric and ideology in addressing and negotiating major issues.

Keywords: Transitions, Transformational Change, Global Governance, "Effective Governance", "Effective Multilateralism"

Introduction and overview: Three new transitions in 2022 highlight major questions, the answers to which will have a significant impact on the outcomes of major global leadership meetings this year and more importantly on the global trajectory toward 2030.

First is the political transition in leadership in Germany from former Chancellor Angela Merkel to Chancellor Olaf Scholz. The second is a transition in G7 leadership from the UK to Germany for 2022. And the third is the transition in G20 leadership from Italy to Asia for 2022 and 2023 with Indonesia and India hosting G20 Summits in the next two years.

These transitions raise major questions regarding the relationship between the G7 and the G20, regarding how the US-China bilateral relationship is managed not only between these two superpowers but within the global governance forums themselves, the meaning and nature of global governance now, and whether these transitions can lead to transformational changes commensurate with the systemic challenges of the 2020s.

I. THE PRIMACY OF "PEOPLE-CENTERED" ECONOMIC POLICIES FOR SOCIAL COHESION AND GOOD GOVERNANCE

Olaf Scholz made a pointed effort to connect with the German people who felt left out by the global economy and further disadvantaged by the economic impact of the pandemic. Opinion polls showed that his capacity to “recognize” the pain of those left behind and to convey a sense of respect for the dignity of people regardless of their social status was a factor in the SPD victory. The fact that he had been labor minister before he was finance minister gave him experience with issues affecting workers and credibility with labor unions. The new imperative in many countries is to now respond more fully to the current conjuncture when social divides drive political polarization and governance paralysis.

So, the question that emerges now is what the pandemic revelations of pervasive systemic social impact will mean for the global effort to address the structural social inequities vividly manifested by Covid-19, and whether the drive for “people-centered” policies will receive higher policy priority as a result. This is a major issue for the world today and for the G20 in Indonesia later this year.

II. THE GERMAN G7-G20 NEXUS IN 2022: G7 – G20 FRICCTIONS AND GEOPOLITICAL DYNAMICS

The transfer of the G7 Presidency from the UK and Prime Minister Boris Johnson to Germany and Chancellor Olaf Scholz could be extremely significant. First, continental Europe, as compared to the UK after Brexit, has developed its own approach to relations with China, seeking “strategic autonomy” in its dealings not only with China but with the United States in its relations with China. Whereas the UK, and Boris Johnson in particular, is happy to tout the “special relationship” between the US and the UK, continental European countries and the EU as an entity are keen to strengthen transatlantic relations while at the same time forging an “autonomous” approach to China that puts economic issues ahead of military-security issues.

The Biden administration’s approach to China is driven by domestic political considerations more than by foreign policy...
G20 processes, which go on throughout the year, present opportunities for China and the US to be involved in serious substantive official discussions on significant issues in the presence of other major players whose views and perspectives matter.«

Concerns. The Biden administration knows that hard lines and harsh language toward China play well in the heartland of America where populist nationalism thrives. Republicans could make Democrats look weak if Biden’s China policy is not firm.

But it goes deeper than that. The drive for a values-based foreign policy for the middle class in America develops a political narrative internally about systemic competition with China as a justification for investments in infrastructure, science, R&D, technology and a skilled workforce, when in fact there are intrinsic reasons why investment in these areas make sense from a purely domestic point of view. The G7 Summit in Cornwall in June and the virtual Summit for Democracy in December 2021 have been ways in which values-driven diplomacy has amplified systemic competition with China by marshalling allies and democracies based on democratic values that directly and deliberately contrast with China’s trends.

The challenge facing Germany in its role as host for the G7 during 2022 is how to bridge the G7 values-based ethos with the eclecticism of the G20, which is quintessentially a culturally diverse grouping of major countries. The “democracy versus autocracy” framing for the Summit for Democracy is not a palatable vocabulary for the G20. (Bradford 2021)A) On the other hand, Europe and the European Union are steadfast in their defense of human rights and democratic safeguards and values even as they relate to China pragmatically on other issues.

A way through this thicket would be for Germany to propose that both the G7 and the G20 focus on the capacities of governments to deliver social outcomes that are politically sustainable, regardless of regime type. That is, to focus on function over form as a means of moving the conversation from polemics to professional exchanges.

The China-West Dialogue has presented panels on China-West relations in the Global Solutions Summits in 2020 and 2021. It has recommended that the G20 establish a G20 Working Group on “Effective Governance” as a way of shifting the tone and tenor of the current debate to one that is less ideological in character and more focused on governance capacities to deliver for society as a whole. Such a G20 focal point for official exchanges could include drawing on the social democratic experience in various countries, the OECD work on “new approaches to economic challenges” (NAEC) and the SDGs, among other sources, as a way of prioritizing “people-centered” policies as high policy for the 2020s.

“The Cornwall Consensus” developed by a high-level panel of experts from G7 countries made a solid effort to ratchet up ambition for systemic transformation that would move beyond neoliberal faith in market forces alone to drive outcomes, but the G7 official communique did not capture the urgency or the content of their report. (G7 Panel 2021)Also, the G7 Sustainable Development Policy issued by the UK G7 does not even mention the SDGs, which suggests that member governments were reticent about endorsing this set of goals that their own governments agreed to at the UN in 2015. There is a live question about whether the SDGs are still a mobilizing force for intensifying efforts to achieve systemic sustainability and greater social inclusion by 2030?

III. IMPLICATIONS OF THE TRANSITION FROM EUROPE TO ASIA FOR THE G20 LEADERSHIP

From a global perspective, it is a good thing that the next two G20 Summits will be held in Asia, in Indonesia in 2022 and in India in 2023. But it is fraught with challenges. It comes at a moment when the bilateral US-China relationship dominates geopolitical tensions and creates tensions for all countries, especially those in Asia, who strongly prefer not to take sides in the struggle. The China-West Dialogue is a process of bringing together thought leaders from a variety of significant countries in North America, Europe and Asia, including China, in an attempt to pluralize the toxic US-China bilateral relationship by reframing it as China-West relations.

In a series of zoom discussions, now involving fifty people from a dozen countries, the China-West Dialogue has concluded that the G20 is the most suitable existing global forum in which to situate some of the US-China relationship. First, the most successful G20 Summits have demonstrated that “plurilateral” leadership by a half dozen G20 leaders, countries or governments have been able to generate greater ambition than would have been the case if G20 host governments had tried to exercise leadership alone. China and the US during several G20 years have been part of plurilateral leadership efforts. There is turnover from one year to the next in which countries step forward to exercise plurilateral G20 leadership. There are what we have come to call “shifting coalitions of consensus” depending on the issue in G20 dynamics, which have the advantage of avoiding blocs of like-minded countries holding together from issue to issue. These fluid leadership dynamics do open the door to China and the US both exercising leadership in the G20, sometimes together and sometimes not, as in the past, which would now have ameliorating effects on their tense relationship. (Alexandroff and Bradford, 2021)

Secondly, there are G20 ministerials, G20 task forces, and G20 working groups composed of officials from different ministries and agencies in G20 governments which address a range of issues which the US and China need to be involved in and work on together. These G20 processes which go on throughout the year, pres-
ent opportunities for China and the US to be involved in serious substantive official discussions on significant issues in the presence of other major players whose views and perspectives matter. This embedding of China and the US in the G20 could be a “two-for”, strengthening the G20 by increasing the activity of both the US and China in it, and easing geopolitical tensions between them by increasing the interaction and contact on a professional level among officials from both countries. (Bradford, 2021B)

This raises the stakes for Indonesia in 2022 to structure the agenda and G20 processes in consultation with the great powers – the US, China and the EU – to assure their involvement and participation in the G20 throughout the year with the explicit dual objectives of strengthening global governance by strengthening their participation in the G20 thereby easing geopolitical tensions. The burden is on the US, China and European leaders to realize that the G20 is vital to holding the international community together as a single entity working together rather than allowing geopolitical tensions to intrude upon the tone, process and content of this crucial forum.

The Biden administration and the Xi government need to be convinced that the G20 could be beneficial to each of them and both of them together. The China-West Dialogue has found that having a dialogue with China is more productive than having discussions about China without Chinese participation. And, having pluralized China-West relations is a more propitious context for easing geopolitical tensions than the bilateral relationship left to itself. The G7-G20 nexus needs to use these dynamics to move geopolitics from polemics to professionalism.

IV. THE FUTURE OF GLOBAL GOVERNANCE DEPENDS ON THE FUTURE OF NATIONAL GOVERNANCE (BITAR)

The late Professor Djsiman Simandjuntak, the co-chair of the Indonesian T20 until his untimely death in November, said at an RIS event days before his death, that the issue for the T20 and the G20 in 2022 is “focus.”

The problem we have in the T20/T7/GSS community is an embarrassment of riches. We have developed processes that generate a vast number of policy briefs and research papers, made as contributions to the policy formation process for G20 ministerials and G20 leaders’ summits. The fact is that the range and the depth of these processes are now immense. This is a great thing. A huge number of outstanding researchers, thought leaders, experts, and experienced, accomplished people interact with each other to generate these results. It should continue. And, as was pointed out in the RIS virtual seminar in November, there is a need in the coming four years to widen the involvement of think tanks from the Global South into the T20 process.

But as Professor Djsiman pointed out in that forum, there is a need for focus. The G20 and other forums like it, including the Global Solutions Summits, need to focus on whether momentum can be generated toward transformational change on a scale and scope necessary to achieve systemic sustainability...social, ecological, economic, financial and political sustainability.

Currently, there is doubt whether governments will actually increase the level of nationally determined contributions (NDCs) to cutting CO2 emissions to achieve net zero by 2050. There is doubt about whether governments will generate the public revenues necessary and allocate public expenditures adequately enough to achieve “people-centered” growth. There is doubt about whether political processes are capable of meeting these challenges. There is doubt about whether the Sustainable Development Goals are in fact on governments’ agendas or just have been agreed to in principle but not in practice. There is doubt about whether the international community will provide the resources necessary for an adequate health surveillance system to face and manage future pandemics, or for providing vaccines to the world not just to the privileged, or for providing SDRs and debt relief for developing countries vulnerable to health and climate crises.

The fundamental issue before the international community today is, what are the real meanings of national governance and of global governance today? How do we imagine new politics for fresh articulations of “effective governance” domestically and of “effective multilateralism” globally?

I would offer the thought, in response to Professor Djsiman’s call for focus, that we seek to formulate new conceptions of politics which enable societies to not only redefine their futures but take charge of their futures. (See: Bradford 2022, G20 Insights, for more on “the new politics for transformational change.”)
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Website for the China-West Dialogue: https://globalsummitryproject.com/research-projects/china-west-dialogue/
Could the Global South G20 Presidencies spark a Bretton Woods moment for digital technology governance?

The case for a digital stability board

Policy brief

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Keywords:
digital, data, global governance, G20, developing countries

INTRODUCTION

The global community has a brief window – and an unprecedented opportunity – to drive forward more inclusive digital technology governance. With Indonesia taking over the G20 Presidency in 2022, followed by India in 2023 and Brazil in 2024, this will be the first time that three emerging powers will hold consecutive G20 Presidencies, and it provides a tremendous opportunity for them to put a stamp on the governance of digital technologies. Currently, digital governance is anything but representative: it is dominated by the European Union, the United States and China. A perspective from outside these three blocks, which also seeks to mediate among them, is needed. Further, the risks associated with the use of digital technologies and data hold the seeds for common ground among all G20 countries, while preserving and indeed enhancing their tremendous opportunities for commerce and society.

Issues surrounding these technologies include how social media platform giants are using and monetizing personal data, including the implications for privacy; the implications of these platforms for market structures and the ensuing consumer protection and competition issues; and concerns over related areas such as intellectual property, trade, cybersecurity, and national security. Nevertheless, the governance of the G20 itself creates challenges for achieving the coherence necessary for improved digital governance. There can be a lack of continuity from one Presidency to the next; a focus on papers and discussion and less on outcomes and longer-term impacts; and the G20 itself makes decisions in vertical silos – whereas digital governance requires horizontal decisions with a multistakeholder and representative focus. Against this background, this policy brief will discuss why current digital governance is unsatisfactory, particularly from a developing country perspective, address the role that the G20 could play under the Presidencies of Indonesia, India, and Brazil, and present a proposal to create a new institution called a Digital Stability Board (DSB) that would lead work on the many facets of global digital governance, modelled after the Financial Stability Board (Fay 2021).

GLOBAL DIGITAL GOVERNANCE IS DOMINATED BY THREE BLOCKS AND NEEDS TO BE MORE INCLUSIVE

Digital governance is effectively set in three data realms: China, the EU, and the United States (Aaronson and Leblond, 2018). Countries, in particular developing countries, are essentially left out of any substantive discussion on digital governance. They have little choice but to pick and follow a data realm or to follow a myriad of rules that may conflict across these realms – and in either case, rules created without their input.

As noted in Fay (2021), UNCTAD (2021) and UN (2019) there are many interrelated factors that underlie the lack of representation of developing countries in global digital governance discussions. These include:

– Lack of technical expertise on digital issues;

– Lack of domestic legislation related to data governance and privacy, which essentially implies that the countries are subject to the rules of digital platforms and data realms;
The global community has a brief window – and an unprecedented opportunity – to drive forward more inclusive digital technology governance.«

governance, risking entrenchment of a digital divide and lack of inclusiveness – the exact opposite of what was intended when the internet was founded. Moreover, developing countries have borne the brunt of some of the pernicious harms emanating from the lack of suitable digital governance and where mechanisms proposed or undertaken by large platforms do little to take into account their particular circumstances (Tworek, 2021).

A BRETTON WOODS MOMENT FOR DEVELOPING COUNTRIES

More generally, these governance gaps and lack of inclusivity in current arrangements have created a number or risks that transcend borders and have become even more apparent during the pandemic. These risks include hyper-surveillance and the invasion of personal privacy; cyber security and ransomware; disinformation and public health and safety; competition and abuses of monopoly power; the distribution of economic gains, and even threats to democracy (Fay and Medhora 2021). Further, the operations of major digital platforms are opaque, with little accountability for their potential dangers. Moreover, trends that blur the boundaries between office and home, and the advent of the Internet of Things, 5G and digital identities pose systemic risks that may be amplified by the interconnectedness of digital technologies. The pandemic did not create these pre-existing issues and risks, but it has accentuated their importance in manifold ways.

Breton Woods was the Allies’ answer to the financial and social shock of the emerging post-World War II period. As argued by Medhora and Owen (2020), a new Bretton Woods-style agreement would enable the world to meet the promise of the new connected age, to manage the far-reaching implications of digital technology and hyper-globalization, and to provide an opportunity to create a similar institutional framework for the world’s hard and soft digital infrastructure as it recovers from the social and economic impacts of the current pandemic.

In contrast with that agreement, however, this Bretton Woods moment could now be led by countries that are not major powers, including developing countries. Indeed, simply in terms of population, the next three G20 Presidencies account for about one-quarter of the world’s population – and that alone gives them a compelling reason to lead.

HOW COULD THE PRESIDENCIES OF THREE EMERGING POWERS PUSH FORWARD A COMPREHENSIVE DIGITAL GOVERNANCE AGENDA IN THE G20?

The country chairing the G20 in a particular year – the Presidency – sets the objectives. The rotating Presidency is both a strength and a weakness of the G20. Each Presidency inherits a large number of workstreams that it must manage, and different countries have different capacities to do so. Further, while it is not surprising that workstreams tend to have a life of their own given that many issues are ongoing, this makes it difficult for a new Presidency to introduce a new area of work and to make meaningful progress on it. At the same time, how work is carried out by G20 working groups can be a stumbling block to initiate and make progress on digital governance and to create the priorities upon which G20 Leaders can mandate action.

Creating the governance of digital technologies requires a “whole of government” and multistakeholder approach since the implications and governance of digital technologies touch upon virtually all areas of policy, and different stakeholders can bring in valuable expertise particularly at the local level. Governments do not yet do this. Not surprisingly, the same is true for the G20, whose working groups essentially mirror government structures. To some extent, the G20 has realized that this approach can be problematic and recently created a Digital Economy Working Group (from its beginnings as a Task Force). This group has a number of laudable goals that include the aim to “share information, mitigate the challenges and risks of digitalization” and to “advance a digital economy agenda.” It also recognizes that a “multistakeholder approach would enrich discussions.” Nevertheless, these goals might not lead to the necessary coherence in digital policy. For example, they may re-enforce silos because of the mandate to avoid “duplication of work in other G20 bodies,” as opposed to an approach in which the working group would oversee and encourage collaboration among various working groups, i.e., a “whole of working group” approach. Further, while the new working group acknowledges the importance of a multistakeholder approach, it does not mandate such an approach, which is needed to obtain valuable and diverse insights.

The current state of digital governance ultimately lacks democratic accountability and representation.«
Finally, although they are tasked to report back to G20 Leaders, G20 working groups have typically focused on producing papers and not on substantive outcomes. Thus, what is considered “appropriate” can vary tremendously.

What can be done?

CREATE A DIGITAL STABILITY BOARD

These Presidencies can draw inspiration from an earlier bold move by the G20 when it exercised its collective leadership to create the Financial Stability Board (FSB). The FSB is a multistakeholder-driven international institution set up by G20 Leaders in the wake of the 2008–9 global financial crisis. It aimed to rein in and regulate global banks and insurers in the face of the previous light touch regulatory framework and the powerful and competing vested interests at the company, national and regional levels, that had led to the crisis and its vast societal harms. The next three G20 Presidencies can seize the moment – a Bretton Woods moment – to exercise the same leadership that created the Financial Stability Board by creating a Digital Stability Board (DSB) [Fay 2021].

Its creation would be a testament to the importance of reforming the governance of digital technologies to make it more effective, inclusive, and coherent.

The FSB is not treaty-based, but its success derives from both its institutional structure and from its transparent multi-stakeholder participatory international forums that include policy makers, regulators, standard-setting bodies, and civil society. Its overall objectives are set by G20 Leaders, and it must report back to the G20 on progress against those objectives. In a similar fashion, the DSB would also be a multistakeholder representative forum with a remit to create global governance for big data, artificial intelligence (AI) and digital platforms, while allowing national variation to reflect different values and cultures [Fay, 2021].

The Digital Economy Working Group of the G20 could be tasked with developing a high-level action plan for digital governance that would be approved by G20 Leaders and given to the DSB to carry out. The DSB would then shape global standards, regulations, and policies; advise and innovate on best practices, as well as share insights about the regulatory and policy actions needed to address risks and vulnerabilities in a timely manner. Most importantly, it would ensure that its work feeds into other organizations and coordinate outreach to all countries and civil society. The DSB framework is scalable. It can begin by coordinating standard-setting for digital technologies. Given that laws and regulations typically lag behind technology, standards and soft law can help to fill the gap. Indeed, standards tend to become embedded in regulations at a later point in time and referred to in international treaties. The structure can be used to scale to a broad set of issues set out by the G20 – privacy, competition, cybersecurity and so on – and importantly to ensure coordination among them. Like the FSB, it would be mandated to report back to the G20 Leaders on how it is achieving the objectives they set out.

A GLOBAL APPROACH WITH SUBSIDIARITY BUILT IN

As with any global governance endeavor, but especially with big data and new technologies, a “one-size-fits-all” approach would be a non-starter. The roles ascribed to a DSB above are meant to account for differences in the approach to regulation while sharing broad values and principles. Elsewhere [Medhora and Owen 2020], the starting block has been described as a statement on technology and society, patterned, for example, on the Universal Declaration of Human Rights (UDHR). Article 12 of the UDHR already enshrines the Right to Privacy, but as several exercises building the principles for an ethical Artificial Intelligence show, the digital era exposes a wider set of issues that merit consideration. The OECD and UNESCO, among others, have done work that leads to a global compact on the ethics of new technologies. The G20 has already adopted these in large part, but they do require one more round of “scrubbing” to ensure that they embody the priorities and concerns of emerging powers and developing countries. This set of statements, signed by many, if not all, countries of the world, would thus form the “preamble” to an effective system of governance of new technologies.

At least in its early forms, the DSB would not impose specific policies on the global community (assuming this were even possible). Rather, it would rely on sharing best practices, creating a “go to” database on various aspects of the digital economy and society, and producing an authoritative annual report on, say, threats to the cybersphere. Over time, this would help create a governance structure that countries and other stakeholders were willing and able to adopt. This is the trajectory that is occurring in financial sector regulation, from initially the Financial Stability Forum to the current Financial Stability Board to [at some point] a treaty-based institution.

While we live in an era where there is little appetite to create new global institutions, it is hard to see how the “wicked problem” of global digital governance can be tackled without one. Bringing together the disparate silos of digital issues and bringing in fresh (non-official actors) are exactly the value-added that make the case for a DSB. And its work would be a classic global public good – available to all, leaving all better off.

CONCLUSION

A principal critique of the globalization we have witnessed during the past three decades is that while finance and technology (and to a lesser extent labor) have become unfettered, the institutional and

»The next three G20 presidencies can seize the moment – a Bretton Woods moment – to exercise that same leadership that created the Financial Stability Board to create a Digital Stability Board.«
policy responses to manage it have lagged. Nowhere is this more apparent than in the digital realm, where new technologies have exploded and increasingly result in fragmentation rather than constructive integration.

A Digital Stability Board would be a starting point to harmonize and advance global governance of digital technologies. This is a job tailor-made for the G20 to show that it remains an effective and inclusive steward of global integration.

References


The challenge of digital currencies

Designing a resilient financial system for the digital society

Policy brief

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Institution: CARI

The Argentine Council for International Relations (CARI) is a non-profit academic institution created on June 15 of 1978 to promote the study and debate of international affairs from a national perspective. The Council assesses the political, economic, cultural, and social dimensions of international relations and seeks to foster cooperation and peace through its diverse activities.

Innovation caters to diverse demands from both advanced and emerging economies, including those of the financially underserved and unbanked. Conventional monies (cash, central bank reserves, commercial bank deposits) coexist with a surging array of private sector-issued digital monies: electronic money and cryptocurrencies (especially stablecoins).

Cash usage is declining as a share of payments. Mobile and remote payments accessible 24/7 are climbing. Still, many of these new alternatives are prefunded or backed up by conventional monies. Their conversion to the monetary anchor at par is essential for their use as mediums of exchange.

In the short run, policymakers and regulatory authorities hold the upper hand. They can choose between building a more advanced technological infrastructure for monetary services or crafting ad hoc restrictive regulations on demand. But, in the long run, a solely rigid defensive approach will not work. It will diminish welfare as needs and tastes evolve. Central banks must give consumers and savers access to the monetary services they prefer in a stable environment. As authorities aspire to retain their currencies’ role as the monetary anchor, keeping pace with technological change and social behavior is crucial to shape progress and uphold social favor. In that sense, central bank digital currencies (CBDCs) emerge as a contingency plan to preserve public money.

This piece calls on the G20 to lead the process and ensure accommodation with economic and social dimensions. Policies should take full advantage of innovation while addressing financial stability risks. The threat of increased currency competition and fragmentation risks will require robust international cooperation.

MONEY AND THE PAYMENT LANDSCAPE ARE IN A STATE OF FLUX

New monies and payment systems are on the rise worldwide. Money is a social convention, and payments are social experiences linking people. Innovation caters to diverse demands from both advanced and emerging economies, including those of the financially underserved and unbanked. Conventional monies (cash, central bank reserves, commercial bank deposits) coexist with a surging array of private sector-issued digital monies: electronic money and cryptocurrencies (especially stablecoins).

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and business failure. The Mt. Gox bitcoin exchange liquidation (2014), the Silk Road darknet market scandal (2013), and the Wirecard fallout (2020) reveal that those risks could trigger serious trouble.

Digital platforms might develop their own currencies and built-in payment systems. In June 2019, Facebook (now Meta Platforms) and others launched the Libra Project, later called Diem. Libra was initially thought to become a global stablecoin backed by a basket of highly liquid conventional currencies. This was potentially a huge threat to financial stability.

> Stability risks cannot be overlooked. ‘Peer-to-peer’ networks and digital platforms are subject to runs and forced liquidation of assets.«

After much scrutiny by Washington regulators, and many downsizing changes, Facebook decided to pull the plug on the project in January 2022, and Diem was sold to a financial institution, Silvergate. Why did Libra trigger important regulatory concerns? Global digital platforms are larger than Systemically Important Financial Institutions (SIFIs), hold more accounts, and expand faster. And they benefit from relaxed taxation, regulation, and oversight. Unlike cryptocurrencies starting from scratch, their giant user base might favor rapid massive adoption. They can grow by tying their monies to the multiple services they provide while taking advantage of their overriding market power, privileged access to data, and cross-subsidization of activities within the conglomerates. They might offer a full array of financial services (credit, savings, wealth administration, insurance, etc.) disrupting the established channels of finance. Restrictive regulation will work as a stopgap measure but in the long term a more thoughtful governance approach has to be put in place.

**The Reign of the Two-Tier System Is in Peril**

The dominant two-tier system that gives central banks a monopoly over base money issuance and leaves private banks in charge of broad money and credit creation is under pressure. Other architectures are viable now, if not desirable. It is not only centralized digital platforms – blockchain, fintech developments and decentralized “peer-to-peer” networks that represent potential alternative paradigms, “tokenization” could become a radical disruption.

Consider DeFi, or Decentralized Finance, that runs on automated (“smart”) contracts and applications, mostly on the Ethereum blockchain. It replicates the activities of a financial system with no centralized intermediary: exchange, lending, derivatives, asset management, insurance. Fungible tokens, like ethers and bitcoins, and non-fungible tokens are used to provide capital.

Cryptocurrencies are too speculative to be true currencies, but stablecoins (crypto assets pegged to a currency or an asset as an anchor) work as “vehicle currencies” to switch in and out of volatile cryptocurrencies and facilitate fund transfers or liquidity holding. Ironically, most of them are managed off-chain by third-party issuers and traded in centralized exchanges.

Complete decentralization is an illusion due to governance needs. Contracts, no matter how smart, cannot cover all possible eventualities. So, at the end of the day, due to governance matters, a minimum level of centralization is always required. In DeFi, holders of governance tokens – usually the organizers of such initiatives – are the only ones that exercise voting rights when unforeseen circumstances demand special decisions (which can exert extraordinary impact on the fate of all token holders).

Stability risks cannot be overlooked. “Peer-to-peer” networks and digital platforms are subject to runs and forced liquidations of assets. Without access to the central bank balance sheet, they cannot expand liquidity. Not surprisingly, the Federal Reserve’s chairman, Jerome Powell, has stated that central banks do not want to destabilize the current system. Authorities do not aim to compete with commercial banks for funding (for example, with a CBDC) but neither do they want the two-tier system to lose its edge to less stable arrangements off their radar.

**The Role of CBDCs**

CBDCs can become a valuable addition to the Central Bank toolbox (Siaba Serrate, 2021). They might lower transaction costs, increase financial inclusion, facilitate direct fiscal transfers, and advance innovation. CBDCs might be needed to ensure universal access to public money and the effectiveness of financial and monetary policies. They could provide interoperability with a whole variety of payment solutions on both a domestic and cross-border basis and encourage public-private partnerships to provide competitive services like open payment bridges (as India’s Unified Payments Interface) and programming.

However, no unique design delivers all those benefits altogether. Many could be provided by alternative means of payments, such as real-time gross settlement systems (RTGS), especially if they are enhanced with application programming interfaces (API) functionality. Almost all central banks are improving their payment systems.

A CBDC could be created as a digital representation of an existing conventional currency, not undermining its singleness. But a privately issued stablecoin, pegged to the currency and backed by a safe and liquid pool of assets, would play the same function. Ultimately, both will broaden the demand for the currency. If stablecoin issuers were regulated as banks, they might supply a digital risk-free asset, backed by federal deposit insurance for the vast majority of transactions.

According to a 2021 BIS survey of 65 central banks, 86 percent were exploring the benefits and drawbacks of CBDC issuance, and about 60 percent were conducting experiments or a proof-of-concept. CBDCs could trigger bank disintermediation and bank runs if not appropriately designed. Currency substitution (digital “dollarization”) and loss of control over monetary policy might happen as a cross-border effect. The G7 has devel-
Board of Governors are divided. Governor Lael Brainard favors a CBDC given that others have CBDCs. Many disagree and propose a dollar stablecoin instead, a public-private solution. Governor Christopher Waller thinks that is the end of the discussion. “After exploring many possible problems that a CBDC could solve, I am left with the conclusion that a CBDC remains a solution in search of a problem.”

This is not a reason to abandon research and development. Web 3.0 and the metaverse indicate that the future is yet to arrive. Closer integration between physical and virtual reality spanning social presence, office work and entertainment will further spur monies to adapt to be fully compatible.

“Central banks share the view that it is not an appropriate policy response to start considering CBDC only when the need to issue CBDC arises in the future” (Kuroda, 2021). Central banks might want to get their digital tools ready as a call option. To be premature is a mistake that authorities can afford, but they might not want to be wrong and late.

RECOMMENDATIONS TO THE G20

The establishment of a Digital Money & Finance Working Group (DMF-WG) is urged to (a) accomplish the analysis of new digital instruments and procedures, (b) put forward the framework(s) for their integration to improve the financial architecture and society’s welfare, and (c) monitor implementation.

The DMF-WG must evaluate:
- safety, efficiency, and integrity of payment systems;
- new instruments’ and procedures’ legal entity and governance;
- market integrity and competition;
- cybersecurity and operational resilience;
- consumer and investor protection;
- data privacy, protection, and portability;
- environmental and social impact and governance (ESG);
- tax compliance; and
- compliance with norms against illicit finance.

The DMF-WG must develop a systemic vision and agenda for a resilient financial system in the digital age based upon solid granular knowledge with the flexibility to accommodate national values and priorities.

The IMF, the World Bank, and the BIS should be members and function under the umbrella of the Financial Stability Board (FSB). Active consultation with the private sector and the International Standard-Setting Bodies and the private sector is essential.

Digitalization goes far beyond finance and is reshaping society without a consensus set of shared norms. The elaboration of a Global Digital Governance Compact is needed to establish principles, codes of conduct, standards, regulation and policies across the many relevant domains to build trust and ensure it works for the greater good. Those areas would include – but not be limited to – governance on data, platforms, infrastructure, competition, cyber-security, artificial intelligence, big data, internet of things, cloud computing, etc.

A Financial Chapter should tackle financial digitalization (fintech, open banking, risk management, etc.). Regulation and surveillance, now segmented, needs to be reframed to be effective in a world where strategic actors operate across various financial and non-financial businesses requiring collaboration across different authorities and geographic jurisdictions.

Strong international cooperation is urged given the menace of increased currency competition and the understanding that choices will be rooted in national interests. It should discourage a race to prioritize preemptive second-best solutions. The agenda already exposes a defensive bias [preserving monetary sovereignty, avoiding digital “dollarization,” evading financial sanctions]. Coordination should promote interoperability and be positively based on a prudent “do no harm” principle controlling for unwanted currency substitution effects and adverse spillovers. Keep in mind that digital blurs country limits, and cooperation is required to function smoothly and not create havoc.

»A CBDC could be created to complement conventional cash, not replace it.«

While G7 central banks are sharing work on CBDCs, China has pioneered an independent path. Its participation in the Multiple CBDC Bridge led by the BIS Innovation Hub is a positive note as it involves joint efforts with relevant central banks. It is strongly advised to harmonize all types of projects and experiences before effec-
tive implementation. No global stablecoin project should begin operation until it adequately addresses relevant legal, regulatory, and oversight requirements and adheres to applicable standards.

Cooperation between advanced and emerging economies must gain broader scope and impetus. In matters as in e-money and digital payments innovations, non-G7 countries are leaders. Competition between commercial banks and fintech is stifler, a situation that might occur later in G7 countries. The first CBDC was launched in the Bahamas, not in the G7 (nor in the G20). Nigeria has launched the second one, eNaira. Establishing BIS Innovation Hub nodes outside the leading financial centers in regions like Latin America and Africa rushing with innovation and fast-changing financial landscapes is a still missing sensible step. They don’t shy away from aggressive or debatable moves (consider El Salvador embracing bitcoin as legal tender on top of dollarization).

are a real-time laboratory on topics as stability risks and currency substitution, suitable for empirical research. A specific proposal:

1) Elaborate a comprehensive vision on the future of money and payments and continuous monitoring;

2) Integrate that vision into an agenda to guide a resilient financial system in a prudent transition towards the digital age;

3) Encourage the broader international cooperation and expand the reach of the BIS Innovation Hubs;

4) Promote a Global Digital Governance Compact for a responsible and inclusive digital economy. Within this Compact, develop a Financial Chapter and align the financial agenda accordingly;

5) Continue execution of the G20 Roadmap for Cross-Border Transactions;


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Fault lines at the G20

Can the G20 come to a universal agreement on crucial issues like trade and climate?

Opinion piece

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The Group of Twenty (G20) has emerged as a leading global forum for international economic cooperation and rulemaking, comprising key advanced and emerging economies. It brings together the world’s major economies, accounting for 80 percent of global GDP, 75 percent of global trade, and 60 percent of the population.1 It was one of the first multilateral forums to give both advanced and emerging economies an equal footing on the same platform. However, in recent years, the G20 has been subjected to increasing criticism for its lack of legitimacy and inadequacy in addressing global challenges. In the aftermath of the pandemic, existing fault lines have deepened, and the gaps in expected recovery pathways have further widened. Moreover, evidence of friction and divergence in priority areas are visible in certain key issues of the G20 agenda.

TRADE DIVERGENCE

Over the last few years, the G20 agenda has focused on supporting the necessary reform of the WTO.2 The G20 leaders have recognized the urgent need to restore the dispute settlement system to “contribute to predictability and security in the multilateral trading system.”3 In reality, the G20 faces several constraints that can delay the fulfilment of its trade agenda and recovery convergence from the pandemic. Since December 2019, the WTO’s Appellate Body (AB) has been unable to replace retired members for the required quorum—which has rendered the Body inactive. The US, under the Trump administration, accused the WTO of “judicial overreach” and blocked the appointment of judges to the Appellate Body.4 The United States has expressed its discontent over the Appellate Body’s interpretation of WTO rules on anti-dumping, subsidies, and countervailing duties—stating that the AB had significantly affected the US and other market economies’ ability to confront the trade distortions.5

«The G20 has been subjected to increasing criticism for its lack of legitimacy and inadequacy in addressing global challenges.»

While the US blockage of the appointment of WTO Appellate Body members has led the multilateral rules-based trading system into crisis, the Biden administration has not yet taken any action towards lifting the impasse at the AB. The G20 as a grouping has not been able to expedite the restoration of dispute resolution despite highlighting its urgency in several of its high-level meetings. Moreover, the G20 Rome Leader’s Declaration has not made any direct mention of this agenda.6 The underlying reason could be due to G20 countries’ varying proposals on how to proceed with the resolution. For instance, the EU proposed7 expanding the AB and redefining its membership, while Canada highlighted8 the need to update trade rules to ensure the WTO’s relevance for modern trade issues. Additionally, while a Multi-Party Interim Appeal (MPIA) has
been proposed by a group of countries, such a solution is not likely, as only 22 of the WTO's 164 members, comprising 6 G20 members, have so far joined this appeal.9

Further, the G20 leaders also highlighted the crucial role of the multilateral trading system in ensuring equitable access to medical supplies, vaccines, and pharmaceuticals.10 However, there is a wide gap in terms of global production and distribution of COVID-19 vaccines, medicines and diagnostics between advanced and emerging and low-income economies – 60 percent of the advanced economies' population are fully vaccinated; however, a whopping 96 percent of the low-income countries remain unvaccinated (as of October 2021).11

»The G20 as a grouping has not been able to expedite the restoration of dispute resolution despite highlighting its urgency in several of its high-level meetings.«

At the Italian G20 Trade and Investment Meeting in 2021, India called for removing the trade barriers such as vaccine differentiations, COVID passports, and other mobility restrictions, which can disrupt the flow of critical services.12 G20 members such as Indonesia, South Africa, and India further reiterated that one of the ways to demonstrate this is by accepting the TRIPS waiver proposal.13 Despite the Biden administration's announcement of supporting the waiver, a few G20 members such as the EU, Germany, and the UK continue to oppose any consensus on this proposal.14 According to the EU, Intellectual Property (IP) is not a barrier to increasing capacity to produce vaccines.15 The Commission argues that the IP waiver would not speed up manufacturing. Similarly, Germany claimed that “the protection of IP is a source of innovation and must remain so in the future.”16

According to Germany17 and the EU,18 the factors limiting the production of vaccines is not IP but high-quality standards, infrastructure, skills, and production capacities – something developing nations lack and cannot be overcome in a short period of time.

ECONOMIC RECOVERY

Though the G20 countries agreed19 to raise International Monetary Fund (IMF) reserves with a new Special Drawing Rights (SDR) allocation of USD 650 billion, critics20 have argued that given the scale of the financing challenge in emerging economies, it is not enough. About 250 civil society organizations claimed that the SDR allocation of about USD 3 trillion was required; however about USD 650 billion was the most that could be granted without the support of the United States Congress.21 As the SDRs are allocated proportional to countries' quotas at the IMF, the distribution is skewed towards bigger countries – according to the European Network on Debt and Development, advanced economies will receive around 67 percent of the allocation, while the low-income countries will receive about only one percent.22

Furthermore, in 2020, the extraordinary G20 Finance Ministers and Central Bank Governor’s Meeting recognized that debt treatments beyond the Debt Service Suspension Initiative (DSSI) may be required on a case-by-case basis in the aftermath of the COVID-19 crisis.23 To date, 46 of the 75 eligible countries have applied for the scheme. However, the initiative has several roadblocks. According to Clement Landers, Senior Fellow at Centre for Global Development, the private creditors, which constitute about 20 percent of the DSSI debt service, have refused to participate voluntarily.24 Second, many countries that requested the DSSI treatment have been downgraded by the crediting agencies.25 Lastly, China, which is the largest creditor to DSSI countries, has exempted its government-owned lenders by classifying them as private sector entities.26

The G20's failure is reflected in its inability to make private creditors (banks, hedge funds and oil traders) a part of the debt suspension scheme.27

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The members also failed to agree on a date by which they would phase out inefficient fossil fuel subsidies. According to emerging economies such as India, climate action must be guided by the country’s national circumstances and stage of economic development, not at the cost of the country’s equity and development.28 Moreover, while the Rome Declaration commits to mobilizing climate finance of USD 100 billion annually from public and private sources through 2025, it fails to mention any retroactive payment of the financial commitment of 2020 to the developing countries.29

CONCLUSION

Given the fragile economic environment and global challenges posed by the pandemic, it is imperative for the G20 to seek common ground on global trade governance, international financial architecture and sustainable development – which is representative of the Global South. The G20 members must reinstate their com-
The G20 members have failed to break the impasse on climate goals.

such as vaccines, especially for developing and low-income countries. Moreover, for a sustainable economic recovery from a global crisis such as the pandemic, the G20 leaders must aim to facilitate higher private-sector engagement for debt relief efforts. Moving beyond the DSSI, the G20 must aim to build more robust and transparent mechanisms to enhance access to emergency funds for the Global South. Additionally, the G20 can be a key enabler in providing long-term financing needs for climate action. To break the climate impasse, it is crucial for the G20 members to collaborate in producing people-centric climate change mitigation strategies, which assess and acknowledge the divergent mood towards a rules-based global order by reinforcing the negotiating functions of the Appellate Body (AB).

They must commit to explore a consensus-based permanent solution to the crisis of the WTO Appellate Body and dispute settlement system. In view of a future health crisis and to enable an even global recovery, the G20 nations need to ensure mechanisms that prevent supply-side constraints of essential services and goods

E-Governance in the post-pandemic era

How technology is changing the landscape

Policy brief

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Responsive e-governance combines information and communication technologies and modern management practices within a single identity framework that enhances citizen, public and private sector engagement; transparency and accountability; and business and market efficiency – all leading to improved public service delivery and GDP growth. The Asian Development Bank (ADB) argues that technology can greatly improve government effectiveness at increased speeds of adoption, maturity and integration with public services. Countries already have started such services. India’s digital ID program Aadhaar registered 99 percent of its 1.2 billion population; Indonesia’s e-KTP card, Malaysia’s MyKad, Bangladesh’s Smart NID card system, and Pakistan’s NADRA system have followed similar suit. Asian megacities are also improving public transportation systems using technology: The Jakarta Transport Authority, for instance, engaged with multiple application providers such as Trafi, Waze, and Google Maps to assess alternate traffic routes that cuts down commuting times and increase ridership. Kenya’s M-Pesa system, launched in 2007 as the world’s first mobile money service, has contributed to an uptake of e-government services, enhancing financial inclusion for 86 percent of Kenyans. Similarly, the diffusion of mobile networks and inexpensive mobile phones has enhanced the use of digital identification systems for accessing government and IAAS (identity as a service) services used for KYC or anti-money laundering activities.

Due to the benefits of e-governance and digitally available public services, the European Commission has made efforts to

Participating Institution I:
AISA
As a nationally recognised not-for-profit organisation, the Australian Information Security Association (AISA) champions the development of a robust information security sector by building the capacity of professionals in Australia and advancing the cyber security and safety of the Australian public as well as businesses and governments in Australia.

Participating Institution II:
African Development Bank (AfDB) Group's mission is to help reduce poverty, improve living conditions for Africans and mobilize resources for the continent’s economic and social development. With this objective in mind, the institution aims at assisting African countries – individually and collectively – in their efforts to achieve sustainable economic development and social progress. Combating poverty is at the heart of the continent’s efforts to attain sustainable economic growth. The African Development Bank (AfDB) Group’s mission is to help reduce poverty, improve living conditions for Africans and mobilize resources for the continent’s economic and social development. With this objective in mind, the institution aims at assisting African countries – individually and collectively – in their efforts to achieve sustainable economic development and social progress. Combating poverty is at the heart of the continent’s efforts to attain sustainable economic growth.

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Technology can greatly improve government effectiveness at increased speeds of adoption, maturity, and integration with public services.«

 sector industries are now also realizing the potential of leveraging integration opportunities with government systems for customer identification and service improvements, providing consumers with greater flexibility to move their data between private sector competitors.

TECH AND FINANCIAL INCLUSION: BRIDGING THE GAP

Gartner in 2018 predicted that by 2030, 80% of heritage financial firms would shut down due to growing digitalization.15 The pandemic has since accelerated the adoption of online banking and digital payment systems, revolutionizing business models reducing consumers’ dependency on cash.15 Fintech is democratizing access to finance and achieving financial inclusion as an enabler and accelerator of econom-
ic growth. According to the World Bank, 1.2 billion “unbanked” adults gained access to financial services since 2010, increasing the number of individuals with bank accounts by 35 percent.12

Moreover, according to the World Bank’s Findex Report, only 19 percent of financial account holders in Southeast Asia accessed their accounts using a smartphone or internet in 201717 while 35 percent of people in the 15–24 age bracket were reported to use the internet to make purchases14. This figure increased to 42 percent in 202016. India’s fintech adoption rate – currently at 87 percent16 – has been augmented by the growth in digital payments whose transaction value touched USD 103 billion in October 2021 alone.17 In Bangladesh, fintech startup bKash has revolutionized the economy and 90% of bKash users have not interacted with the banking sector before.18 136 jurisdictions out of 140 members of the OECD and G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) in October 2021 agreed to a minimum 15 percent tax rate from 2023 for multinational enterprises providing e-commerce business solutions19 as a system that ensures fairer profit distribution.

In addition to financial inclusion, e-governance and digital systems also require reliable and affordable access to digital networks and services for businesses and individuals alike. Uninhibited service needs sound telecommunications policies that “reflect the need for a wide diffusion of digital networks, targeted measures for disadvantaged people, and firms.”20 In addition, government policies need to ensure adequate oversight in consideration of unregulated cryptocurrencies to address money laundering and taxation challenges,21 necessitating proactive policymaking that rapidly facilitates a shift from analog systems to digital.

TECH AND ACCESSIBILITY: A DOUBLE-EDGED SWORD?

Despite the post-pandemic internet penetration rates exceeding 60 percent in Southeast Asia, large swathes of the world’s population continue to lack a stable and affordable access to the internet with Africa recording just over 40 percent22 and South Asia recording 30 percent.23 A lack of affordable internet would have an inadvertent disruptive effect on widening an already existing digital divide. According to the Alliance for Affordable Internet (AfAI), a 1GB data plan is simply unaffordable for almost a billion people spread across 57 countries.24

Developed economies, meanwhile, witnessed spectacular technological advancements. The UK, for example, adopted digital assistance initiatives25 while the government of Singapore developed the Silver Infocomm Initiative (SII) to redress connectivity issues among people over age 50 by building their skills and education levels.26 Even some developing economies and LDCs are now pushing similar measures to facilitate digital literacy programs and social inclusion. In Kenya for example, a campaign by Safaricom in partnership with Google drove the adoption of mobile internet among women by introducing inexpensive 4G handsets along with customer support, simplified activation and relevant content.28 In Zanzibar, the World Mobile Group experimented with blockchain as a method of delivering fast and cheap internet access to under-served populations across five pilot sites that would serve roughly 3,000 people.29 However, technological advancements are not fast enough due to affordability issues and a lack of ICT infrastructure. During the pandemic, reliability and speed of internet-based connectivity are also crucial factors driving inequity between urban and rural areas 90 percent of students across Sub-Saharan Africa do not have home computers and 82 percent are unable to access online learning programs, creating an educational crisis and leading to dropouts resulting in losses of about USD 10 trillion in potential earnings and an increase in learning poverty rates to 63 percent.30

BUILDING BRIDGES: TECH AS A DRIVER FOR SOCIAL INCLUSION

Currently, there are approximately 327 million fewer women than men who own a smartphone and are able to access internet-based services. In developing countries, women are 22.8 percent less likely than men to use the internet.31 In Africa, 24 percent of women versus 35 percent of males currently use the internet32. According to AfAI, over 40 percent of coun-

»E-Governance and digital systems require reliable, equitable, and affordable access to digital networks and services.«
With a high barrier to entry for women in technology, they are already underrepresented in technical and executive positions of major technology transnational corporations. To illustrate, the number of women in Australia participating in the cybersecurity sector is only 17 percent. Research proves that companies with diverse leadership teams including women are up to 15 percent more likely to be profitable. Women-led businesses generated USD 820.6 million in global revenue with an additional USD 592 million in VC investment in 2019. Internet connectivity to 1,000 villages in response to the pandemic.

ICT infrastructural development is essential to economic development of developing and lesser-developed economies. In Kenya, the food crisis diverted increased market participation due to on-farm cameras and in-house monitors, reaping huge benefits for the economy. Even a 10 percentage-point increase in broadband penetration could increase GDP growth by 1.38% for developing economies. The pandemic’s push towards digital transformation has increased the need for ICT development. Georgia improved internet connectivity to 1,000 villages in response to the pandemic.

VIRTUAL HEALTHCARE: THE FUTURE?
Thailand set up a Ministry for Digital Economy and Society in September 2016 with a National Digital Economy Masterplan spread out over 20 years, before the pandemic even hit. Gabon, one of Africa’s few upper-income countries, aimed to transform its public health services in 2016 by placing them online through the eGabon project, rolling out a National Health Information System. But COVID-19 certainly increased digital initiatives in health. Africa addressed its critical shortage of healthcare workers with a strong, innovative approach using ICT and 4IR. Health startups from South Africa are also attracting investments. In April 2020, for example, a pan-Africa hackathon launched by the African Development Bank (AfDB) to elicit responses to the pandemic’s challenges saw over 25,000 entrepreneurs respond to the call, 16,000 participate, and 750 solutions proposed of which 20 received funding.

Imposing restrictions, regulating public movement, and adopting preventive measures to curb the spread of COVID-19 spurred governments into combining healthcare with innovative and advanced technologies. In Australia, state-based manual mandatory QR code check-in applications were implemented to enable faster and more accurate contact tracing of citizens as they moved about in different retail stores or venues, far more effective than the federal government’s automated Bluetooth-enabled solution. Even the use of telehealth consultations increased worldwide.

Technologies, however, need to be affordable, easy to use, intuitive, reliable, and secure. Policy and regulatory uncertainty around healthcare, unfortunately, slows down adoption rates for technologies introduced in markets while finding itself at odds with their commercial, multinational nature. Moreover, low levels of digital health and literacy even among health practitioners is a major barrier to the widespread use and adoption of technology-based health innovations and products, further complicated by climate-related concerns.

TECH AND CLIMATE ACTION: INNOVATION IN PROTECTION
Although the G7 decided to make climate risk disclosures mandatory in June 2021, the need for understanding and quantifying emission baselines become a complex exercise for enterprises regardless of their size. “Green enterprises,” a twin strategy combining economic growth with environmental sustainability, are no different.

ASEAN’s growing internet economy – USD 100 billion (2019) and expected to triple by 2025 – would help businesses advance sustainability efforts through technology investments, bolstered by ASEAN’s Digital Integration Framework Plan 2025, taking place alongside the Comprehensive Recovery Framework. Green enterprises in Singapore, for example, are expected to grow at an exponential pace by 2030 with up to 70 percent coming from overseas markets, leveraging technologies such as artificial intelligence and big data. China recently unveiled an ambitious five-year economic plan that aims to prioritize innovation and technology across sustainability initiatives. Currently, Africa is the leading global destination for off-grid solar investment with USD 24 billion invested in 2020. However, according to the World Economic Forum (WEF), most of the investment flows to non-African companies or ventures are based on outdated risk assessment profiles that keeps critical funding out of the hands of African entrepreneurs.

Several top tech companies – including the likes of Amazon, Apple, Alphabet, and Meta – were criticized for numerous reasons at COP 26, yet companies elsewhere are actively participating in climate change initiatives, cognizant of the fact that digital technology could help reduce carbon emissions by about 17 percent. On Digital Day 2021, for example, 25 companies signed the European Green Digital Coalition pledge spearheaded by the European Commission and endorsed by the United Nations Environmental Programme (UNEP) to develop digital green solutions and take active measures towards carbon neutrality.

HONEST POLITICS: TECH-ENABLED RIGHTS-BASED GOVERNANCE AND SOCIAL MEDIA PLATFORMS
Technology has, in many cases, enabled individuals to enjoy their human rights, especially freedom of expression with the help of social media and digital platforms. However, technologies have increased exposure to newer risks such as government...
censorship and hate speech in digital spaces through algorithms designed to filter offensive or unacceptable content online.46

According to the Committee to Protect Journalists, internet censorship and restricted internet access remain common forms of harassment in countries like Pakistan and Syria. China and Iran use complex filtering and content blocking measures to control social interaction in digital spaces47 while in Turkey, internet service providers (ISPs) have been mandated to crack down on “expressions of dissent” towards the government. Africa in 2021, according to cyber security company Surfshark, became the most censorship-intensive continent across the globe, responsible for nearly 53% of all internet disruptions that were related to protests and/or elections.48

Restrictions on digital platforms have increased in the wake of the pandemic. Despite UN’s urge for human rights compliance,49 governments around the world attempted to legitimize pervasive surveillance measures50 through facial recognition and privacy-invading contact tracing apps while social media companies regulated information dissemination51 with concerning commercial interest.52 Global tech companies must respect the digital policies as embedded in the Universal Declaration of Human Rights over their commercial interest.53 States and private enterprises should comply in accordance with the UN’s Guiding Principles on Business and Human Rights.

Moreover, as the implementation of AI/ML systems increases in our daily lives, data sets used to train these systems will unfortunately result in biases that may have detrimental lifelong consequences for individuals based on their social and/or economic identities. Understanding what can be termed ethical AI or ML, therefore, is important for developing policies that address inherent biases, providing citizens with dispute mechanisms.

»Data is more than just a ‘new oil’. It is the bedrock of a rights-based and user-centered environment in the 21st century.«

The rapid pace of emerging technologies can inspire resilience and adaptability among human beings, but it must be kept in check with appropriate ethical guidelines that address gaps in governance through a multi-stakeholder approach to ensure their equitable, fair, and just use54 without necessarily slowing down innovation and progress. Numerous examples of multi-stakeholder collaboration that spark innovation and increase public trust already exist. Japan’s experience with cryptocurrency and Finland’s open-data approach to transport are existing examples.55

SUMMARY AND CONCLUSION

Any technological change would cause systemic disruptions to fundamental ways of interaction within any context. The numerous characteristics that define any new technology are determined by the way communities interact56 both with and without it. Governance of technological interventions lies in ensuring existing institutions anticipate, reform and adapt to normative social issues as they arise in response to the after-effects of technological disruptions. In a post-pandemic context, it is without doubt that technology will bolster global economic recovery but must not be without appropriate regulation to avoid potential negative fallout,57 such as an increase in inequality and abuses of power.

A digital future is indeed possible, provided they are grounded in fundamental rights and laws that keep one safe from unlawful persecution. Data is more than just a “new oil.”58 It is the bedrock of a rights-based and user-centered environment in the 21st century.

Please Note: The opinions of Richard Labelle are his own and do not necessarily represent the view or position of the World Bank African Development Bank Group.

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COVID-19 and governance in the Global South

The role of power distribution in redefining the social contract

Opinion piece

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UNDP’s Oslo Governance Centre (OGC), works closely with UNDP central and regional bureaus in New York headquarters and other relevant UN bodies in strengthening the overall analytical and learning ability in the area of governance and peacebuilding. Our focus includes human development, democratic governance and conflict prevention to support policy development and applied research, with an overarching focus on democratic governance and peacebuilding in crisis, conflict and transitional contexts.

INTRODUCTION

There is no doubt that the COVID-19 pandemic has highlighted the importance of governance arrangements, both nationally and globally. The varying effectiveness of the pandemic response across countries and regions has depended largely on the capacity of societies to reach agreements and follow them collectively. We have seen the relevance of the quality of governance across different levels (global, national, and local) and among different actors (public, corporate, etc.) impacting both the short-term response to this crisis, and the long-term achievement of the 2030 Agenda.

With this in mind, Southern Voice and UNDP’s Oslo Governance Centre joined forces to drive a conversation across the Global South on the emerging trends on governance during the pandemic, and the implications for SDG 16 and the 2030 Agenda more broadly. This collaboration translated into policy roundtables across Africa, Asia, Latin America, the Arab region, and Europe and the Commonwealth of Independent States (ECIS), as well as an online consultation on the SDG 16 Hub. These conversations touched on a diverse range of issues on peace, justice, and inclusive institutions. Throughout the different consultations, we identified an underlying concern: the pandemic has exacerbated the unequal distribution of power.

Reflecting on the discussions of governance in global development discourse, we see how it is usually analyzed through the lenses of concrete techniques and approaches that can improve the relationship between governments and citizens. This include, for example, strategies to increase transparency, accountability, participation, or state capacity. But what is increasingly apparent is that a more fundamental structural change is needed to address the multiple and overlapping crises facing the world today. Addressing inequality must be at the heart of development, as the redistribution of power and resources is necessary to rebuild the social contract and restore trust and legiti-
macy of the state. In this context, the focus of the UN Secretary-General’s report, “Our Common Agenda” (United Nations, 2021), highlights the need to renew the social contract grounded on human rights. After all, these fundamental societal agreements between people and the state are the foundation for all forms of governance.

ANALYZING POWER DYNAMICS IS ESSENTIAL FOR A NEW SOCIAL CONTRACT

We recorded similar narratives across all regions. COVID-19 is revealing extreme inequalities and resulting in a dangerous imbalance in the distribution of power within societies. We refer to power here as the capacity to influence others; that could be states, groups or individuals. Findings from the studies we conducted on the COVID-19 pandemic and governance in the Global South (UNDP & Southern Voice, 2022) make apparent the importance of democratizing political power in responding to global health emergencies. Across the Global South the pandemic exacerbated existing power imbalances in pandemics and beyond, action must be taken at three different levels: the multilateral system, national institutional arrangements and the inclusive participation of individuals.

MULTILATERAL ARRANGEMENTS THAT PROVIDE POLICY SPACE TO NATIONAL GOVERNMENTS

The Our Common Agenda Report rightly highlights that a social contract is built at the local and national levels. It is not something that can be imposed top-down. Consequently, the Secretary-General highlights, “I will therefore mobilize the whole United Nations system to assist countries in support of a renewed social contract, anchored in human rights.” (United Nations 2021, p.220). In practice, this entails creating policy space and strengthening regional and global spaces that promote human rights. Other global governance spaces, such as the G20, can also provide policy space to promote the renewal of a more inclusive and just social contract, to ensure that it is effective.

The issue of a lack of policy space for governments to operate during the pandemic came out clearly in the dialogues hosted over the last year. The concept of policy space has been used to describe the tensions, particularly in trade, between global agreements and national policies. Participants highlighted how, in the Global South, governments’ capacity to respond with fast and substantial investments to the pandemic was limited by the lack of fiscal space due to lack of access to international financing or increasing debt. International trade rules proved inadequate to support developing countries in accessing medical equipment and vaccines. In other words, the global norms had a direct impact on how well governments were able to react. Multilateral arrangements that support a new social contract, are those that provide governments the policy space to respond to the needs of their citizens, including setting up early warning systems to enable countries to act and put in place resources for social policies to address the national-level fallout of global crises.

While the policy space at the international level remains important to enable inclusive and responsive governance, promoting accountability mechanisms at the regional and global levels can also be effective to curb abuse of authority. Strengthening international mechanisms such as the Human Rights Council and regional human rights bodies to hold national actors to account for violation of human rights and abuse of power in the context of the pandemic may be needed (Mthembu, 2021). Further, in the dialogues it was suggested that engagement of civil society organizations and national human rights mechanisms be increased with a particular focus on addressing the priorities and including the participation of vulnerable communities. To this end, we emphasize the urgency of increasing local and global support toward human rights defenders, many of whom have been at the forefront of demanding accountability for abuses and calling for a more inclusive and just pandemic response.

INSTITUTIONS THAT BALANCE POWER IN SOCIETY

SDG 16 promotes peace, justice, and strong institutions. The pandemic has highlighted the need to unpack the meaning of strong institutions. A paradox seems to emerge: strong institutions that can...
implement policies swiftly in response to crises are essential but, at the same time, if sufficient oversight measures are not in place, the risk remains that strong institutions can easily abuse power and may not necessarily cater to marginalized and vulnerable populations. What are the characteristics of strong institutions that promote a balanced distribution of power in society?

»After the pandemic, and with the objective of a new social contract, the re-balance of power in governance is needed.«

First, they must be institutions that do not abuse their legitimate power. The discussions across different regions highlighted how some governments have exploited the pandemic to put in place measures to secure their own power and prevent freedom of assembly and dissent. Furthermore, in some regions, there is concern that the pandemic response has been highly securitized: from the language of security forces in the implementation of short-term, all these abusive strategies recur, and frontline public officials, and other independent oversight bodies to check governments’ actions are also critical. These institutions must remain functioning even throughout crises.

Second, decentralized institutions are less likely to be able to abuse power since different roles and responsibilities are shared between different levels of government. In large countries with federal systems, subnational authorities are often better placed to put in place local-level pandemic response measures that reflect the concerns and priorities in the location. Local authorities, at times, were also effective in counterbalancing executive power by questioning and challenging centralized decisions that were not in the interest of local populations. Furthermore, decentralized institutions have proven better at responding to the needs of communities during the pandemic and providing needed health and social services. For example, India reached millions through a vast network of rural local bodies called gram panchayats and frontline public officials (Kapur, 2021). Subnational institutions can play an important role in building trust in the public sector within society as they are often the ones most directly in contact with the population.

Finally, strong institutions are those that are less vulnerable to corruption and capture by elites. The corruption scandals regarding the management of COVID-19 resources along with government short-comings in implementing social services have reinforced perceptions of a distant State, run by a privileged elite (UNDP & Southern Voice, 2022). In summary, strong institutions are those that are resilient during crises and are able to effectively respond to their population, upholding good governance principles of transparency, inclusion, and participation so that power is shared and there is sufficient oversight in place to ensure accountability.

**ELICIT AND INTENTIONAL INCLUSIVE INSTITUTIONS**

While the previous two sections have highlighted the importance of systems both at the national and global levels, a people-centered approach remains critical. At the heart of the social contract is the relationship between people and how power is organized. Without adequate representation and participation in decision-making spaces of different population groups, an inclusive social contract is not feasible. As we see increased polarization across all regions and countries, inclusive governance approaches promoting tolerance and solidarity become even more needed.

The regional dialogues highlighted that COVID-19 restrictions had a disproportionate impact on marginalized populations and excluded many lower income populations, especially daily income earners. When governments criminalized non-compliance with COVID-19 measures, these groups were especially affected (Zagmutt and Bohmer, 2021). The restrictions also particularly affected women, who made up a large part of the informal work sectors. In addition, the pandemic placed an additional burden on care responsibilities which was for the most part absorbed by women. Additionally, for many governments it has proven difficult to provide social protection to everyone. In Asia, undocumented persons and migrant workers are a key demographic that suffered from additional discrimination and marginalization during the pandemic (UNDP & Southern Voice, 2022). These are just two examples to illustrate that when policies are not intentionally inclusive, they can have discriminatory outcomes. A critical step to address this would be to ensure that participation of youth, women, and marginalized groups are included in all levels of policy making and that avenues for increased public participation is built into governance processes.

Furthermore, the pandemic has shown us the increased importance of digital spaces to promote political participation. For example, to circumvent restrictions on public physical gathering, people sought out online platforms to exercise their freedom of association, assembly and expression. However, these digital spaces are not inclusive by design either. Disparities among different population groups in access to digital spaces could also be seen as “a tool of social and political exclusion” (UNDP & Southern Voice, 2022). As more governance processes and means of public engagement and participation in political processes become digital, equitable ac-
access to technology and digital capabilities are essential to ensure inclusive participation and prevent disenfranchising those on the other side of the digital divide.

CONCLUSION
The pandemic has served to refocus our attention on the interconnectedness of the world across countries and communities and to recognize that to effectively recover from this pandemic, we need to address inequalities: economic, social and political inequalities. This requires a rebalancing of power and renewing of the social contract. To implement changes in this direction, we must think at both a systemic and individual level. Multilateral institutions must provide sufficient policy space to countries so that they can put in place effective policies that respond to the needs of citizens, and that respond to crises promptly. At the national level, governance institutions should strengthen systems promoting the distribution of power at all levels – from decentralization of authority to systems of checks and balances. But strengthening institutions is insufficient if these institutions are not truly inclusive, promoting participation and representation of different groups. To correct the grave imbalance of power seen across all regions as they face multiple waves of the pandemic, it is clear that policy decisions must explicitly seek to address inequality and exclusion, both in terms of the process of design as well as in the outcomes.

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Developing country demands for an equitable digital tax solution

Necessary reforms in the two pillar solution

Policy brief

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ABSTRACT

The taxation of the digitalized economy is the foremost challenge in international taxation today. Countries around the world, especially developing countries, are struggling with taxing the rising profits of major tech giants that operate on entirely new business models that have made traditional international tax rules obsolete. A “Two-Pillar Solution” is being negotiated in the OECD/G20 Inclusive Framework on BEPS that seeks to update these rules, re-allocate taxing rights, and establish a global minimum tax. However, as it stands, the solution has very limited tax revenue benefits for developing countries and is administratively complex. For the solution to be durable, it must be equitable, and accordingly must incorporate the concerns of developing countries going forward.

INTRODUCTION

International taxation has moved from being a niche, technical issue to being high on the global agenda. The recent Group of Seven (G7) and Group of Twenty (G20) agreements prominently featured international tax as one of the major issues in the global economy. A historic negotiation is nearing conclusion in the Organisation for Economic Co-operation and Development (OECD)/G20 Inclusive Framework (IF) on Base Erosion and Profit Shifting (BEPS). This is on the “tax challenges arising from the digitalisation of the economy.”

It is commonly assumed that the negotiation applies only to large tax-avoiding tech companies such as the FAANG (Facebook, Amazon, Apple, Netflix and Google), which stand accused of avoiding around USD 100 billion in taxes. However, in reality it has gone much further and seeks to fundamentally change international tax rules that govern how the “nexus” or a taxable presence for Multinational Enterprises (MNEs) is decided and how their taxable profits are allocated between jurisdictions. The digitalization of the economy has meant that MNEs can generate revenues from jurisdictions without needing to have a physical presence. Further, allocating profits between source and residence jurisdictions becomes difficult when highly digitalized businesses barely have any physical assets, relying almost entirely on “intangibles” such as algorithms for creating value. For example, Uber does not need to own cars and Airbnb does not need to own real estate for delivering their respective services.

“TWO-PILLAR SOLUTION” – A HALF-HEARTED APPROACH

To solve these problems, the IF has pro-
The present structure of Pillar Two gives the default first claim on this income to the developed countries and is again based almost entirely on a US domestic law and meant to serve American interests.«

duced a “Two-Pillar Solution.” Pillar One seeks to update international tax rules, while Pillar Two seeks to establish a global minimum tax. The G7 and G20 agreements were hailed by the Western media as “historic,” but the contribution of developing countries has been under-reported at best and ignored at worst. Developing country proposals, such as those made by the Group of Twenty-four (G24) and the African Tax Administration Forum (ATAF), have barely received any attention or serious analysis.

The reality is that were it not for the strenuous efforts of developing countries, the Two-Pillar Solution would be a carbon copy of American proposals. Even now, much of the architecture of Pillar One is based on a US proposal titled “marketing intangibles.” This sought to redistribute only a tiny portion of total MNE profits to market jurisdictions, the so-called non-routine, or residual profits. The US later also called for a very high threshold so only a few MNEs would be covered. It demanded a global turnover of over EUR 20 billion and profitability over 10 percent. This reduced the number of companies in scope to around 100 from the earlier 2,300 based on a EUR 750 million turnover threshold.

Both these proposals now form the basic foundation of Pillar One. The present estimate is that profits over 10 percent of revenues will be considered as residual, and between 20–30 percent, a figure still being negotiated, of these will be reallocated to the entire developing world. Tandon (2021) demonstrates the application of this through an example. Out of 22.5 percent global rate of profits of Alphabet, Google’s parent company, taking out the non-routine profits (assuming a 20 percent reallocation) would mean only 2.5 percent [(22.5 – 10\(\times0.2\)] would be available for distribution to source countries. This distribution is expected to take place on the basis of sales. Hence, with 34 percent contribution by the Asia Pacific countries to global sales of Alphabet, only about 0.8 percent \([2.5 \times 0.34]\) is to be distributed among them, which could be less if certain rules of Pillar One approach are adopted.6

Pillar Two, similarly, seeks to put in place a global minimum tax through four interlocking rules, which essentially determine which country gets to tax the under-taxed income. The present structure of Pillar Two gives the default first claim on this income to the developed countries and is again based almost entirely on a US domestic law and is meant to serve American interests. For example, if the global minimum tax is agreed upon at 15 percent, and an MNE pays a developing country government an Effective Tax Rate (ETR) of only 2 percent, then the remaining 13 percent will be collected by the country where the MNE is headquartered. This is based on the “income inclusion” rule, which is almost entirely modelled on a US domestic measure known as Global Intangible Low-Taxed Income (GILTI), part of the Tax Cuts and Jobs Act (TCJA). If the company is a Big Tech firm like one of the FAANGs, then the headquarter jurisdiction would be the US, which would collect the taxes. Only if the headquarter jurisdiction refused to collect the taxes – which is quite unlikely – would the “source” country from where the MNE generated the revenue be able to collect the tax.

It is no surprise therefore that even the OECD’s revenue estimates for Pillar One and Pillar Two show that developing countries have very little to gain. In fact the total gains are quite limited. Pillar One is expected to lead to an annual tax revenue increase of a paltry USD 5–12 billion, and Pillar Two between USD 23–70 billion (Figure 1). This pales in comparison to the United Nations [UN] High Level Panel on International Financial Accountability, Transparency and Integrity for Achieving the 2030 Agenda (FACTI Panel)’s estimate of USD 500–600 billion lost annually due to corporate profit shifting. The distribution of gains is shown below, with high income countries – developed countries – the clear winners from Pillar Two.

It was therefore unsurprising that nine members of the Inclusive Framework (IF) did not sign up to the agreement reached on July 1, 2021. These have now been reduced to six: Ireland, Hungary, Estonia, Kenya, Nigeria, and Sri Lanka. Negotiations continue to have their concerns tak-

![Figure 1: Estimated Effect of the Two-Pillar Proposals](source: OECD Economic Impact Assessment, 2020)
Going forward, for the Two Pillar solution to be fair, stable and durable, it is vital that the implementation plan fully reflect the needs of developing countries.«

also suspect. Negotiators have revealed on condition of anonymity that countries were given “accept all or reject all” ultimatum and so were forced to accept, even if they deeply disagreed with many aspects of the Two-Pillar Solution. It points to a larger systemic problem with the OECD’s “consensus” approach to decision-making.

Going forward, for the Two-Pillar Solution to be fair, stable, and durable, it is vital that the implementation plan fully reflects the needs of developing countries. It is therefore highly valuable that the future international tax framework be fair, with developing countries allowed to collect their fair share of the MNEs’ profits in the digital economy. Otherwise, it may run the risk of even more countries abandoning it and opting for unilateral measures or alternative approaches such as Article 12B of the UN Model Tax Convention. Whatev- er equitable components are there in the Two-Pillar Solution have been brought about solely due to the painstaking efforts of developing countries. These include the recognition of demand as a basis of profit allocation, nexus that does not require physical presence, profit allocation using an apportionment approach, revenue-sourcing rules that trace it to the end-market jurisdictions where goods and services are consumed, exclusion of the extractive industries and the conditional primacy of the subject to tax rule. It is important to give developing countries credit for these hard-won achievements, while highlighting demands that have not yet been accepted and must be incorporated going forward.

CONTENTIOUS DOMAINS

More work is needed in the following areas of the Two-Pillar Solution, which need to adequately reflect developing country concerns.

Re-allocation of total MNE profit

Both the G24 and ATAF demanded the re-allocation of a portion of total MNE profit rather than categorizing it into routine and non-routine, which is administratively complex and irrational in terms of policy. The G24 had called for fractional apportionment, which would allocate a portion of the global profits of the enterprise to different jurisdictions based on a formula that gave balanced recognition to both supply and demand factors and would be administratively simple for developing countries. ATAF proposed that the quantum to be reallocated could be a Return on Market Sales based on the Global Operating Margin of the MNE, whereby the higher the Global Operating Margin of the MNE, the higher the reallocation.

Taxing income from “routine” functions

The G24 and ATAF both argued that routine functions such as marketing and distribution could be carried out remotely, but as they would generate only “routine” profits these would not be reallocated to the market jurisdictions, which would be unfair.

As stated by the G24, it is ... illogical and inappropriate that an enterprise will have a taxable nexus in a market jurisdiction but would pay tax only when it earns non-routine profit. An enterprise engaged in providing goods/services remotely, does marketing of its product, distributes its products say TV shows or movies, collects payments from customer and addresses customer grievances. All these activities, which are in the nature of baseline distribution and marketing activities can be performed remotely. It is therefore quite unfair (and ironical) to deny taxing rights in respect of such activities to a market jurisdiction on the ground that these are not performed physically when the very purpose of the discussion is to address precisely this problem i.e., the ability of businesses to operate remotely due to digitalisation.

Mandatory and binding dispute resolution

This has been a red line for many developing countries. Mandatory and binding arbitration has long been criticized for its structural inequities and remains objectionable. While a concession has been made to make the process elective for countries fulfilling certain conditions, this should be made elective for all developing countries.

Subject to Tax Rule

The Subject to Tax Rule (STTR) allows developing countries to impose a withholding tax on certain intracompany payments that have the potential for tax avoidance. This will come first in the rule order under Pillar Two only for developing IF members, defined as jurisdictions with a Gross National Income (GNI) per capita below USD 12,535. They must request another IF member to incorporate the STTR into their bilateral tax treaty (if it exists). However, it is unclear how this will be enforced. Further, analysis by the BEPS Monitoring Group (BMG) has shown that the STTR will have limited benefits and may not result in any additional taxing rights under the vast majority of tax treaties.

Scope of Subject to Tax Rule

The G24 has demanded that the scope of the STTR be as broad as possible and include all service payments and capital gains. Service payments in particular pose a significant tax avoidance risk to developing countries.

Undertaxed Payments Rule

The Undertaxed Payments Rule (UTPR) gives source jurisdictions the right to deny deductions to bring the effective tax rate up to the minimum. Unfortunately, at present this is applicable only after the Income Inclusion Rule (IIR), which gives the “first claim” on undertaxed income to
headquarter jurisdictions – mainly developed countries. Only if they refuse to collect the tax, which is very unlikely, would the UTPR come into effect. Thus, the UTPR must receive primacy in the rule order under Pillar Two.

Minimum Rate
The minimum rate of 15 percent is too low. Countries such as Argentina have called for 25 per-cent and ATAF and the African Union have called for at least 20 percent. Tax justice civil society organizations such as the Independent Commission for Reform of International Corporate Taxation (ICRICT), the Tax Justice Network and Oxfam are campaigning for a 25 percent rate. This can contribute to higher resource mobilization and support pro-growth policies that will help countries achieve the Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development.

CONCLUSION
The Two-Pillar Solution must incorporate these developing country demands to be fair, equitable and durable. An imbalanced agreement that excessively favors the

»The G24 has demanded that the scope of the STTR be as broad as possible, and include all service payments and capital gains.«

Global North at the cost of the Global South is unfair and faces the danger of being abandoned or undermined. The developed countries are gaining little by shielding large tech firms headquartered in their jurisdictions, as these are not paying taxes to them either. Major companies like Amazon, FedEx and Nike have paid zero in taxes to the US federal government. Ensuring these MNEs pay taxes in the jurisdictions from where they generate profits would benefit both developed and developing countries and place the world on a sustainable path to a post-COVID recovery.

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Economic transformation in international development cooperation

A call to action

Opinion piece

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As a federal enterprise, GIZ has over 50 years of experience in a wide variety of areas, including economic development and employment promotion, energy, and the environment, as well as peace and security. GIZ works in demand around the globe – from the German government to European Union institutions, the United Nations, the private sector, and governments of other countries.

The global sustainability agendas, i.e., the 2030 Agenda, the Paris Climate Agreement, and the Convention on Biological Diversity, call for no less than "transforming our world." Transformation refers to deep changes in predominant systems that allow for a sustainable transition towards "recoupled" economies in which economic, social, and ecological prosperity grow together and not apart, thus asking for a substantial reduction in carbon emissions and societal inequalities across G20 countries and beyond. For years, actors in academia, policy and practice have been calling for more action on " transformational change" through cooperation, as the international community has come to realize that gradual changes in development pathways are not enough for solving the current global challenges such as the rise in inequality, loss of biodiversity and climate change.

Building on this momentum, we have joined forces in a GIZ-hosted dialogue series for revisiting economic paradigms and shifting the discourse on transformation from abstract concepts to practical recommendations for international development cooperation. We perceive that it is not enough to nurture old or new critique of economic conditions and the underlying economic science; nor is it sufficient to only point out abstract alternatives or top-down blueprints for human development within planetary boundaries. We suggest fostering the development and operationalization of practical alternatives in international development cooperation.

For this purpose, we have structured our dialogues around three guiding questions, which we have tried to answer. In the following, we present our dialogues’ outcomes and call to action.
WHAT COULD A NEW ECONOMIC MAINSTREAM LOOK LIKE?

First, we tested the development of economic values and norms that could constitute a paradigm shift and formulated application-oriented criteria for our vision. We then reached a consensus on the following essential features for a new economic mainstream in international development cooperation:

- A market economy with private, cooperative, municipal, and purpose-oriented enterprises complemented by global trading systems serving the common good, and thus all dimensions (ecological, social, and economic) of development
- Growth up to sufficiency and at optimal size in line with natural regenerative potential and common-good balance (equality, fairness, poverty alleviation)
- Cooperative incentive structure based on creating maximum, long-term use value of products and services

The global sustainability agendas call for no less than ‘transforming our world’.

- Stakeholders (those who produce, provide, and use products and services) in the corporate environment are main beneficiaries of economic development as opposed to mostly detached shareholders
- Democratic co-development of economies’ purpose and functioning with stakeholders rather than leaving markets to self-regulation according to alleged “natural laws of economics”
- A way of working as practitioners in economic cooperation, embracing complexity and local ownership, that facilitates open results, local interpretations and common narratives of economic transformation perceived to be legitimate, useful, meaningful, and fair.

We suggest using this vision for economic transformation as guidance for transformational ambitions in international development cooperation. However, we would also like to highlight that our compilation of features is by no means exhaustive and needs to be adjusted to the respective local context. Any addition or prioritization of features should be carefully evaluated by development practitioners and their local partners.

HOW CAN OUR VISION BE FACILITATED THROUGH INTERNATIONAL DEVELOPMENT COOPERATION?

Second, we discussed essential aspects for designing and implementing transformational projects for economic development in international development cooperation. We considered seven design principles (1 to 7) the so-called TransformAbilities, as drafted by GIZ, and we enriched them with two suggestions (8 and 9) from our discussions:

1. Paradigm-ShiftAbility: The most distinctive ability is the questioning of recent systems, paradigms, socio-technical regimes or major narratives. Such change leads to new systems with fundamental differences that could not be included in old ones.

2. MainstreamAbility and ScalAbility: Without a large-scale change to a new mainstream, paradigm or narrative; there would be no transformation. Interventions should actively try to catalyze a scaling towards a broader mainstream.

3. SustainAbility and ResilienceAbility: Another crucial ability of an intervention is to facilitate the stabilization and resilience of a new regime, paradigm or narrative to increase its chances of remaining sustained over time.

4. MultidimensionAbility and Multi-levelAbility: Transformations may occur in one or more dimensions. The ability of an intervention to address multiple dimensions such as policy, technology, markets or societal norms is therefore essential. Additionally, interventions should consider the interactions between and the impact of the micro-, meso- and macro-level to achieve a cross-cutting and broader impact.

5. Social-ChangeAbility: As various social layers and levels can show tremendous resistance towards a new regime, paradigm or narrative, a deliberate approach to anchoring them within the broader society is required.

6. ComplexAbility and AdaptAbility: Transformational interventions should be able to address some of the basic characteristics and dynamics of complexity. These are the ideas of emergence (the system is more than its parts), nonlinear behavior and dynamics, as well as uncertainty and unpredictability in the system. The ability to adapt continuously to changing contexts (adaptive management) is closely related.

7. ReciprocAbility: Complex systems consist of countless interdependencies, (counter)productive dynamics, as well as mutual influence and power structures. Reciprocal relationships (vertical and horizontal) are crucial for the success of transformational interventions and help in balancing the complex system dynamics.

8. Capacity-FacilitateAbility: Without the adequate capacity to absorb a change into a new mainstream, paradigm or narrative, transformation is not going to be sustained over time. Thus, transformational interventions should also aim at facilitating capacity across multiple levels.

The most distinctive ability is the questioning of recent systems, paradigms, socio-technical regimes, or major narratives.«

9. Social-JusticeAbility: Changes to a new mainstream, paradigm, or narrative require considerable adaptation and re-distribution within society. The ability to foster social justice, through a focus on equality and a “leave no one behind” principle, is crucial in interventions promoting radical change.

We encourage every development practitioner and their local partners to consider these abilities in the design and implementation of transformational proj-
ects for economic development across countries.

**HOW CAN ECONOMIC TRANSFORMATION BE OPERATIONALIZED IN PROJECTS?**

Third, we focused on turning the previous ingredients (our vision and the extended TransformAbilities) into an actionable approach for transformational interventions in economic development cooperation. In conclusion to our joint reflections, we compiled a set of five guiding actions that can help development practitioners and their local partners stay on the path towards transformation. The following paragraphs present our visionary results:

»Ultimately, we trust our suggestions to improve the future of people, planet and prosperity.«

1. **Ask yourself the crucial questions for transformation!**

In the beginning, development practitioners and their local partners should identify the reasons why the recent paradigm, narrative or mainstream cannot sufficiently serve sustainable development in the respective field(s). They should define the intended transformation to which fundamentally different paradigm, narrative or mainstream as clearly as possible (for example in the form of a common vision). The extent to which the transformation differs from incremental changes or reforms as part of “business-as-usual” should be highlighted as well. Additionally, all perspectives and forms of knowledge should be considered in order to outline why the new paradigm narrative or mainstream is more sustainable in comparison to the recent one. Lastly, measurement criteria for success and progress towards the desired transformation should be clarified.

2. **Let transformational ambitions and a new mainstream emerge!**

This action consists of mapping and co-creation exercises in the local context. First, development practitioners should map existing societal and political narratives that could be linked to the transformational ambition. Second, the vision for a better paradigm, narrative or mainstream should be jointly developed with relevant stakeholders building on the preceding mapping of predominant societal and political narratives. Finally, local education and communication for social change formats should be mapped for broad dissemination of transformational ambitions across society.

3. **Create partnerships for and of change!**

Partnerships are essential for the sustainability of transformational ambitions. Thus, development practitioners should try to find permanent professional and locally recognized support and resources for the envisioned transformation. These local partnerships should be built on genuine cooperation, reciprocity and complementarity between local actors and stakeholders. A constant focus in the interventions should lie on creating partnerships, meaning that project planning and impact promises, which are hard to predict, take a secondary role in transformational projects. Moreover, development practitioners should act in flexible, adaptive, and iterative “knowledge-to-action” cycles (in which established facts inform transformational ambitions). Above all, securing learning and capacity development on all sides, while letting transformational ambitions emerge and grow jointly, should be treated as a crucial factor for success.

4. **Enable a new paradigm, narrative or mainstream, as well as social change of values, norms, beliefs, and behaviors!**

Without social change, transformational ambitions are doomed to fail. For this reason, development practitioners should find local change agents in different dimensions and at different levels and support them to catalyze broad social change. For this, interventions should identify and target early adopters and bridge gaps with other followers to induce exponential diffusion of innovations. Complementarily, fundamental decisions in politics and society, as opposed to incremental changes or reforms, should be supported and the redefinition and allocation of public and private finance towards transformational ambitions facilitated.

5. **Work on the resilience of a new paradigm, narrative or mainstream!**

Finally, resilience plays a central role in our actions. For increasing resilience of a new paradigm, narrative or mainstream, development practitioners should advance contributing factors, which may differ locally, such as education, research and development, financing instruments or platforms of knowledge. Additionally, interventions should prioritize social justice through establishing feedback and solidarity mechanisms, inclusion, and empowerment of marginalized groups, focusing on instruments reducing vulnerability and inequality and others.

We urge you to use these actions in development practice, which will ultimately facilitate beneficial change for all through transformational ambitions in economic development cooperation. Lastly, we would like to summarize our results and call to action.

**A CALL TO ACTION**

We, the members of the GIZ-hosted dialogue series “How to Unleash Transformation in Economic Development Cooperation?” came together in a collaborative process to revisit economic paradigms and shift the discourse on transformation from abstract concepts to practical recommendations for international development cooperation.

We agreed on a common vision for economic transformation in development cooperation, as well as nine design principles and an actionable approach for facilitating economic transformation through projects in development practice. Our common vision for a new economic paradigm focuses on sustainability and the common good in society.

We call on you, the development experts and practitioners from the G20 countries and beyond, to take our suggestions
forward in designing and implementing transformational projects in economic development cooperation. Ultimately, we trust our suggestions to improve the future of people, planet and prosperity.

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1 The full GIZ report “Transforming our work: Getting ready for transformational projects”, which was commissioned by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMU), can be found under the following link: https://www.giz.de/fachexpertise/downloads/Transformation%20Guidance_GIZ%202020.pdf. Beyond this work, the BMU supports transformational ambitions through several initiatives and projects, such as GET, SPARK-Transformation and others.
On the precipice of a new era in education

A large-scale e-learning project supports thousands of medical students and faculty in Ethiopia

Policy brief

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Lecturio provides students, lecturers, medical personnel and health workers with digital learning tools and contents, proven effective by learning science. The full medical and nursing curricula as well as contents for community health workers and health management are available online. The interactive platform contains more than 10,000 learning videos, more than 4,000 clinical case questions, over a thousand articles, 3D anatomy models, and deep analytics about the learning progress. Over 1 million users in 175 countries are using Lecturio. The company’s production studios are based in the headquarters in Leipzig/Germany. Lecturio has branches in the US and Bulgaria.

www.lecturio.com

THE CURRENT SITUATION
One figure clearly illustrates the current health care situation in Ethiopia: There is only one doctor for every 10,000 inhabitants in the country. In comparison, Germany has about 40; Iran, 16; and the Philippines, 6 (WHO 2021). The rural areas of Ethiopia in particular are underserved. Child and maternal mortality rates are significantly affected by this shortage of doctors, as are the rates of malaria and tuberculosis. For this reason, Ethiopia has expanded its health care system more than almost any other African country over the last 15 years. Massive investments were made in new and established medical faculties as well as in the development of rural health care. Ethiopia’s system of health extension workers (HEWs), which has its roots in the 1970s, is considered a model for many African countries. Today, there is a health post in the vast majority of Ethiopia’s 17,000 village communities. There, about 45,000 community members who have basic health training take on disease-prevention tasks; educate people about contraception, nutrition, circumcision, and hygiene; and vaccinate people, something that is reserved for trained medical personnel in other countries [Assefa et al. 2019].

Under this approach, Ethiopia’s health care system managed impressive results in the last few decades, despite the economic and political difficulties the country has faced: While in 2009, 87 out of every 1,000 children in Ethiopia died before their fifth birthday, today that figure has declined to 50 (Unicef 2021). Significant successes have also been achieved in the fight against HIV, polio, tetanus, measles, and tuberculosis. Access to medicine, drinking water, vaccination programs, and malaria protection has been improved. Today, almost every Ethiopian is within a two-hour walk of a local health clinic. An affordable health insurance system is also under development.

URBAN AND RURAL REALITIES
One of the main goals of the Ethiopian Ministry of Health is to further reduce the inequalities in health care between different regions in Ethiopia and between urban and rural areas. Planning human resource developments in the health sector for years to come is a herculean task for the federal government of Ethiopia, given the constraints of the health system and budgets. According to the World Health Organization’s Global Health Expenditure database, in Ethiopia, only around US$24 per capita was spent on health expenditures in 2018 (in comparison, Mexico spent US$521 that same year). Improving the difficult health situation in a country with 111 million inhabitants with these meagre resources seems impossible (WHO 2021).

However, even with these constraints, Ethiopia has managed to establish a health care system based on primary health care services.
»Digital offerings are expected to bring about a major leap in quality, quantity and efficiency.«

(health posts, health centres, and primary hospitals), and all major cities have hospitals with specialized physicians. Although the distribution of hospitals (primary, general, and tertiary) is spread across the country, a high share of Ethiopia’s medical doctors live and work in the capital, Addis Ababa. In contrast, access to modern health care is limited in many rural areas, where about 80% of the population lives, and most receive little income from farming.

In 2003, Ethiopia started to build its Health Extension Program (HEP). The government trained tens of thousands of HEWs and assigned them to primary health care units (PHCUs). Today, more than 42,000 government-salaried female HEWs are deployed in the country, particularly in rural areas. They are assigned to health posts, in villages ("kebele") with populations ranging from 3,000 to 5,000 inhabitants. Five health posts and a health centre work in collaboration and form the PHCU that serves about 25,000 people.

SIGNIFICANT IMPROVEMENTS

The results have been very positive: A survey undertaken by the University of Queensland, Australia, and the Institute of Tropical Medicine, Belgium, sees Ministry of Health understand that digitalization offers enormous opportunities.

For example, digital innovations can enable tens of thousands of students, medical personnel, and community workers to participate in training programs. Costs for instructors, travel, accommodation, and food can be reduced enormously. Although parts of the education and training would continue to take place in small seminar groups on-site, digital solutions are expected to bring about a major leap in quality, quantity, and efficiency. e-learning programs can reach even the most remote parts of the country, and staff no longer must travel for days to attend workshops. Depending on the time of year and the road conditions, just getting to Addis Ababa can take days, as Ethiopia is four and a half times the size of Great Britain.

Doctors and health workers are overloaded at work, every day. In-service e-learning can be part of the solution.

FRUITFUL MEETINGS

Understanding this potential, it took the Ministry of Health and Stefano Wisbauer, co-CEO of the German online learning platform Lecturio, only a few hours to agree on a joint plan for a large-scale capacity-building intervention. The department of Human Resources for Health is responsible for the education and training of all state health personnel in Ethiopia—for the employees of health posts in 17,000 villages as well as for training doctors at the university level. Lecturio outlined a very useful solution for Ethiopia: complete, online medical and nursing curricula.

Since 2015, world-class lecturers have flown to Leipzig, Germany, every year to produce comprehensive learning videos at Lecturio’s production studios. The result is more than 10,000 videos covering the full medical curriculum, from anatomy to pharmacology to surgery, taught by educators from renowned schools and universities, including Harvard, Johns Hopkins, Imperial College, University College London, and Yale. The interactive learning platform itself was developed by IT experts in Germany, the United States, and Bulgaria. It is based on learning science and comprises artificial intelligence functionalities, 3D models, thousands of clinical case questions, and deep analytics for both learners and administrators. Educators get to know their students’ learning progress and can use a secure online exam system.

One aspect was particularly important for Ethiopia—the platform’s learning apps also work offline. Users can download contents beforehand and access them wherever they are, even in rural areas without internet connection—an important tool in Ethiopia, where infrastructure is an issue, especially in more remote areas. The goal that the Ministry of Health and Lecturio agreed on in 2019 was to support thousands of Ethiopian medical students online, including a train-the-trainer program, as well as the local production of

Digital education for blended learning and flipped classroom approaches
video tutorials for medical equipment use and maintenance for technical assistants and nurses. To help jumpstart this innovative approach, the German Federal Ministry for Economic Cooperation and Development (BMZ) and the German Society for International Cooperation (GIZ) got on board. Working systematically with universities across a large country such as Ethiopia on an e-learning project was a new undertaking, and interest was high. A public–private partnership was forged to make the project financially feasible; it began its work in mid-2020. The BMZ highlighted the project under its Strategic Partnership Technology for Africa as a “project with developmental added value,” like Volkswagen’s engagement in Rwanda and that of the German software giant SAP in 10 African countries (BMZ 2021).

MORE THAN 9,300 ACTIVE LEARNERS AFTER 1.5 YEARS
A year later, 21 state medical faculties in Ethiopia are equipped with a dedicated digital medical teaching platform. Despite its launch in the middle of a COVID-19 pandemic lockdown, as well as several other disruptions, such as the country’s 2020 elections and the ongoing civil conflict, the project has been moving along well. Today, more than 9,300 students and faculty are actively using the e-learning platform, the video tutorials were produced with local partners in Addis Ababa, and thousands of students and educators have attended webinars, where they learn how to use the platform and integrate it into their daily routines, along with flipped classroom and blended-learning strategies.

The digitalization of education and learning processes has been acknowledged as a challenge and a significant culture change in many Ethiopian universities. Like St. Paul’s Hospital Millennium Medical College in Addis Ababa, other universities have a change management centre for digital health education in place, so as they understand that continuous project work is necessary for success.

It is not only older professors who have difficulty making the switch to digital. Doctors and lecturers are usually extremely busy, and it’s not always easy to find the time or inclination to integrate innovations into daily routines. However, at St. Paul’s, for example, that was never left to the whims of faculty members. To integrate Lecturio into their operations, St. Paul’s offered orientation and training seminars for the directors of each department, and then their staff, and the university kept track of who attended.

Although almost every student has a smartphone or a tablet in Ethiopia, infrastructure is still a complex issue. Internet connectivity can be expensive and is not available everywhere. St. Paul’s therefore provides free Wi-Fi access to its students on campus. Unfortunately, however, that doesn’t help when students are in COVID-19 lockdown far away in the countryside. Yet user data and personal interviews show that most students have found ways to overcome these hurdles—by using internet hotspots, cafés, libraries, or with private wifi contracts, which cost €10 or more per month, a significant sum for many Ethiopians (Mükke 2021).

“...All over the country, Ethiopian medical students had to deal with huge disruptions in both 2020 and 2021. Some of these difficulties are still ongoing, such as COVID-19 and weak internet accessibility. But with this medical learning platform, many thousands of us managed to stay with in the learning mode and process,” says Bekele Abera, chair of the Student Council and president of medical students at Addis Ababa University. The rapid uptake of Lecturio offerings by Ethiopian students also underscores the urgent need for innovative digital teaching in their medical schools. More and more, flipped classrooms and blended learning are part of the new normal in many Ethiopian universities today, says Abera.

Lecturio and the Ethiopian Ministry of Health are now developing new educational content formats for HEWs, broadening their cooperation to address health care capacity building in both “top-down” and “bottom-up” ways.

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Are institutions beyond repair?

Fixing our society will require that we first fix our institutions

Opinion piece

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Institutions at every level, local to global, are facing a barrage of grievances against them unlike any time in recent history, both because of the severity of the accusations against them as well as the breadth of institutions involved: elections are broken and governments are corrupt; the police are brutal and racist; governments are unwilling and unable to protect their constituents from a virus; political systems stifle cultural differences and economic innovation; tax and legal codes favor the rich and influential, while punishing the poor; higher education is just for the elite and suppresses dissent; the media is a deep pool of disinformation; big problems, like climate change and educating young children, serve as political talking points but nothing more.

At all levels of society, from those that make our towns and cities work to those that navigate critical global issues, are essential to our way of life. They provide the order and predictability that allow societies to operate and thrive. A society anchored by unreliable and inconsistent institutions — for instance, incoherent legal or policing systems or food, drug and airplane safety regimes — would be chaotic and unsustainable.

Yet now institutions are broadly stumbling. And as widely divergent as institutions appear to be, discussions about ways to fix them tend to be parsed and specific, focusing on what an individual institution can do to repair itself. That approach ignores a surprising and heterodox conclusion that emerges from a closer examination: at all levels of society, institutions – from multilaterals to national governments and local police or educational systems – are failing for the same two reasons. First, the world is fracturing, creating stress on institutions that were designed to operate in a more unified world. Second, the pace of technology (which bears some blame for global polarization and the inherent disparity at the heart of much institutional distress) is accelerating wildly and institutions are unable to keep up. To repair institutions, we need to focus on common solutions to these twin trends.

THE BURDEN OF POLARIZATION

More than anything else, global and local fracturing is sapping the effectiveness of institutions. Rapidly spreading polarization has replaced the concept of collective responsibility with self-interest and transformed open discussion into arguments with immoveable points of view. On a grand stage, ideological fracturing was behind the US decisions between 2017 and 2020 to pull out of several international
In an information environment increasingly dominated by platforms [...] the technological sophistication of institutions simply cannot keep up.«

agreements and multilateral institutions, including the Iranian nuclear non-proliferation accord, the UN Human Rights Council, and the World Health Organization.

In local communities, polarization is hindering the ability to find meaningful solutions, whether it is making policing and local judicial systems more equitable or reforming education systems to become more adaptive and relevant for a digital future. In each instance there appears to be no common ground from which to begin conversations, even regarding their mandate, priorities or how to begin to address the problems, not because of the legitimacy of the argumentation but because of what the “other side” represents. As a result, essential reform is extremely difficult to progress as inequities and needs of local communities continue growing.

TECHNOLOGY’S ROLE
Global fracturing is in part a by-product of technological transformation. In an information environment increasingly dominated by platforms, such as Facebook, Twitter, Google or Tik Tok, in which facts (and disinformation) travel around the world in seconds and good and bad activism emerge from 280 characters, the technological sophistication of institutions simply cannot keep up. As a prime minister’s aide told me: “Platforms are increasingly marginalizing the basic role of government. For instance, the idea of doing a census seems such an old-fashioned tool for informing political and economic decisions. Google and its counterparts have better information in real time, every day. And if defense is increasingly a matter of protecting information and networks driving our real economy, who is better prepared to serve that role, us or the large platform companies?”

Increasingly, technology companies have gained global ubiquity and accumulated vast amounts of personal data to reshape every facet of personal life. Institutions that used to be crucial to safeguarding and driving progress in each of these areas are now more often than not bystanders or, worse, impediments to improvement. Most national communications agencies had their founding in the era of radio, for example, and simply have not been able to keep up with today’s media.

FIXING SHORTCOMINGS
Institutions that hope to play a central, trusted role for their constituencies must find new ways of operating in a world that has changed. There are three essential steps that all institutions, regardless of level, must take immediately.

1) **Design specifically for a fractured world.** Institutions must restyle themselves around the notion that people no longer share beliefs or fact bases. They must forge new mechanisms for finding common ground in an era that values polarization over collaboration, smoothing over differences and combating disinformation on social media, impairing their ability to provide services. These mechanisms include small committees, collaborative and rotating leadership, and consensus debates for airing evidence and viewpoints but not false facts. The goal is engagement with constituents to understand where the disagreements are and, perhaps more importantly, the few areas where agreement exists. Focus the institution’s work on the most important of those areas and where people can agree upon truth.

For example, while tensions are rising between nation states across a growing range of issues, they share a few important domains — climate, space, and the internet, among others — in which all countries have a common, existential interest. Multilaterals will be crucial in these areas as they require intense and broad focus to be addressed.

2) **Remember the core mission and innovate dramatically.** US elementary and secondary school programs have expanded their role much more than that, in aggregate, only 60 percent of their budgets are spent on instruction. The Dean of the Blavatnik School of Government at Oxford University once stated that the World Health Organization, which has the budget of a large American hospital, allocates approximately 80% of its budget to critical things, not central to its core mission. This is not to say that the needs they are addressing do not matter, just that the broader the mandate any single institution assumes the harder it will be to reach consensus on how to adapt and the more difficult the adaptation challenge will become. Institutional simplicity is essential in an increasingly complex and ambiguous world, where change is difficult.

Instead of giving in to the pressure to expand their mandate, institutions should return to their roots and then innovate quickly. They must develop new creative approaches to interact with and serve constituents that emphasize their value and reemphasize their purpose, outpacing the ability of technology to weaken the institution’s relevance. This is not easy, as re-adjusting investments to focus on the core will entail harm to other interests being met by overextended institutions.

3) **Learn to lead differently.** As a result of these two inherent challenges — polarization and technology acceleration — institutions are also facing another crisis: inadequate leaders. To successfully repair their institutions, leaders must embody and negotiate a set of apparent paradoxes. They must be capable of making decisions quickly and decisively but be humble enough to change course when they make mistakes. They must be sufficiently savvy about the world to understand its interconnectedness and political structures...
leaders, New Zealand’s prime minister Jacinda Ardern deftly managed the tension between strategy and execution in virtually sidestepping the pandemic.

The task of these leaders is not an envious one. They need to dramatically rethink and recreate their institutions to address increasingly complex and ambiguous problems, with constituents who do not agree, a continuously changing technology environment and growing distrust of the organizations for which they have responsibility. It is in such times that history shows leaders emerge. Here is hoping they do now, before it is too late, and the world gives up on its institutions. History shows only bad things happen when that occurs.

In the noise of the COVID-19 pandemic, a handful of exemplars of paradoxical leadership stood out. Pfizer chair and CEO Albert Bourla combined respect for tradition and innovation by rolling out a new R&D approach that used artificial intelligence to accelerate drug development and testing, simultaneously developed candidate vaccines and built manufacturing capacity well ahead of approval, while surpassing the standards for impartial and accurate drug development. This allowed Pfizer, working with BioNTech, to produce the first approved COVID-19 vaccine in the U.S. and get it to the market at a speed we have rarely seen. And among global institutions that hope to play a central, trusted role for their constituencies must find new ways of operating in a world that has changed.«

Global social cohesion in time of crisis

Rethinking global solidarity to promote social well-being worldwide

Policy brief

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Social cohesion is considered a key goal for policy. Social cohesion has been conceptualized as the capacity of a community to express mutual solidarity in tangible forms and for its citizens to feel, as well as be, included in society. Such a sense of inclusion goes hand in hand with trust in institutions and in fellow citizens (Grimalda & Tänzer, 2018). Measurements for both variables have shown a staggering downward trend over the past decades. In the US, the share of respondents to the General Social Survey who answered that they trusted others has dropped from 80% in 1960 to 20% today. The Edelman Trust Barometer (2021), covering 28 countries worldwide, also recorded a downward trend during 2020, with China registering the largest drop in trust among all countries. Trust in governments is also showing a declining trend in countries covered by the World Value Survey. Governments are the least-trusted societal leaders among the seven categories considered by the Edelman Trust Barometer (2021). Trust in international institutions such as the IMF or the World Bank is even lower than trust in national governments. Perhaps even more worryingly, the democratic form of governance is also being questioned. The share of World Value Survey respondents answering that a political system with “a strong leader who does not have to bother with parliament and elections” is “very good” or “fairly good” was growing rapidly in nearly all Western countries and reached an all-time high of 37% of respondents in the US in 2017, on par with Russia.

Can this worrying trend be reversed? Perhaps surprisingly, social psychologists argue that it is precisely in times of existential threat to a population that social cohesion can be expected to increase (Thornhill & Fincher, 2014). The reason is that, during our evolutionary past, human altruism has been shaped by the need to cooperate with one another when group survival is at risk, like during exposure to diseases, climatic threats, or war (Choi & Bowles, 2007). A review article investigating the effects of exposure to war conflict (Bauer et al., 2016) demonstrates exactly such points. Exposure to warfare triggers higher prosociality. However, prosociality tends to have an inward-oriented character. That is, it tends to favor others belonging to groups with which one identifies (such as national groups) at the expense of other groups. In fact, it has been argued that the high levels of trust observed in the aftermath of WWII were the results of the surge in social cohesion experienced during wartime.

Does the same hold in time of COVID-19? A research group of which I was part tried to test precisely the extent to which individuals were willing to help others in a tangible way in relation to the COVID-19 pandemic. Participants of an online study conducted in the US and Italy were given $5/€4 as an unexpected bonus and were asked if they wanted to

»It is in times of existential threat to a population that social cohesion can be expected to increase.«
donate any portion of it to charities active in COVID-19 relief at the local level (states in US/ regions in Italy), national or global level (Grimalda et al., 2021a). Any amount not donated was kept by the participant. Donating money is the quintessential altruistic action. Individuals give up own

"Whatever global effort is constructed to address global crises, it should consider the parochialism of human psychology."

donors to the national charity and the local charity, respectively. Another result of the study was that people directly exposed to COVID-19 – in the sense that they had been infected or had family members or acquaintances who had been infected or had died from COVID-19 – were more likely to donate and donated larger amounts. Exposure to contagion increased the probability of donating by 11%, and increased the amount donated by 9%.

Two lessons may be drawn from this study. This evidence is indeed consistent with the theory that social cohesion increases when an existential threat is looming. Even if the stakes were low, most people decided to donate something to people suffering from COVID-19. Second, altruism was overwhelmingly parochial. Even people who stated that their greatest source of attachment was the nation, as opposed to the local or global level, donated to the local charity. This finding suggests that whatever global effort is constructed to address world-wide crises, it will have to consider the markedly parochial character of cooperation observed in our study.

The results of this study were somehow reflected in practice. Individuals and government expanded their solidarity during the pandemic. However, such a solidarity had a distinctive national character. Nationalism could be observed in the global management of vaccines. Rich countries formally supported and funded the COVAX initiative, aiming to distribute vaccines to low and middle-income countries worldwide. On the other hand, though, rich countries hoarded available vaccines for the benefit of their own population. As a result, while in July 2021 the Global Alliance for Vaccines and Immunization (GAVI) estimated that Covax would deliver 2.2 billion doses by January 2022,1 this estimate had to be reduced in December to 1.2 billion.2 At the time of this writing, only 9% of people in low-income countries3 had received at least one vaccine dose, compared to 77% in high-income countries.

On the fiscal side, governments from many countries expanded their aid programmes to citizens negatively affected by the pandemic, at the cost of large public deficits. According to Eurostat,4 the government debt-to-GDP ratio increased by 13% in the EU in 2020, reaching the highest level of debt ever recorded. A deficit of similar size was also experienced in the US. Global aid paled in comparison with national aid. The G20 established an Action Plan, implemented throughout 2020 and 2021 to support vulnerable economies in the fight against the COVID-19 pandemic. This plan consisted of the disbursement of emergency financing from International Financing Institutions (IFIs) and the suspension of the payment of debt services. The sum of financial support provided by IFIs amounted to around USD180 billion in the midst of the crisis. The G20 called on the IMF to make a comprehensive proposal for a new Special Drawing Rights general allocation of USD 650 billion to meet the long-term global need to supplement reserve assets. This apparent buoyancy is however less attractive than it may seem. There is a “financial stigma” associated with accessing these lines of finance, which would come at the cost of higher interest rates on the capital markets [UN, 2020]. In fact, it is feared that a global financial crisis is in the making. It is therefore necessary that the G20 foster an urgent plan for a global social protection scheme able to match up the fiscal needs of LMIC.

Both vaccine nationalism and staggered economic recoveries, i.e., letting rich countries recover from the crisis ahead of all others, are examples of strategies that are both myopic and counterproductive. Epidemiologists have argued that vaccinating the whole world population was in the long-term interest not only of low and middle-income countries, but also of high-income countries (Yamey, 2021). The reason is that the risk that a variant will eventually develop in areas at low vaccination rates and spread around the world is very high, as indeed happens with the Omicron variant. A worldwide containment strategy would be much more effective than national ones. Likewise, putting national interests ahead of international interests economically is a sub-optimal strategy. Given the high interdependence of economies through global supply chains, a slowdown in a country may create a domino effect on all other countries that are connected to it. The current slowdown in the economic recovery is caused by supply bottlenecks that are, at least partly, related to the per-during incapacity of low and middle-in-

"Both vaccine nationalism and staggered economic recoveries are myopic and counterproductive."

resources with no immediate benefit for themselves, but with beneficial effects for others. Overall, 31% of people acted selfishly and donated nothing. However, people who donated gave up 59% of their endowment. The most favorite charity was the one active at the more local level, which was selected by 37% of participants, followed by the national charity and the global charity, selected by 19% and 13% of participants, respectively. Hence, in spite of COVID-19 being depicted as a global cooperation problem, only a fraction of people donated at the global level. At the intensive margin, though, people donating globally were the most generous, as they gave 70% of their endowment, against 60% and 54% given by...
come countries to produce at pre-pandemic rates (Çakmakli et al., 2021). Such an incapacity is in turn caused by the slowdown in economic activities and the forced dislocation of the labor force from urban to rural areas caused by COVID-19 lockdowns.

Historically, it is in times of crisis that new institutions have been developed. For instance, in many countries income tax was introduced to fund war efforts. In policy briefs proposed to the Think 20 (T20) in Italy and Saudi Arabia, a research group of which I was part identified the need to create automatic safety nets in most countries, but especially in low and middle-income countries, to counter sudden and unexpected crises such as pandemics (Grimalda et al., 2021). Given the lack of fiscal capacity in these countries, the only possibility to establish a safety net is through external aid.

In a policy brief presented to the T20 (Grimalda et al., 2021), we advocated the establishment of a Global Citizen Income, funded by progressive international taxation, as an effective instrument to counter the challenges illustrated above. A Citizen Income (also often called universal basic income) is a periodic cash payment unconditionally delivered to all on an individual basis, without means-test or work requirement. A Global Citizen Income is a Citizen Income extended to all citizens of the world (Van Parijs and Vanderborght, 2017).

The idea of a Citizen Income rests on philosophical, economic, and political grounds. Philosophically, a basic income is a way to fulfill the widely shared idea that no one should be left without the means to live a dignified life, acknowledging that everyone has an entitlement to receive a dividend from the exploitation of natural resources and inherited infrastructures. Economically, a Citizen Income is an effective way to end poverty traps, as it alleviates the problem of low take-up rates for other forms of income support, and reduces capital constraints for small entrepreneurs as well as opportunity costs of forsaking unemployment subsidies when accepting a job (Atkinson, 2015). Politically, a Global Citizen Income is a stepping stone toward instilling a sense of global citizenship in the population. In a situation of still fragile multilateralism, fostering global citizenship is needed for global institutions to regain legitimacy and provide support for the provision of global public goods. Another argument to fund a Global Citizen Income rests on the idea of compensation for carbon emissions. Given that this is disproportionately carried out by high-income citizens, it would entail sizable transfers from High-Income countries to Low Income and Low-Middle-Income countries.

In the policy brief, we advocate the establishment of an emergency Global Citizen Income to reach out to the poorest of the poor first, to be gradually extended and increased to the whole world population. With USD 600 billion, equivalent to 0.75% of world Gross National Income (in 2019), it would be possible to transfer the Purchasing Power Parity (PPP)-adjusted sum of USD1.90 to 2.67 billion people living in countries with per capita GNI lower than USD 2,076. With time, progressive international taxation may be put in place to increase coverage of the scheme (see Grimalda et al., 2021 for an outline of possible sources of revenues). As a second step, the whole world population would be covered by the PPP-USD 1.90 transfer, at a cost of 3.1% of world GNI. As a third step, the transfer would be increased to PPP-adjusted USD 3.2 for an expenditure of 5.2% of world GNI.

Figure 1 plots the value of Citizen Income transfers (as a percentage of world Global National Income) against the share of world population that would be covered. The three vertical lines identify thresholds for Low Income countries (LIC), Low-Mid-Middle Income countries (LMIC), High-Middle Income countries (HMIC), and High-Income countries (HIC) according to World Bank definitions. Coverage is computed assuming that all residents of a country falling below a certain GNI threshold receive a GCI of either $1.90 (lower line) or $3.2 (upper line).

To have a benchmark, a UNDP report estimates that 3% of world GNI was spent...
during the COVID-19 pandemic as social protection measures, including temporary cash transfer measures (Fajardo-Gonzalez et al., 2021). However, 87% of this amount was concentrated in HIC. In other terms, while HIC have allocated an average of USD 847 per capita in social protection transfers, other countries have spent a per capita average of USD 150, which drops to a mere USD 4 in LIC. The report estimates that cash transfer programs were effective in reducing the number of people to fall under the USD 1.90 poverty line by 80% since March 2020. Nonetheless, the impact was largely circumscribed to HIC and HMIC.

The provision of a Global Citizen Income seems of course difficult to realize in the short term. It seems to clash with the main results of the studies reviewed above, that is, that human altruism is parochial, particularly so at times of existential threat. One key to better convey its appeal is to think of it as a policy that should not only be defended on humanitarian grounds, but is also in the long-term interest of rich countries that would fund the scheme. Given the interdependence of societies and countries in terms of economy, climate and health, the idea that “we are all in this together,” repeatedly stated by UN Secretary General Antonio Guterres, could not be more appropriate.

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Ethical use of AI in education

A call for research and innovation based on working together globally

Research paper

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Global Foundation for Cyber Studies and Research-

Global Foundation for Cyber Studies and Research- an independent, nonprofit and non-partisan think tank - comprising of global cybersecurity experts, aims at producing research studies, policy papers, provide advisory, and work on various aspects of classical, contemporary, and modern cyber related matters under one umbrella.

UTN Córdoba

UTN is a public university in Córdoba, Argentina, founded with the purpose of preparing professionals in the field of technology to meet the corresponding needs of the industry, without regard to the cultural and humanistic training that makes them able to develop in a managerial level within industry and society creating a spirit of social solidarity and mutual understanding in the relations between capital and work.

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Keywords:
Advanced Technologies (AT), Artificial Intelligence (AI) in education, Ethical issues

ABSTRACT

The Future of Education and Skills 2030 states that over the last few years, there has been discussion around areas of international public policy such as data manipulation, sophisticated artificial intelligence (AI) algorithms and machine learning. The potential for access to technology has increased all over the world. There are great potential benefits, but there are risks and opportunities with AI particularly for education. Therefore, we must proceed diligently and prudently towards a new ethical context for education, in an environment where AI is used to support students and teachers, and where we also train students for a future world in which AI plays an increasingly important role.

As a new normal emerges, innovation in skills development is increasingly bound up with advanced technologies, particularly AI. The impact on the different levels of education should be seen as an innovative contribution to the growth of any economic region. But any innovation in technology must be gradual, not going beyond the boundaries of the ethical aspects of its context. Based on the analysis in “Global Educational Policies must be underpinned by new social contracts and a renewed emphasis on ethics” (Grainger, 2020), we refer to the two paradigms based on the "future of prosperity, sustainability and inclusion":

1. The need to work together, globally, is greater than ever, and
2. Coordinated action must embrace structural reform

These require concrete actions that allow increasing suggestions for structural and intersectoral reforms as well as striving to invest in innovative education-
al solutions based on the ethical use of AI. This should promote the formation of skills and serve the needs of young people, creating favorable conditions for avoiding future deficits in education. In their multilateral commitment, the G20 countries could accelerate their efforts to close the digital divide and address the unfavorable post-pandemic impacts that have destabilized the growth and recovery of several regions.

Discussions will focus on the importance of innovation in skills training based on the incorporation of advanced technologies (AT) in educational processes and an emphasis on aspects of ethics.

**INTRODUCTION**

The possibility of access to AT has increased in many areas throughout the world. AT according to the Gartner Glossary refers to technology that is still immature but promises to deliver significant value, or that has some technical maturity but still has relatively few users, such as artificial intelligence. AI, according to the European Commission’s communication on AI, refers to systems that display intelligent behavior by analyzing their environment and taking actions to achieve a specific goal. AI-based systems could be software-based, acting in the virtual world, such as voice assistants, image analysis software, search engines and speech and face recognition systems, or embedded in hardware devices, such as advanced robots, autonomous cars or Internet of Things (IoT) applications.

In March 2020, most of the world went into a forced shutdown in order to control the spread of the COVID-19 virus. Schools, colleges and universities closed. This resulted in the largest online movement of education in history.

Due to the lockdown, it was necessary to implement changes to maintain some form of normality. In fact, the pandemic has accelerated processes that were already underway. In particular, the impact on education could be mitigated by improving development strategies, which, through the integration of advanced technologies, have made it possible to bring together and exchange knowledge both in mainstream education and in the most remote places on the planet.

Achieving quality education provides better opportunities and well-being for young people. For this reason, we highlight UNESCO’s recommendation to rethink the role of education at key moments of societal transformation, “Reimagining our futures together: A new social contract for education” (UNESCO, 2021). This report encourages reforms in curricula and teaching methods, taking into account three major changes that will impact on our societies: globalization, the climate challenge and the digital revolution. These changes involve both technological and ethical aspects.

The deployment of advanced technologies is impacting various segments of our life. Skills training in particular is an area of education that is turning to AI, increasing the use of data mining, machine learning, robotics, digitization and many more specific branches of AI engineering.

Lessons have been learned from the strict lockdown, where it was not possible to develop skills in disciplines that require face-to-face training and human contact, such as medicine, engineering, nautical studies and so on. The lockdown generated the need for reskilling and upskilling and the need to work together globally. These requirements have inspired many educational centers to base their processes on innovative changes that enable gradual trust-building at a very early age in disciplines such as robotics, programming logic, and problem-solving, and at more advanced levels in machine learning and natural language processing (NLP), among others.

**RENEWED EMPHASIS ON ETHICS**

The purpose of this study is to focus on concrete research and recommendations for global ethical challenges whether in social or technological areas. In particular, it focuses on the use of AI in learning, teaching and education. It aims to provide a prospective angle on relevant AT developments and ethical aspects as a solid basis for a well-informed discussion about the future of these advanced technologies.

The T20 Task Force on Digital Transformation calls for a commitment to education and highlights increasing international cooperation in this area. “The coronavirus (COVID-19) pandemic revealed how poor integration of technology has led to widespread learning loss – the trend that has been exacerbated given the limitations of in-person instruction due to school closures” (Wiliowskis & Cobo, 2021). Despite the adjustments and improvements in the use of technology for education during the pandemic, many gaps remain, and the divisions between nations continue to increase. There are still marked social, environmental and economic differences between developed and in developing countries and regions. For that reason, we need to ask the following questions:

- Could AT favor the development of knowledge and collaboration between regions that are less or more technologically developed?
- Could the teaching of AT be incorporated into the formal education curriculum from a very early age?
- Could the current landscape of policies and regulations for AI introduce risk socialization mechanisms between different regions?

Information and Communication Technologies (ICTs) were already a great opportunity for the education sector to make changes during the pandemic. Equally important, in circumstances in which virtuality required transformation in a different setting, many strategies made it possible to simulate normality. Although distance and face-to-face meetings between teachers and students are fundamental to the learning process, advanced technologies are already being used with success in other areas and can be used to innovate in education and training practices. But it will be a great challenge to be able to apply them ethically, as they mainly involve data manipulation. For example, students and their achievements are assessed using AI systems. The assessment is necessary based on criteria that reflect biases and outstanding measures of success, but it is important to analyze that AI systems will have great difficulties in dealing with people who are creative thinkers, are innovative and are not standard representations of vast collections of already known cases.

The problem is that while much curricular content can be taught and assessed remotely with good AI algorithms and motivated students, it is more difficult
to transfer applied knowledge through virtual courses for vocational and specific skills. For example, it would not be easy for an electrician to apply what was learned virtually. Based on several technologically innovative educational experiences both in the UK and in Argentina, our research attempts to demonstrate in different cases studies how advanced technologies, such as simulators, augmented reality, data science, natural language processing (NLP) and other strategic technologies, are developing in such a way as to provide big social opportunities and avoid ethics inequalities and unfair bias.

ADVANCE TECHNOLOGIES AS A SUPPORT FOR TRANSFORMATIVE COMPETENCIES

The process of training skills in different disciplines can be validated and evaluated in various ways. However, in some disciplines, demonstrating skills development and evaluating them virtually is very difficult and, at present, almost impossible.

Although engineering is the discipline that most automates repetitive tasks through developments in artificial intelligence and robotics, validating a student’s skills virtually or with automated tools is imprecise. However, innovative tools could complement these processes. Also, coordinated action and international cooperation will increase new challenges in education.

Assessment in certain disciplines has significant consequences for health and safety. Practical skills training requires accurate assessment in order to give a “license to practice.” For example, there is a shortage of heavy truck drivers globally because they could not be trained and assessed in sufficient numbers during the lockdown.

Since artificial intelligence algorithms can remember a student’s learning journey and easily personalize learning experiences, it should be possible to choose examples, different levels of difficulty, and times that are appropriate for a particular student to keep them motivated and engaged. It also can awaken creativity and imagination as a pillar of scientific and technological development.

Consequently, understanding basic and secure AI programming is important to help students and teachers understand how AI systems work and help them reflect on the ethical use of AI, preserving the transparency of the data and diversity, non-discrimination and fairness.

CHALLENGES THAT INSPIRE INNOVATIVE CHANGE

Every year, Gartner, an information technology research and consulting company that provides research analysis, predicts the trends for the next years. The list includes 12 strategic technology trends as shown in figure 1 (Gartner, 2021), focused mainly on AI and automation and highlighting the learning of data and the generation of new innovative creations that are similar to an original model but do not repeat.

While these are references, educational processes are involved in the strategic technology trends mentioned above. Thus, for Universidad Siglo21, the largest privately managed university in Córdoba, Argentina, which is very involved in technological innovation, emphasizing the challenge of technological innovation has required increasing efforts and taking on risks to address the systematic incorporation of advanced technologies in education. Their project, Robótica y el aprendizaje automático, focuses on furthering the knowledge and application of robotics and machine learning at the higher education level. This will contribute to improving the quality of life of people who are training in various disciplines. “Machine learning occurs through algorithms. An algorithm details a series of ordered steps that are taken to accomplish a task. The objective of machine learning is to create a model that allows the student to solve a given task. It highlights how to train a model in the use of a large amount of data” (Bravo, 2020). The model learns from this data and is capable of making predictions.

The machine learning techniques they are using are:

- solving a problem or identify an object (neural networks);
- classifying the elements by identifying questions (decision trees);
- finding relationships in the data sets and taking a set of randomly created decision trees as the basis for their decisions (random forests algorithm);
- grouping data points based on shared characteristics (clustering algorithms);
perform them successfully. Advanced technologies encourage creativity, imagination, critical-logical thinking, respect for science and working together globally.

Another case is “Robótica educativa en los CENI de nivel inicial” at Universidad Siglo21 and the Ministry of Education of the Province of Córdoba. Its aim is to introduce the logic of educational robotics from the initial level in formal school training. The government delivered a technology kit but the teachers did not have enough skills. The teaching centers, CENI, have a gap in the content of robotics curricula and must seek to avoid a misunderstanding about robotics. Robotics does not lead to people losing jobs but improves the quality of work for employees. It avoids repetitive tasks and creates new, much more specialized jobs requiring permanent training to be able to

data-driven culture in universities, using predictive models with AI algorithms throughout the student cycle from enrollment, monitoring and dropout prevention to specialized post-study training and recommendations. Based on information obtained from the student, customized decisions are made for each student that help to take action in different areas within the university. As a result, in 2020, student retention rose by 10 percentage points, academic performance improved by 30 percentage points, and earnings before interest, taxes, depreciation, and amortization (EBITDA) rose by 12 percentage-points over the previous year.

What has become apparent is that in some areas it has been difficult to meet some or occasionally all of the above three criteria. The EdTech company Ed Machina in Argentina proposed to Universidad Siglo21 to improve student retention during the pandemic through the implementation of AI. The concept focused on establishing a data-driven culture in universities, using predictive models with AI algorithms throughout the student cycle from enrollment, monitoring and dropout prevention to specialized post-study training and recommendations. Based on information obtained from the student, customized decisions are made for each student that help to take action in different areas within the university. As a result, in 2020, student retention rose by 10 percentage points, academic performance improved by 30 percentage points, and earnings before interest, taxes, depreciation, and amortization (EBITDA) rose by 12 percentage-points over the previous year.

EDUCATIONAL DISRUPTION WILL BE REAL AND ESSENTIAL

Figure 2 highlights the T20’s commitment to education. Therefore, it is important to encourage adoption of the G20 principles on artificial intelligence (Twomey & Martin, 2020): ensuring data aggregators and AI firms operate in the interest of data subjects.

ETHICAL USES OF AI IN EDUCATION

Structural reform must not be seen simply in terms of institutional arrangements but must be sustained by new social contracts. These are the basis for the two paradigms that provide the foundation for a “future of prosperity, sustainability and inclusion.”

An ethical attitude towards AI is essential in any area of our life, even more so in student training and the ability to evaluate knowledge. Knowing what is legal or when to use AI systems or not avoids causing ethical biases. As mentioned in an article on human-centric digital governance (Kastrop & Ponattu, 2020) in Issue 7 of the Global Solutions Journal, as people increasingly interact with virtual agents, individuals can potentially be permanently monitored and deliberately manipulated even in the most sensitive areas of their lives.

Data manipulation and excessive automation can create inequalities in edu-
emphasis on the digital dimension at all educational levels and at the national, regional and global levels.

Digital material (audio, video or desktop simulation/gaming) and advanced technologies will be an invaluable enhancement of the learning experience as a supplement to or replacement of more traditional methods.

AI can help us build an innovative educational process based on prediction models that are as smart as we want them to be. It is technically easy to develop AI to teach skills, but these should be based on ethical practices that promote equity and fairness, including the provision of the continuous assessment of each individual’s progress. Therefore, it is important that ethical practices encouraged to follow the instruments, frameworks and standards established by organizations such as UNESCO and the G20. This is the time to encourage people to work together globally, and to support more collaboration between the education and industry sector through the progressive incorporation of new curricular content in order to advance new technologies.

SUMMARY
The changes in teaching practices forced by the global health situation have marked an important milestone in education. The integration of advanced technologies and innovative strategies have shown unprecedented potential to form the basis for the digital pedagogy of the future. The pandemic has accelerated the urgency of a new, ethical, social contract with an

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Migrant care and domestic workers beyond the COVID-19 crisis

A call to action for transnational cooperation

Policy brief

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CIPPEC (Center for the Implementation of Public Policies Promoting Equity and Growth) is an independent, non-partisan, nonprofit organization that works for a just, democratic, and efficient state that improves people’s lives. To this end, it concentrates its efforts on analysing and promoting public policies that foster equity and growth in Argentina and beyond. Known for the high qualification of its staff, CIPPEC has become one of the most recognized and respected public policy think tanks in the region.

Women’s Economic Imperative is a global, non-profit organization committed to promoting women’s economic empowerment and inclusive economic growth for the benefit of all in society. WEI’s foundation is rooted in the work of the United Nations Secretary General’s High-Level Panel (UNHLP) on Women’s Economic Empowerment and was founded by the UNHLP’s Chief of Secretariat in conjunction with several members of the Panel. Our primary areas of focus are women’s economic empowerment and women’s entrepreneurship, including: providing policy advice to key stakeholders on policy frameworks, ecosystems and issues related to women’s economic activity; design and implementation of interventions and capacity building to deepen impact and drive systemic change; policy advocacy and thought leadership.

Keywords:

Gender, Migration, Care, Labour, Globalisation

The COVID-19 crisis pointed out what truly matters for our well-being. In this process, it unveiled a fact that remained largely unspoken in the global public agenda: care work is essential for sustaining life as we know it.

Care and domestic work encompass multiple activities and bonds aimed at meeting the physical, emotional and psychological needs of people at different moments of their lives. These tasks involve both face-to-face actions between a care recipient and a caregiver (taking someone to the doctor, feeding a child) and household work that creates the preconditions for direct caregiving (cooking, cleaning, shopping, gardening). Overall, care work presents three key characteristics: it is overwhelmingly feminized, it is undervalued, and it is a vital pillar of our societies.

During the last decades, diverse factors have increased care demand. As women massively entered the labor market, the traditional family model with full-time female caregivers became outdated. Consequently, outsourcing care became an alternative for households to address their needs. This process gave rise to an internationalization of care services known as “global care chains.”

As defined by Arlie Hochschild, global care chains are “a series of personal links between people across the globe based on the paid or unpaid work of caring.” While these chains entail multiple occupations and sectors, they frequently involve a household that recruits a foreign woman to provide care, who in turn transfers her own care needs to others. Consequently, a network of inter-connected households emerges which links individual lives with global trends through domestic work.
Migrant care workers are particularly exposed to vulnerabilities. The compounding and intersecting inequalities they experience due to demographic and socioeconomic characteristics are deepened because global care chains sit at the crossroads of labor, migration and care policies. These policy regimes are frequently inconsistent with each other or present contradictions and voids, both within and between countries. As global care chains are transnational processes governed by national-level policies, challenges arise to protecting migrant care workers’ rights.

With the onset of the COVID-19 pandemic, these challenges have magnified. Since 2020, all lives have become vulnerable – to varying degrees – to the coronavirus, and care became a crucial resource to mitigate the risks. In this way, while the global health threat paralyzed economies, the burden of care work intensified.

Yet while care relevance increased during COVID-19, care workers, especially the migrants, saw their rights severely affected. The impacts of the pandemic on migrants’ livelihoods and their families were evident in several dimensions, as national measures and emergencies produced transnational consequences. Among migrants, care and domestic workers have historically faced more risks and have been less assisted during crises, and the COVID-19 pandemic was no exception.

Overall, global care chains mesh migration, class, gender, labor, and care at a transnational level, requiring coherent multilateral approaches to tackle challenges and seize opportunities to guarantee rights. The G20 has a paramount role in this endeavor, as the pandemic emphasizes the importance of multilateral cooperation in addressing global systemic concerns.

This topic is particularly relevant during the current G20 Presidency: Indonesia has one of the largest migrant worker communities, estimated at around 9 million people. Half of them are women, usually employed as domestic workers in the informal economy. This situation hinders their access to decent work and affects their human rights.

It is crucial to strengthen the role of transnational cooperation to ensure decent livelihoods for migrant care workers and advance gender equality globally. To this end, we need a new paradigm in which the socioeconomic system puts life at its core.

MIGRANT CARE AND DOMESTIC WORKERS: CONCEPTS, DATA AND CHALLENGES

Domestic work can be defined as the labor performed in or for a household.

Domestic workers might include caregivers, nannies, social workers and others who conduct different tasks in private household settings. Around the world, the ILO estimates there are more than 67 million domestic workers, 83% of whom are women.

Obtaining a global perspective of migrant domestic workers is challenging, as data is scarce and patchy. The struggles are related to limited demographic information, different conceptual definitions and the absence of migrant tracking, among others. At the same time, a significant share of domestic workers is employed in the informal economy or lack documentation, which leads to deficits in their recording. Bearing these caveats in mind, the ILO calculates that more than one of every sixth domestic worker in the world is an international migrant, accounting for 11.5 million people. This figure means that approximately 7.7% of all migrant workers are domestic workers.

While 78% of the domestic workers are in Asia and Latin America, the distribution of international migrant domestic workers reveals a different picture: 35% are in Asia, 27% in the Arab States and 19% in Europe, while only 7% are in Latin America. They experience deprivations globally, yet the exercise of their rights varies greatly between countries and regions.

Overall, deficits in their labor conditions are ubiquitous, particularly for migrants. They experience low access to social security, lack of joint representation, low remuneration and high levels of informality. In extreme cases, human rights can be severely compromised. Domestic workers might experience gender-based violence, forced labor, sexual abuse and restrictions in their fundamental freedoms. The risks are especially significant for live-in workers.

These rights violations are related to several factors. Domestic workers are frequently isolated in private settings. This situation hampers law enforcement, while it hinders their possibilities for collective representation. Furthermore, job protection regulations sometimes exclude domestic workers. In 2010, general labor laws covered only 10% of the domestic workers globally while 30% of the workforce was completely excluded from any labor regime. The neglect of care as an essential activity thus translates into the mistreatment of care and domestic workers.

THE CONSEQUENCES OF THE PANDEMIC ON MIGRATION AND GLOBAL CARE CHAINS

While inequalities have been longstanding, the pandemic worsened the experience of migrants. Migrants were frequently excluded from emergency policy responses, while, sometimes, discriminatory attitudes were fostered. Moreover, they usually worked in the sectors more affected by...
the crisis. Consequently, their livelihoods and their families’ situation back home deteriorated, as the crisis also impacted remittances.

The pandemic also affected migrants’ health: they have been disproportionately at risk of being infected, especially those in precarious jobs and irregular status, while they had lower access to healthcare services and vaccines. At the same time, they played a critical role in addressing the pandemic by working in diverse care sectors.

» Global care chains mesh migration, class, gender labor, and care at a transnational level, requiring coherent multilateral approaches to guarantee rights.«

In terms of mobility, border closures restricted the possibilities for travelling between host and home countries, increasing the separation between migrants and their families. Emigration also decreased and more migrants returned to their countries of origin due to socioeconomic and sanitary risks. While some countries tried to reach agreements, restricted the possibilities for travelling and increased the separation between migrants and home countries, in keeping with a transnational perspective. Consequently, their livelihoods and their families’ situation back home deteriorated, as the crisis also impacted remittances.

Regarding domestic workers, the pandemic underscored the obstacles for law enforcement in private households. Experiences varied depending on the employment relationship: live-in workers increased the dependence upon their employers and their isolation, while those who lived elsewhere were unable to get to work. These obstacles were particularly harsh for sponsored migrant domestic workers, who were tied to specific employers and, hence, could not look for a new job, access social protection or return home.

While their labor situation worsened, migrant domestic workers had limited access to employment protection policies and COVID relief programs. Rao et al. highlight that the workers reacted to these exclusions by mobilizing and increasing claims-making. Nonetheless, these achievements could only partially offset their gendered, classed and raced vulnerabilities shaped by structural power relationships.

A CALL TO ACTION TO THE G20

Around the world, the pandemic had negative consequences on livelihoods and well-being for all, yet migrant domestic workers’ deprivations were particularly exacerbated. As the ongoing challenges aggregate, governments must act locally and transnationally, fostering cooperation across borders to guarantee human rights and decent labor standards for migrant domestic workers. This approach requires the adoption of a new paradigm in which the socioeconomic system sustains life by building collective structures and resources that address people’s needs in three realms:

Building back better through guaranteeing the right to care: to support life needs, care policies must remain a priority beyond the COVID-19 emergency. This approach requires fostering shared responsibility and valuing essential workers. ILO’s 5R Framework can be a good starting point to recognize the value of care and domestic work, reduce women’s burden, and redistribute it both within families and with other stakeholders, while rewarding care work fairly and guaranteeing the representation of care and domestic workers.

For migrants, it is especially relevant to enable skills portability across borders by recognizing informal learning and foreign diplomas and providing training to strengthen their career paths. These policies can bring positive impacts by reducing gender and socioeconomic gaps while producing economic returns in terms of job creation and GDP growth.

Establishing social protection floors to leave no one behind: as COVID-19 heightened vulnerabilities and exposed the interconnections of our mutual well-being, it is urgent to expand the coverage of social protection policies to include all migrants regardless of their status. A lesson learnt from the pandemic is that the risks of protecting only part of the population are costlier in terms of public safety than implementing preventive interventions.

Thus, a rights-based approach to policy can contribute to guaranteeing an adequate standard of living for all, fostering more inclusive and resilient societies that can better face future crises.

Establishing synergetic legal frameworks: in most countries, migration regimes prevail over labor law so migrants face obstacles to claiming their rights; migrant domestic workers are especially disadvantaged. Therefore, countries should implement regulatory frameworks that provide domestic workers with the same rights as workers in other fields and allow all migrants to claim their human and labor rights, regardless of their status. At the same time, governments should implement rights-based migration schemes that enshrine human dignity above all, aiming at keeping families together, fostering formal employment, regulating recruitment processes and facilitating access to justice. In many regions, this means revising the sponsorship systems for migrant domestic workers, as they often restrict their fundamental rights and freedoms.

Spanning multiple countries and involving diverse policy regimes, national interventions by themselves are not enough: global care chains require coherent transnational approaches.

» Addressing the socio-spatial dimensions of care must be part of a comprehensive strategy that rethinks our socioeconomic system from a human-centred perspective. «
Transborder cooperation can take several shapes. Some countries of origin have negotiated bi- and multilateral agreements to protect their migrant citizens in host countries. For example, some Asian countries (e.g., Indonesia, the Philippines and India) have demanded better protection for migrant domestic workers in countries of destination (e.g., Malaysia, Saudi Arabia) and arranged memorandums of understanding. In other care sectors, such as healthcare, there are codes for ethical recruitment that also aim at mitigating the potential negative implications of care work migration. While challenges still prevail, these agreements — when appropriately enforced — can be valuable to foster migrant domestic workers’ well-being and address global systemic concerns, especially when involving multiple stakeholders in the process.

Furthermore, collaboration among unions at a transnational level can also bring about positive effects. Around the world, achievements have included improved collective agreements, higher minimum wages, and better terms of employment, among others. At the supranational level, efforts have involved building networks among organizations and reaching bilateral agreements between unions in sending and receiving countries, as it happened in Latin America and in Africa. The G20, as an international forum that gathers leaders from all sectors in different tracks, provides a unique platform to contribute to this endeavor by engaging multiple stakeholders in the process. First, the G20 can have a critical role in building alliances to address challenges in global care chains by facilitating exchanges on experiences, strategies and potential transboundary effects of national interventions. Joint work opportunities between tracks and working groups can be especially promising to attain better coherence, raise awareness of the challenges ahead, trigger synergies and tackle trade-offs among policies.

Second, the G20 can also improve data collection and disaggregation on care migration in its member countries and beyond. This step is crucial to better understand the integration of countries into care chains, analyze the determinants of migration flows, monitor the situation of migrants, and identify any intersecting discrimination that they might suffer. This information can, in turn, foster research on the topic and put forth evidence-based policy proposals to guarantee migrant care and domestic workers’ rights. To this end, collaboration with engagement groups and peer learning mechanisms can produce virtuous processes of evidence generation and exchange of good practices.

While backlash against globalization tries to emerge, movements of people across the world are unlikely to disappear; this includes people migrating to provide care. Any discussion at the multilateral level, hence, should consider the lives that exist across borders and rethink our social protection schemes transnationally. The G20 and its leaders can take a pioneering role in igniting discussions and advancing interventions to ensure basic social welfare schemes and labor rights for all beyond the nation-state level in times when people are not geographically tied to a single place.

Addressing the socio-spatial dimensions of care must be part of a comprehensive strategy that rethinks our socio-economic system from a human-centered perspective. The COVID-19 pandemic brought to the surface the prevailing challenges in caring and deepened existing inequalities. Thus, the G20 has a need and a duty to prioritize care policies worldwide and promote transnational cooperation to ensure migrant care and domestic workers’ rights.
2 Razavi, S. (2007). The political and social economy of care in a development context: Conceptual issues, research questions and policy options. UNRISD.
Women’s health is societal health

New data highlights the inequities in health for women, the socioeconomic impact and the need for informed strategies for change

Opinion piece

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Hologic, Inc. is an innovative medical technology company primarily focused on improving women’s health and well-being through early detection and treatment. For more information on Hologic, visit www.hologic.com.

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Keywords:
Women’s health, health inequalities, data drives change

Healthy women are the cornerstone of families, communities, and economies. Sex remains a powerful shaper for health outcomes, and so it is crucial we address the inequities in health that face half the world’s population.1 This is particularly so in light of the disproportionate impact the Covid-19 pandemic has had on women’s socioeconomic well-being.

As the G20 builds back from the worst aspects of the pandemic, leaders must use this opportunity to address the causes of the health disparities faced by women and girls. But a barrier to realizing this ambition is the global gap in knowledge on the state of women’s and girl’s health. There is a clear need for more robust, quality data and benchmarking to track and measure women’s health on a global level.

As specialists in early detection, diagnosis and treatment of women’s health issues, Hologic is determined to address this challenge, and so has conducted the Global Women’s Health Index (GWHI), as part of the Gallup World Poll – the largest comprehensive health survey globally, capturing insights directly from more than 120,000 people, in 140 languages across 116 territories globally. Its more than 36 million data points document the status of women’s health and track changes over time and by country, providing a baseline data set from which to measure the current state of women’s health. This will enable governments to determine priorities and identify and implement appropriate solutions.

MAKING WOMEN’S HEALTH A GLOBAL PRIORITY IN RESPONSE TO THE PANDEMIC

The Global Women’s Health Index was initiated before Covid-19, but the pandemic has created an even more urgent need for world leaders and policymakers to make women’s health a priority.

Preventive and early diagnostic care are two of the most important, controllable factors in women’s health. However, with large numbers of screening and testing appointments missed due to the pandemic, coupled with an already significant deficit in care for women, half the world’s population is facing further risks as COVID-19 continues to impact global health and socioeconomic well-being.

Women are more likely than men to be affected by pandemics; they are responsible for the majority of care for children and sick family members, and are more likely to lose their livelihoods and face barriers when attempting to re-enter the workforce.2 For example, during the West African Ebola outbreak between 2014 and 2016, quarantines closed markets, which destroyed the livelihoods of traders in Sierra Leone and Liberia, 85% of whom were women.2 Only 17% of these women had returned to work thirteen months after the first case was detected, compared to 63% of men.3

Of course, the socioeconomic impact of the pandemic on women and girls has a wider societal impact. Whether due to their contribution to the paid workforce, or to the unpaid carer workforce, the socioeconomic benefits of healthy women are clear.

A study by Kristine Husøy Onarheim, Johanne Helene Iversen and David E. Bloom found that how countries develop and perform depends upon how the country educates and provides opportunities for women and girls.4 Societies that invest in women’s health are more likely to
have better overall population health and increased productivity levels for generations to come.

An additional study by the British Medical Journal found that investments to improve women’s health offer higher economic and social returns in areas that promote income growth and poverty alleviation, including labor and education. Modelling based in the United States has suggested that reduced maternal mortality between 1920 and 1970 resulted in a 52% increase in labor force participation among women of reproductive age.

WOMEN’S HEALTH NEEDS ARE NOT BEING MET GLOBALLY

Despite the clear socioeconomic benefits of investing in women’s and girl’s health, the Global Women’s Health Index revealed a stark picture of how women’s health needs are not being met globally. In the section below, we highlight these women’s health needs and further, we provide insights into strategies leaders could focus on in order to ensure a healthy future for women.

Higher scores on the Index mean potentially healthier, safer and longer lives for women, with the score accounting for a combination of factors, including physical health as well as social, economic and political factors.

With an average score of just 56 out of a possible 100 across all G20 members – excluding the EU which was not included as an audience for the survey – there is clearly significant room for improvement. Germany was the highest-ranking member, scoring 65, and ranking sixth, while Brazil and Turkey were the lowest ranking, both scoring 44 and ranking 77th and 99th, respectively.

The data and insights from the Holistic Global Women’s Health Index can drive specific action plans to change the awareness of, access to and affordability of healthcare for women and ultimately, to protect and improve women’s health globally, by country and over time.

To help countries and territories map out a strategy to ensure a healthy future for women, the Index has identified five dimensions of women’s health: preventive care, basic needs, emotional health, opinions on health and safety, and individual health. Importantly, these dimensions account for more than 80% of the variance in female life expectancy and provide an important foundation for developing strategies to improve health outcomes for women and girls.

In the following section, we highlight three of these dimensions – preventive care, individual health and family planning, and emotional health – and the GWHI findings on which strategies should focus.

Preventive care

Of the findings uncovered by the Index, potentially most worrying is the limited testing of women for the most damaging diseases, even prior to the COVID-19 pandemic. The data revealed that 60% of women surveyed, representing 1.5 billion women globally, had not been tested or screened for cancers, diabetes, STDs/STIs and high blood pressure during the 12 months prior to the survey.

High blood pressure is linked to heart disease, which kills an estimated 17.9 million people and is the leading cause of death for women globally each year, yet in 2020 only one in three women had been tested for this key health indicator in the 12 months prior to the survey.

Cancer accounted for nearly 10 million deaths in 2020, but in that same year, worldwide, only 12% of women said they had been tested or screened for any type of cancer in the 12 months prior to the survey. In some countries and territories, only 3% of women were tested.

Globally, in 2020, fewer than one in nine women were tested for STDs/STIs in the countries and territories studied, despite the serious health consequences they can have beyond the initial infection.

When appropriate levels of prevention in healthcare are utilized, there is a decrease in the prevalence of ill health and this in turn results in a sustainable growth of productivity. By providing effective preventive care, screening and testing, global leaders will not only be supporting the health of half of the population, but also children and the economic productivity of society.

To this end, Hologic has created the Global Access Initiative, a partnership with the Clinton Health Access Initiative, Inc. (CHAI) and MedAccess (backed by the UK government), to bring lifesaving infectious disease testing to over two million men, women and children in resource-limited countries.

With cancers, diabetes and heart disease being the leading causes of death for women worldwide, it is essential that women have access to the tests and screenings that can save their lives. That is why we advocate for and support measures such as the Protecting Access to Lifesaving Screenings (PALS) Act in the United States Congress. This legislation enables full insurance coverage of routine screening mammograms for women in the United States, starting at age 40, instead of 50.

Healthy women are the cornerstone of families, communities, and economies.

We have also partnered with leading non-profit organizations to deliver Hologic’s Project Healthy Equality. This is a multifaceted, multiyear initiative that uniquely combines research, education and access to address the structural and cultural barriers to women accessing healthcare. It has been launched in the US, with pilots taking place this year in United Kingdom and Canada. Project Health Equality will be rolled out across further countries, in each case addressing a specific health equality challenge for that country.

We know preventive and early diagnostic care are two of the most vital aspects of health care for women. «
supporting women’s health, and we challenge leaders to focus on continuing to develop preventive healthcare pathways that can mitigate the worst impacts of diseases such as cancer and heart disease.

Individual health – Family planning and maternal care
The Index found that in nearly all regions, a woman’s age at her first pregnancy has a significant impact on her health outcomes; women who report first becoming pregnant before age 19 had worse outcomes than women who became pregnant later. Many of these girls drop out of school, further limiting their opportunities for training and employment, and they become more vulnerable to a life of poverty and exclusion.11

»Data and insights from Hologic’s Global Women’s Health Index can drive action plans to change health-care for women.«

This means that family planning becomes a crucial tool in addressing health disparities among women. And yet, despite maternal care often being a focus of women’s healthcare, there are significant global differences in how family planning needs are being met. With regard to the indicators laid out in the Sustainable Development Goals, the level to which family planning needs are satisfied by modern methods has stagnated globally at approximately 77% from 2015 to 2020; while it has increased from 55% to 58% in the Africa region, the figure remains low in comparison.12

Women who practice family planning are able to avoid high-risk births and reduce their chances of having a baby who will die in infancy.13

While there has been progress in recent years, without effective family planning provision in place, including education and access to contraception, global leaders will be challenged to best serve the healthcare needs of women. There must be continued efforts on a global scale to ensure women have the resources to make informed decisions related to family planning.

Emotional health
The Index found women and girls are facing increasing levels of worry and stress; 40% of women experience worry during much of the day, amounting to approximately 1.1 billion women, while 38% reported experiencing stress, amounting to approximately 1 billion women.

Women are affected to a greater extent than men by depression, anxiety, psychological distress, sexual violence, domestic violence and escalating rates of substance use.14 This can be attributed to the pressures created by their multiple roles, gender discrimination and associated factors of poverty, hunger, malnutrition and overwork.14 There is also a relationship between the frequency and severity of such social factors and the frequency and severity of mental health problems in women, with severe life events that create a sense of loss, inferiority, humiliation or entrapment acting as predictor of depression.14

There has been research to show that factors relating to increased autonomy, as well as support from family, friends or health providers, can be vital against the development of issues related to mental health, especially depression.14

It is vital that there is a greater understanding of the prevalence and causes of mental health disorders among women, on a global scale. Without such an understanding, world leaders and health policy makers will not be equipped to create and fund the necessary policies to address women and girls’ needs and concerns. Nor will they be able to provide the necessary training and resources to primary health care providers to help them recognize and treat the consequences of problems with mental health, many of which are a result of issues faced by women such as domestic violence, sexual abuse, and acute and chronic stress.

NOW IS THE TIME TO ACT ON GLOBAL FEMALE HEALTH INEQUALITIES
As we rebuild from the COVID-19 pandemic, the time to act on improving the care and outcomes for women’s and girls’ health is now.

The Global Women’s Health Index offers governments a necessary baseline to determine the priorities and identify and implement appropriate solutions, to address and improve the health and socioeconomic well-being of women and girls. Hologic will be conducting the Index on a multi-year basis, and delivering the data to world leaders, who have the opportunity

»Now is the time to act on global female health inequalities.«

to establish, benchmark and understand how half the global population is living their lives.

We are urging leaders and governments of the G20 to use this data and the five dimensions to guide the development of health strategies that will make a tangible difference to women’s quality of life and life expectancy.

ABOUT THE HOLOGIC GLOBAL WOMEN’S HEALTH INDEX
Conducted as part of the Gallup World Poll, this unprecedented multi-year Index is an in-depth examination of critical markers for women’s health, by country and territory, and over time. The survey questions were developed and reviewed by global women’s health expert advisers to Hologic and Gallup, representing leading institutions and thought leaders such as John Hopkins University, George Washington University and RAD-AID.


6 World Health Organisation. Cardiovascular Diseases. Available at https://www.who.int/health-topics/cardiovascular-diseases#tab=tab_1 (last accessed 7 December 2021)


Hot city, cool women

Public transportation systems as cooling infrastructure

Opinion piece

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THE NEW INSTITUTE is a mission-driven Institute of Advanced Study and a platform for change. It strives to develop powerful visions to fundamentally reshape society and practical solutions to turn those visions into a reality. It works in strategic partnerships with a variety of institutional and individual stakeholders – changemakers who share a common set of values and objectives.

SEEDS (Sustainable Environment and Ecological Development Society) is a not-for-profit organisation that helps make communities resilient through comprehensive interventions in the areas of disaster readiness, response and rehabilitation. Since 1994, the organisation has worked extensively on every major disaster in the Indian subcontinent, integrating locally-based approaches to build the long-term resilience of the communities it serves.

Keywords:
Urban heat, gender, mobility, infrastructure, climate vulnerability

In his poem “Garmi ka mausam”, famous Urdu poet Ismail Meeruthi vividly portrays the onset of hot weather that is typical in many South Asian cities. There’s sweat dripping from head to toe, hot wind blowing against the face and fire-like sun rays wrapping the body. Using the metaphors of cooking pans and flames to set the scene, he – then – also complicates the experience by referring to the less-privileged who don’t have access to proper shelter and cooling devices. He ends his tirade against the heat with a taunt directed towards the rich, who can afford to protect themselves from the sun behind the high and thick walls of their homes; and a reassurance for the poor that God is their protector.

Source: urdupoet.net

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Though Meeruthi clearly omits gender as a factor influencing how people interact with and navigate heat, his reference to class is a great starting point for our essay on how to make our burning cities more bearable for the marginalized, the vulnerable and the discriminated.

Just like poverty, health and mobility, climate vulnerability is gendered, with women – especially those from marginalized groups – being disproportionately affected by global heating and extreme weather events such as heatwaves. This difference in vulnerability exists because women have unequal access to services such as transportation (e.g. having to walk longer in the sun without access to toilets), health facilities (e.g. self-care seen as inconsequential due to cultural norms) and jobs (e.g. unable to afford cooling appliances due to abysmal female labor force participation); and strict gender roles due to which they are restricted to certain tasks (e.g. cooking during the day) and behaviors (e.g. unable to wear fewer or lightweight clothes).

With this as a backdrop, we propose retrofitting the existing public transportation systems in our hot cities into cooling infrastructures, as a measure to address climate vulnerability from a climate and gender justice standpoint. We make this proposal not just because we are urban mobility researchers and enthusiasts and see public transportation as essential for a sustainable and carbon-neutral city, but also because we believe public transportation lies at the heart of the question about access to the city and equality in social relations. From our research on the Delhi metro and Karachi buses, we have learned how these spaces can be places of subjugation but also of resistance; of exclusion but also inclusion; and of powerlessness but also of agency. By expanding the purpose and role of public transportation, we forecast the amplification of all that is good about our buses, metros, autos and Qingqi rickshaws.

The question, then, is what we mean by turning public transportation systems into cooling infrastructures. In our vision, we consider the door-to-door journey as the baseline for what is part of the public transportation system. This includes the big, obvious elements such as vehicles (buses, metro trains etc.) and their waiting stations; but also, paratransit modes and pedestrian pathways connecting destinations to the stations. Additionally, we regard public spaces such as public parks and gardens of public buildings as complementary components which will work as neighborhood cooling pockets connected by the cool mobility infrastructure.

As per our proposal, first and foremost, the public transportation fares should be slashed completely or considerably to make it accessible to everyone who needs it, for the entire hot period. This would remove the financial barrier that usually prevents many economically disadvantaged groups from using it; and encourage them to utilize it as a shelter from the sun. This effort will have to be supplemented by another measure: increased frequency of transport vehicles, to ensure that everyone who wants to use public transportation can do so without waiting too long or having to miss several buses, as is happening in Delhi right now because of pandemic regulations banning overcrowding without increasing the frequency of buses. Then, last-mile connectivity should be enhanced through a) new seasonal routes connecting different areas to major stations, b) improved pedestrian infrastructure including footpaths with reflective paint, shading by non-water-intensive native trees as well as architectural canopies, with places to sit and rest; and c) drinking water stations along with safe toilets which would be needed more than usual due to the recommended increase in water intake to stay hydrated.

As it must be obvious by now and will become even clearer further down the essay, our plan may lead to a spike in water usage in cities that are often water-scarce. Being fully aware of these limitations, we still take this position because we see this increase in water usage as a matter of redistribution of resources, which is re-directing water supply from wasteful and luxurious activities – such as maintaining golf courses, filling swimming pools and nourishing ornamental landscaping – to our cooling infrastructure.

The next recommendation is to tap into local cooling cultural practices such as simply putting a wet towel on one’s head and serving chabeel. Public transportation authorities should integrate these activities into the mobility infrastructure such as in stations, in partnership with philanthropic groups that already do this and with help of local youth volunteer groups, to widen the scope. Street vendors, who play a partic-
can provide necessary support to affected passengers without delay. Finally, proper ventilation should be ensured in all buses; windows should be inspected beforehand and fixed if needed, as ventilation is crucial for maintaining the body temperature at a moderate level.

Given the immateriality of heat – as compared to floods for instance, adequate and timely communication about its dangers and how to deal with it is also a crucial part of this proposal. We envision that the public transportation system will also double up as a robust early warning communication channel where information about heat and its mitigation will be disseminated through posters, announcements and other popular mediums.

Having made our recommendations, we would like to conclude this essay by addressing the elephant in the room: funding for this cooling infrastructure. In South Asian cities, public transportation systems (with the exception of the elitist Delhi Metro) are pressed for resources, and we hesitate to burden them further. What we propose, instead, is to align the various goals and budgets for climate resilience of different departments including, but not limited to, disaster management, transport, urban development, energy, social welfare, minorities welfare, environment and climate change, labor and employment, youth welfare, municipal administration, and women and child development divisions. This coordination between various arms and agencies of the state may also require changes in policy, introduction of additional laws and new taxation schemes (to generate environmental funds from the “uber-rich” polluters with a high carbon footprint) – steps we think are crucial. These funding streams can be further boosted by existing philanthropic efforts, piecemeal government grants, and corporate social responsibility initiatives – all aligned under a single program for immediate action.

Going back to the poet Ismail Meeruthi, who was comparing heat-struck humans to fish out of water in the 19th century, we hope that in this century – when the earth has gotten warmer due to human-induced climate change – our proposal can provide the much-needed respite from the scorching sun that shines, and will continue to shine, strongly above us. Given this crisis and its unequal burden on the already vulnerable communities of the Global South, we see the tweaking of public transportation systems into cooling infrastructures as acknowledging the gendered experiences of ordinary and everyday users, and ensuring sustainable cooling as their right.

Regarding transportation vehicles, every bus and metro train should carry first-aid kits tailored for heat-related emergencies; this means they should include items like cold packs and oral rehydration salts (commonly known as ORS), in addition to the regular items. Further, the staff should be trained for protocols on dealing with health emergencies, so they 1

» We envision that the public transportation system will also double up as a robust early warning communication channel where information about heat and its mitigation will be disseminated through posters, announcements and other popular mediums.«

Translation: Summer

We draw inspiration from and attempt to add to the body of work under https://www.coolinfrastructures.com/

In principle, we believe public transport systems should be free for everyone, all the time.

A cool, sweet drink served by Sikh and Shia groups as a community service on hot and/or holy days.
Towards a basic income for lifelong learning

How to realize security in times of rapid change

Opinion piece

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The Center for Liberal Modernity is a Berlin-based Think-Tank that stands up for the defense and renewal of open society. Liberal Modernity, as such a combination of individual freedom, democratic republic, cosmopolitanism and cultural diversity is facing pressure worldwide. It is challenged from within as well as from the outside. In times of fundamental changes there is a need for crosspartisan reflection about the future of our common society and the international order. For us the individual freedom and social cohesion, personal responsibility and strong public Institutions belong together.

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Keywords:

Lifelong learning, security in times of rapid change, basic income, education

We are living in times of rapid change: climate change, digitalization, the COVID-19 pandemic, the looming systemic competition with China, global migration and the realignment of globalization are changing our world. Each of those pose their own challenges, but they also mutually reinforce each other.

Change is a characteristic of the modern age. But the current change is faster than before, and it comes with insecurities for broader parts of the population. There is an increasing desire for consistent security and belonging. To be able to risk change, a certain “security corridor” is needed. This is what we call “security in times of rapid change.”

POLITICS MUST PLAY A ROLE

Politics must provide people with security in times of rapid change. Therefore, politicians are called upon to find answers. The answers should include two things: First, they must offer solutions to the challenges outlined, and second, they must give people “security in times of rapid change.” This security, which allows people to be in control of and shape their own lives even in phases of rapid change, is also important for democracy. In this way, democracy can (and must!) prove that it is capable of acting (Center for Liberal Modernity, 2019).

How can security in times of rapid change be achieved? The megatrends described above have massive impact on our economy and the way we live and work. Studies show that over 50% of all existing jobs will change in the next ten to 15 years, and some will no longer exist. The Covid-19 pandemic accelerated processes that started before, especially in technology adaption (see, for example, World Economic Forum 2020).

This makes education and lifelong learning even more important areas than ever before. While there a lot of policy instruments to foster primary and secondary education, lifelong learning is not in the focus of policy makers in most countries. It is mostly left to individuals and companies, who do a lot – in Germany, they finance 2/3 of lifelong learning activities alone. But this is not enough: Climate change, digitalization, systemic competition, and the reconfiguration of globalization will cause tremendous structural changes in the ways we live, work, and produce. It will, for most citizens, no longer be enough to be trained and then remain in one occupation for their entire working lives.

WE NEED A BASIC INCOME FOR LIFELONG LEARNING

What is needed is a broad initiative to foster lifelong learning. We therefore propose making massive investments in this area and granting every citizen a basic education income for lifelong learning. This instrument can be designed differently for each country. I will describe it for the case of Germany.

The basic education income proposed here combines a legal right to further education and granting every citizen a basic education income for lifelong learning. This instrument can be designed differently for each country. I will describe it for the case of Germany.

The basic education income proposed here combines a legal right to further education with a concrete financing instrument. It grants every adult citizen up...
to three years of state-financed further education. This instrument allows people to change careers during the course of their working lives and enables them to learn something completely new or to renew their competencies in certain areas. They can decide on their own in which area they want to specialize if they want to learn something completely new or even do a bachelor’s or master’s degree.

A legal right to continuing education should apply to all people of working age. A legal entitlement is enforceable; it gives citizens a strong position vis-à-vis the state. A right to continuing education anchors the issue in people’s minds.

PEOPLE NEED THE CHANCE TO CHANGE CAREER AND TO LEARN SOMETHING NEW

The demand for a legal right to continuing education is widespread, both politically and in the professional community in Germany and beyond. However, it is of little use if it is not linked to concrete instruments. Central to this is the question of financing.

The Center for Liberal Modernity therefore has proposed a basic income for lifelong learning and has modeled it for the German case. It should be available to all people between the ages of 25 and 65, i.e., during their active working phase, for job-related or professional further education.

They should be able to take advantage of this basic education income for up to three years over the course of their working lives, either in whole or in part. Part-time training would be possible, but initial training and purely company-based further training would be excluded, as well as training courses that are solely for private development and cannot be used for work. These restrictions are justified, because the basic education income would be financed from tax revenues (see below). In such financing, a balance must be found between added value and individual benefit.

We propose a basic amount of 1200 euros net per month. This amount would allow low-income earners to make very few cuts but would force higher-income earners to spend part of their savings to maintain their standard of living. This can be justified because it is a state investment with an impact on society as a whole, but which can also have positive effects for the individual – less unemployment, a higher lifetime income, more life satisfaction. In addition, supplements would be provided for children or impairments, e.g. 200 euros per child. Social security contributions and course and material costs would also be covered. A minimum claim period of three months at a time would ensure that the administrative costs and benefits of continuing education are not out of proportion.

»We need a basic income for lifelong learning.«

In order to make lifelong learning accessible to broader sections of the population, a number of other measures are needed in addition to a legal entitlement and a simple financing instrument, including accessible consulting, quality check and mainstreaming the market for further education. These would help to make continuing education more accessible, and to ensure and improve the quality of the programs. It is important for the idea of a legal right that people are not bound to the guidance given. They are free to decide whatever training they want to make within the portfolio of the basic income for lifelong learning.

STATES SHOULD INVEST HEAVILY IN FURTHER EDUCATION

It is difficult to foresee exactly what the costs of a basic education income would be. It is still unclear to what extent it would be taken up if it were a simple, easy-to-understand and available instrument. We assume that far more people would opt for substantial, job-ready training than they do now if a basic income for lifelong learning were available. This is evident on the cost side, but also on the benefit side. The fact that continuing education can help significantly in coping with the upcoming structural change in our economy and working world justifies government investment to a much greater extent than before.

For Germany, the economic research company Prognose calculated two scenarios that assume that each year one percent of those entitled to it – around 367,000 people – take up a basic education income for an average of four and seven months respectively. Including living expenses, course costs and social security contributions, the calculations arrive at a range of between 7 and 14 billion euros annually (Center for Liberal Modernity 2021).

A basic education income would be a strong government investment in minds. But political and social consensus is necessary. The call to establish a legal right to continuing education must also be widely shared politically. The basic income for lifelong learning would be a strong investment in the future – an investment that also entails costs. However, these costs could be offset, at least in part. What is the value? It will empower people to take care of their own lives and career, help to prevent unemployment, foster economic growth and innovation, help regulate migration and help stabilize democracy by providing policies that empower citizens.

A basic education income can help not only to cushion structural change in the labor market, but also to make it possible to shape it – both politically and individually. This can lead to lower spending on (long-term) unemployment and thus to higher tax and social security revenues. These two effects would also help to amortize the costs of a basic education income in the medium term.

A BASIC INCOME FOR LIFELONG LEARNING WOULD HELP DEMOCRACY TO DELIVER

A basic income for lifelong learning has great potential. It is a flexible instrument that allows for quick reactions to changes...
in the economy, skill sets and the labor market. Tying a financing instrument to a citizen’s right to continuing education offers a way to galvanize comprehensive political support for the continuing education sector. By being unbureaucratic, easy to understand, widely applicable, and linked to non-binding but competent guidance, the instrument has the potential to significantly increase participation in continuing education. What’s more, it promotes participation in continuing education and, beyond that, in society.

This also has repercussions for our democracy: if people feel they can take responsibility for their own lives, their approval of democracy increases. The argument also works the other way around: democracy is only successful in the long term if it “delivers,” i.e., gives people the opportunity to develop. It must offer people “security in times of rapid change,” even and especially in times of major change. A basic education income can be a building block for this.

The proposed instrument is a suitable model for developed countries with a solid basic education and financial resources. Here, states can invest larger amounts also in further education. But it is also a model that can be applied to different national and supranational contexts. The G20 can promote such an instrument, create funds to finance it and allocate the money to the areas where it is needed most. The challenges described in the beginning, namely climate change, digitalization, and global migration, are affecting the Global South and developing countries even more.

Thus, the international community can take on responsibility and create funds to foster lifelong learning worldwide. The basic income for lifelong learning can be a model for such funds.

This can be used in addition to the much-criticized microcredit-system (see Chliova et al. 2015 for a meta-analysis). While microcredits start with the under-financialization of people, a basic income for lifelong learning assess the skills people have or can obtain. Both are much needed, especially in developing societies and both help empower people to lead their own lives.

»States should invest heavily in further education.«

References
Advancing inclusive remote learning

Global lessons in inclusive remote learning, amid the COVID-19 pandemic

Opinion piece

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The Human Sciences Research Council of South Africa is Africa’s largest dedicated statutory social science and humanities research agency and policy think tank. Our mandate is to inform the effective formulation and monitoring of government policy; to evaluate policy implementation; to stimulate public debate through the effective dissemination of research-based data and fact-based research results; to foster research collaboration; and to help build research capacity and infrastructure for the human sciences. The Council conducts large-scale, policy-relevant, social-scientific research for public sector users, non-governmental organisations and international development agencies. Research activities and structures are closely aligned with South Africa’s national development priorities.

Keywords:
Online learning, Remote Learning, Digital Inequality

ABSTRACT
 Globally, the COVID-19 crisis has forced the higher-education sector to adopt innovations and technologies to save the academic calendar by progressing through the curriculum. Pervasive inequalities in the education system before the pandemic are now exaggerated, with marginalized students excluded from learning due to disparities in access to remote learning infrastructure, digital learning material and digital skills. The challenges of inequality seem pervasive across universities but most acute in the developing and emerging worlds. Drawing from a webinar hosted by the Human Sciences Research Council during the early stages of the pandemic and subsequent research, this paper shares key lessons in remote learning from across the globe. In summary, the paper provides five important takeaways about remote learning.

INTRODUCTION
 While in crisis mode, the higher-education sector has rapidly adopted new technologies at scale and pace none might have believed possible pre-COVID-19. Video conferencing technology has given people across the globe the opportunity to get to grips with remote learning. While online learning, massive open online courses (MOOCs) and virtual learning have had varied uptake throughout the world, the COVID-19 crisis has prompted an enormous leap forward in appreciating future possibilities.

REMOTE LEARNING AS A POTENTIAL EQUALIZER
 At the start of the pandemic, the key question that emerged was whether South Africa’s education sector was in a position to compete with its counterparts in Europe and China. At its core, this question recognizes the vast disparities in access to technology, the price of data, digital skills and the resources available to higher education institutions. While remote learning has the potential to become an equalizer by ensuring the same quality of education for all, access to the tools to make it possible is a matter that needs urgent policy attention.

For example, while online access in China and Italy is more widespread and cheaper than in South Africa, an urban-ru-
Mobile network providers to offer student access to online learning platforms with varying features. In Egypt, the state launched a centralized learning platform supported by educational institutions, allowing staff and students to interact free from data charges. The centralized platform also limits the expenses incurred by institutions that require such infrastructure. In other African countries such as Ghana, Kenya and Uganda, remote learning was supplemented by radio and television access, recognizing the challenges in mobile network coverage, particularly in rural areas. Ubiquitous internet connectivity at low or no cost and energy sources to power devices seems to be the key to equality in accessing e-learning globally.

**ONLINE LEARNING MAY BE THE FIRST STEP TO CHANGING SOCIETY**

The COVID-19 crisis is possibly a catalyst for critical thinking with a long-overdue focus on content in education. In addition, new learning skills need to be taught in a world where information is in huge supply, but critical thinking is not. When comparing online learning with classroom learning, one may find better exchanges and interaction in the classroom. However, there were also some benefits experienced through remote learning over contact learning. For example, one could watch a missed lecture, although without the benefit of real-life interaction. These possibilities have only just begun to be explored, and there are more opportunities to be found. In future, much more work is needed to incorporate artificial intelligence (AI) and virtual reality into the learning experience and devise intentional online pedagogies that depart from passive learning methods and promote active learner engagement.

Furthermore, the COVID-19 crisis gives us an opportunity to leapfrog outdated technologies. The traditional routes to advanced technology applications need not be followed. Thus, if suitable policy choices are made, 5G mediums or AI applications in online practicals could be made available to South Africa and the world’s poor. During the pandemic, the Technical, Vocational Education and Training (TVET) sector was greatly affected. TVET colleges struggled to negotiate technology access deals with large corporates or secure the technology needed to conduct practical training virtually. These experiences have led to TVET college shutdowns or a focus on theory at the expense of practical study,impeding the effectiveness of such training. Devising inclusive strategies to access virtual reality technologies to conduct practical training will significantly benefit the TVET sector.

Anxiety about these changes is natural, but as experienced in China, it can be quickly overcome as people become familiar with the technology and appreciate its advantages. China’s preparation in making available infrastructure, devices and educators with the necessary skills supported their almost seamless transition. In particular, China’s partnership with its EdTech sector allowed its universities to offer its staff a variety of platforms to choose from when producing and sharing learning materials with students. Such practices highlight the value of the state entering into public-private partnerships to strengthen the products and services available to the higher education sector.

**BEYOND ACCESS TO SUPPORT AND QUALITY**

As the education sector implemented emergency remote learning protocols to save the academic calendar, teachers had to carry the burden of successfully navigating current infrastructure limitations. To better prepare for this challenge, they too need access to free data and free resources just as much as the learners. However, it is essential to support educators beyond simply addressing the access challenges they and their students have experienced. In Italy, for example, teachers required rapid, intentional training to use the appropriate tools to successfully manage online learning. This steep learning curve is frequently one that learners

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»Universities in Russia and China have implemented mass teaching assistant recruitment programs to improve staff-to-student interaction and assist staff in conducting lessons online. These programs have allowed staff to conduct lessons in smaller groups, thus increasing engagement among peers and staff.«

are better equipped to manage than teachers, a phenomenon that requires reflection. The role of power in education has frequently been a topic of discussion, and now more than ever, it is in play, but with the imbalance reversed.

In China, the country took advantage of the Chinese New Year celebration, which coincided with its first lockdown, to roll out a massive two-week programme of digital skill development among all staff, focusing on the tools needed to communicate and engage with students. This programme helped address some of the teething challenges frequent across other countries. Emergency remote learning also suffers from inadequate contact between staff and students. Through emergency remote learning protocols, universities have attempted to replicate traditional lectures in an online setting. However, interaction is often limited with a large staff to student class ratio. Universities in Russia and China have implemented mass teaching assistant recruitment programmes to improve staff-to-student interaction and assist staff in conducting lessons online. These programmes have allowed staff to conduct lessons in smaller groups, thus increasing engagement among peers and staff.

We are only beginning to support teachers in delivering quality online education and learning that requires a physical experience. The quality of online platforms varies greatly and is in danger of perpetuating the inequalities of real-life institutions. So, for example, in South Africa, while TVET college websites were zero-rated by service providers, thus allowing free access to resources, many online platforms of TVET colleges and historically disadvantaged institutions are of poor quality. These institutions could benefit from centralized platforms as launched in Egypt.

BEYOND TEACHING TO CREATING LEARNING COMMUNITIES

At the University of Bologna, in Italy, while the transition from contact teaching to remote teaching was relatively easy and facilitated well using video conferencing software, it soon became apparent that formal teaching content was only one part of the educational enterprise. Shortly after online teaching began, the university set up a holistic programme to support learners, focusing on delivery through technology and building and maintaining a community through remote learning. The loss of in-person contact has impacted the well-being of students, resulting in higher stress levels following the change. In one particularly concerning example from India, the suicide rate among students increased by 21% in 2020 over 2019 levels, highlighting the substantial increase in stress felt by students. With this in mind, the higher-education sector must make supplementary programme staff accessible online and provide social spaces for students to meet online.

The University of Bologna experienced success by developing a wide-ranging cultural programme offered by staff and students from the music and drama departments that promoted socialization to counter feelings of solitude. Another key learning from the University of Bologna’s experience is that, as weeks went by, the teaching staff began to share experiences and expectations. This mutual support ensured the mental health of lecturers as they struggled to maintain the same online pace as they could do in real life. Ultimately students and staff require a range of support whereby career guidance offices become accessible online as well as physical and mental health care support workers and gym staff. Staff need to develop innovative online programmes to ensure that the institution caters to the broad aspects of the students’ and staff’s well-being.

CONCLUSION

With the shift online, much of the burden in ensuring a successful transition is placed on staff who must maintain contact with students, assess their needs and develop learning materials appropriate to the student’s level of digital capability. In the absence of a broader inclusive online learning policy, managements expectations need to be redefined to protect staff from burning out or suffer from being “always on” during this period of change. Unique to the COVID-19 crisis was the expectation that we would “soon go back to normal,” which will clearly not be the case. Helping each other settle in for the long haul and an uncertain future has become part of the remote-learning experience.

After the COVID-19 crisis, South Africa, as with the rest of the world, is likely to experience increased economic inequalities as jobs are lost, and economies slow down. The time to innovate and introduce accessible and quality mass education is now, in the midst of the pandemic, so that once the crisis has passed, there can be no going back to how things were, pedagogically and economically.

The implications of governments’ responses to the COVID-19 crisis

A wake-up call to revisiting a broken social contract and weak institutional capability

INTRODUCTION:
This research paper aims at visiting two case studies, one from the Global North and another from the Global South, to assess their institutional response to the COVID-19 crisis, its effects on principal-agent relations, and how the vacuums presented by the crisis led to tectonic shifts in the social contract. Additionally, the paper visits the effects of multilateral interventions in both countries and investigates their outcomes.

THEORETICAL BACKGROUND:
In addition to exposing a globally dilapidated health system, the COVID-19 crisis has highlighted a dichotomy between principals and agents across sovereign states; for example, the institutional capability to implement lockdown measures. It has also shown that global solutions that include North-South collaboration, such as vaccination, are needed, but also localized ones related to state-constituent relations need to be emphasized.

The social contract is a tripartite contract between public authorities, businesses, and the people, where people and businesses pay taxes to get social security and enabling ecosystems, and exchange wages in return for productivity (Lassalle 2021). Within this contract, principals (mostly the people and businesses), incentivize their agent (usually the state) to rationally make the decisions that are most preferred by those principals. This relationship is governed by trust and accountability (Gailmard 2012).

It has been argued that crises pose a shift in the social contract and its manifestations. These shifts could be a change in the terms of the contract or in the trust among the actors. For instance, the state’s expenditure on social services, such as health, education, and improvement of working conditions, have increased after major crises, such as Marshall Plan after World War 2, the birth of Nordic welfare state, and the introduction of the International Labour Organization in 1919 in the wake of World War 1 and the outbreak of influenza (Madgavkar et al. 2020, Frey et al. 2021). In general, what these shifts had in common is that they followed waves of social unrest, mobilization of massive resources to overcome the crisis, and an exacerbation of social tensions (Lassalle 2021).

Similarly, the unremitting COVID-19 pandemic is not short of crisis. So far, evidence has shown that the largest 22 economies have increased their expenditure on pandemic stimulus plans and cushions by at least 20%, in contrast to a declining trend of social contract expenditure in the past 20 years (Madgavkar et al. 2020). Additionally, pandemic-related unemployment and fatalities intensified social unrest as measured by political protests (Lackner 2021).

In parallel, less-developed states were unable to capitalize on this “opportunity.” An eroded social contract was exposed, but their reactive public finances mobilization was not of the same magnitude of the more developed states, due to limited financial resources, which consequently led to deteriorated trust within the principal-agent model. It was found that “a one standard deviation increase in composite government response measures leads to a 0.353% increase in public trust in government and a 0.414% increase in public belief in its truthfulness” (Razavi et al. 2020, Liu et al. 2021).
CASE STUDIES: For this study, we draw lessons from the responses of Sudan and Italy, whose institutions, despite disparities in levels of development and advancement of health systems, were exposed greatly throughout the pandemic and presented the need for urgent reforms.

ITALY: A CASE FROM THE GLOBAL NORTH.
Italy was severely affected by the first wave of the COVID-19 pandemic, where the first case was detected on 21 February 2020. The Italian government was the first European government to impose a national lockdown early in March 2020, following the announcement of a state of emergency. Despite the early and strict measures imposed by the Italian government, it is described as “tough, and it was described as imposed by the Italian government, it is described as imposing social distancing, lockdowns, disinfection of public spaces and other health measures to help prevent the spread of the virus. However, these measures were mainly enforced in urban centers where more infections were officially recorded, (Boccia et al. 2020; Khogali 2020).

In addition to exposing a dilapidated health system, the COVID-19 crisis highlighted a dichotomy between principals and agents across sovereign states.«

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There are many reasons that could explain why the COVID-19 pandemic had severe impacts on Italy, a developed country, and a member of the G20 as well as the European Union (EU). Italy’s decentralized nature hampered the government’s response and affected the containment of the outbreak (Boccia et al. 2020). Furthermore, Italy’s ageing population (highest in Europe, with up to 23% of the population aged 65 and older in 2019) was a determining factor with regards to the number of deaths as well as the demand for advanced health support such as intensive care units (ICUs) (Statista Research Department 2021). Nevertheless, this situation is not unique to Italy, and many developed countries with similar contexts managed to respond to the pandemic more effectively.

A key factor that contributed to the unfortunate course of the pandemic in Italy is the persistent fragility of its national health service (SSN; Servizio Sanitario Nazionale). The SSN provides universal free access to health care for Italian citizens. Albeit one of the most applauded national health services in Europe, it had undergone continuous budget cuts in the past two decades (Bosa et al. 2021). The COVID-19 pandemic put even the best healthcare systems to the test. Therefore, underfunded systems like the SSN would clearly suffer more under such unprecedented pressure. The strict spending reviews in Italy, especially following the 2008 economic crisis, have shifted the burden of healthcare finance from the government to households. As the pandemic hit, this reality created a serious bottleneck, particularly around the lack of adequate ICU facilities. Despite the government’s efforts to increase the SSN’s ICU capacity by 65%, this did not have an immediate positive impact during the first wave of the pandemic (Bosa et al. 2021).

On the positive side, Italy’s position among powerful multilateral institutions has helped the country progress towards recovery and have a better response in the aftermath of the first wave. Through EU structures such as the European Medicines Agency (EMA), Italy had access to further expertise on managing the pandemic, and Italian citizens had more information on dealing with the virus. Additionally, the border management regulations were more effective in the EU context, in contrast to single-country regulations (Bosa et al. 2021). By investing in the SSN (i.e., improving the social contract) and leveraging knowledge and resources through multilateral institutions, Italy’s ability to cope with the pandemic has significantly improved.

SUDAN: A CASE FROM THE GLOBAL SOUTH.
Due to over three decades of authoritarian military rule in Sudan (1989 – 2019), the healthcare system in the country was under severe stress for being extremely underfunded, as at least 60% of the state’s budget is routed to the military and security forces (OCHA 2020; Ramani 2021). It was estimated that around 81% of the population did not have access to a functional health center within two hours of where they live (WH0 2020). When the Covid-19 crisis struck Sudan, the country had already been crippled by urgent political and economic challenges. Despite the COVID-19 pandemic presenting a huge additional challenge, it was an opportunity for establishing a new social contract between Sudanese people and the state (Khogali 2020).

The first COVID-19 case in Sudan was recorded in March 2020. The government responded to this health emergency by applying social distancing, lockdowns, disinfection of public spaces and other health measures to help prevent the spread of the virus. However, these measures were mainly enforced in urban centers where more infections were officially recorded.
The level of trust in government greatly influences to what extent principals are ready to adhere to their agent’s regulations.«

leaving large portions of more vulnerable citizens unprotected. In contrast, it is argued that the majority of the Sudanese population was located in areas with little access to information on COVID-19, and no connections to other regional or global sources of information (Khogali 2020; Kanu and Khalafallah 2021).

The Sudanese government’s response was limited and non-inclusive. This gap in the response between urban centers and rural areas was mainly covered by the involvement of informal Community Based Organisation (CBOs), especially youth groups (Fadul et. Al 2021). Volunteers from most communities across Sudan worked on collecting donations to support needy families that were affected by the lockdown. They also worked on assisting in health education and facilitating the tasks of the limited health care providers, as well as providing hand sanitizer and soap to encourage their community members to adhere to the COVID-19 prevention guidelines. The support provided by these CBOs was applauded by their respective communities, but also highlighted the incapability of the state in protecting citizens under such dire conditions (Ahmed et. al 2020).

Furthermore, the government struggled in convincing citizens to follow the regulations, indicating the low levels of trust in government. Arguably, the incentive structure in Sudan is dysfunctional, making it difficult to embrace normative principal-agent interactions. Citizens are not incentivized to pay taxes, and the government is incapable of providing adequate services. Subsequently, the principals generally lost trust in the agents’ intentions to make decisions that are mutually beneficial, which made it difficult to go about any COVID-19 protective measures. The government of Sudan could not capitalize on the pandemic to address this dysfunctional citizen-state relationship; hence it lost a chance to restore a broken social contract (Khogali 2020).

**ANALYSIS OF THE CASE STUDIES:**

By comparing the two countries, the following points can be made:

- **Existence within multilateral setups:**
  Italy’s existence within a multilateral setup has helped in:
  - Increasing the principals’ access to knowledge through outlets other than their respective government, such as the European Medicines Agency (EMA),
  - This setup has also increased the state’s “peer learning” when it came to controlling and handling the outbreak. Apart from countries that experienced the Ebola epidemic (Diane et al. 2018), most of the Global South countries had insufficient expertise/structures aside from those regulated by WHO.
  - Shared accountability and coordinated actions with a higher-level agent, rather than single-handed interventions could result in positive spill-overs when tackling major crises.

- **Information asymmetry:** The principal-agent theory assumes that principals have the information advantage, while the agent has an advantage on the expertise side; however, this was reversed in the Sudanese case, where the state had an information advantage, which led to less accountability about their intervention and hence less-effective action, which was not the case for Italy.

- **The social contract:** In the same way COVID has exposed humans with underlying conditions, it has exposed states with underlying issues and the vulnerability of those who are inadequately covered by social protection in Global North and Global South countries alike. However, this exposure was somewhat a seized opportunity to improve state-constituent trust in Italy and a lost one in Sudan.

- **Trust in government:** The level of trust in government greatly influences to what extent principals are ready to adhere to their agent’s regulations. In the case of Sudan, where citizens are not comfortable to pay taxes and rely on alternative sources to access services, it is difficult to assume that they would follow the state’s regulations, even in times of crisis.

- **Immediate vs. longer term gains:** It was evident that firefighting during the crisis, i.e the case of Italy, was not effective on immediately improving the health in both countries, the response was following the virus spread, and never at a first lead. The response of the state followed the pattern of the spread of the virus, meaning that the areas and citizens that were hit first were able to access support, resulting in less support to those who were affected. Those who were affected earlier got hospitalized, while those who were affected later were advised to isolate at home.

To conclude, in addition to exposing a dilapidated health system, the COVID-19 crisis highlighted a dichotomy between principals and agents across sovereign states; for example, the institutional capability to implement lockdown measures. It has also shown that multilateral solutions that include North-South collaboration, such as border closure are needed, but also localized ones related to state-constituent relations need to be emphasized.
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The Global Solutions Initiative

The Global Solutions Initiative (GSI) is a global, non-profit and non-partisan platform for ideas. It advances global economic, environmental, and social prosperity by connecting thought leaders and decision makers, visionaries and pragmatists. Headquartered in Berlin, the Initiative proposes research-based policies to the G20, the G7 and beyond, through ongoing exchange and dialogue with the Think7 and Think20 engagement groups.

Annually, GSI hosts the Global Solutions Summit, a festival of ideas for better global governance. It is the world’s premier forum for transforming research-based insights into policy recommendations for the G20. Since 2017, the annual summits have served as a stepping stone between the respective G20 and T20 presidencies. During the German G7 Presidency in 2022, together with the German Development Institute/Deutsches Institut für Entwicklungspolitik (DIE), the Global Solutions Initiative chairs the G7 engagement group Think7.

Think20

Think20 (T20) is the official engagement group of the G20, bringing together leading think tanks and research centers worldwide. It serves as the “ideas bank” of the G20 and aims to provide research-based policy recommendations to the G20 leaders. In 2022, Indonesia holds the G20 Presidency and therefore also the T20 Presidency.

More information at www.t20indonesia.org

Think7

Think7 is an engagement group of leading think tanks from the G7 countries. The Global Solutions Initiative has been mandated by former Chancellor Angela Merkel to chair the Think7 jointly with the German Development Institute/Deutsches Institut für Entwicklungspolitik during Germany’s G7 Presidency in 2022.

The Think7 engagement group works to develop and propose research-based policy recommendations to support the German G7 Presidency. Besides short-term responses such as providing vaccines or financial support programs in the G7 countries and beyond, this responsibility also implies stewardship for longer-term systemic transformations that generate an environmentally sustainable, socially just and resilient recovery in a multilateral system.

At the Think7 Summit, the policy recommendations will be handed over to the G7, to inform and inspire the G7 Communiqué.

More information at www.think7.org
Activities

- **Circular Economy Solutions Dialogues**
  The CESD advance the circular economy agenda and facilitate the initiative to disseminate green technologies globally and their contextualized application. More information at https://www.global-solutions-initiative.org/policy-advice/circular-economy/

- **Digital Empowerment**
  The Global Solutions Initiative has set itself the goal of actively advancing the debate on the rules of digital governance and developing proposals in close cooperation between research, business and politics that will lead to a comprehensive reorientation of the digital space in the spirit of recoupling. Digital empowerment will also be part of the workshop series of the Socioeconomic Transformation Program at THE NEW INSTITUTE, headed by Dennis J. Snower. More information at https://www.global-solutions-initiative.org/policy-advice/digital-governance/

- **Global Solutions Summit**
  The summit is an annual conference in Berlin, providing an opportunity to present and discuss policy recommendations and visions in advance of the G20/T20 and G7/T7 Summits. More information at https://www.global-solutions-initiative.org/events/summit/

- **Ongoing workshops and conferences**
  Our ongoing activities are deep dives into particular policy areas with the objective to develop solutions that strengthen multilateralism and recoupling. More information at https://www.global-solutions-initiative.org/events/conferences-workshops/

- **The Recoupling Dashboard**
  A country-specific research tool to measure the well-being of societies beyond GDP, which illustrates the interconnections between economic, social and environmental prosperity. More information at https://www.global-solutions-initiative.org/recoupling-dashboard-homepage/

- **Think7**
  Think7 is an engagement group of leading think tanks from the G7 countries. It works to develop and propose researched-based policy recommendations to support the German G7 Presidency. More information at https://www.think7.org

- **Young Global Changers**
  An engaged global network of young individuals with innovative ideas to change the world in the spirit of recoupling. More information at https://www.global-solutions-initiative.org/young-global-changers/

- **Workshop Series on Measuring Prosperity**
  The aim of the workshop series is to bring the measurement of prosperity in economics and business into consonance, as a prelude to the consistent assessment of government policy and business reporting. This assessment is meant to be a foundation for exploring new approaches to the formulation of government policies and business strategies in the service of human well-being. The workshop series is part of the Measurement of Prosperity Initiative of Socioeconomic Transformation Program at THE NEW INSTITUTE, headed by Dennis J. Snower.

- **Workshop Series on Economic Paradigm Change**
  The workshop series attracts major contributors in the development of new paradigms for economics. The new paradigms contain a new understanding of the purpose of economics, focused on the mobilization of resources in the pursuit of wellbeing in thriving societies, now and in the future. Furthermore, the new paradigms involve a new approach to the collection of economic data, new methods of analysis, new questions concerning the nature of economic activity, and new assessment of economic success. The workshop series is part of the Socioeconomic Transformation Program at THE NEW INSTITUTE, headed by Dennis J. Snower.

Contributions

- **Narrative contribution**
  The GSI puts strong emphasis on the co-creation of a joint narrative around the ‘recoupling’ of social, economic and environmental prosperity by stakeholders from research, policymaking, business and civil society.

- **Organizational continuity**
  The GSI offers a permanent yet versatile structure across institutions and countries. It provides continuity and coherence in policy advice.

- **Policy-oriented contribution**
  The GSI is inherently solution-driven. It generates cutting edge policy briefs for the policy leaders of the G20 and other international associations.

- **Research contribution**
  The GSI is comprised of a truly global network of research institutions, connecting national and international expertise in the service of global citizenship.

Publications

- **G20 Insights**
  An online platform to disseminate implementable policy recommendations and conceptual visions for G20 policymakers.

- **Global Solutions Journal**
  With articles by scholars and researchers of the Council for Global Problem-Solving (CGP) and thought leaders from across sectors, the journal provides a bridge between research-based recommendations and best-practice examples addressing global challenges on the G20 agenda.

- **INTERSECTING**
  INTERSECTING has been launched by the Global Solutions Initiative and GIZ and is distributed by the Global Solutions Initiative. It is geared towards think tanks, civil organizations, international institutions, in particular the G20/T20. More information at https://www.global-solutions-initiative.org/publications/e-book-intersecting/

- **The Social Macroeconomics Series**
  The working paper series aims to understand the role of human sociality within macroeconomic activity.

- **The Global Solutions Papers**
  Recommendations and visions for policymakers that deal with major global challenges.

For more information, please visit us at www.global-solutions-initiative.org
The Council for Global Problem-Solving (CGP) is the intellectual core of the Global Solutions Initiative. The Global Solutions Initiative thanks the highly committed members of the CGP for their intellectual advice and their valuable contributions.

The CGP is an accessible, permeable organization, open to all think tanks and research institutions that fulfill its terms of membership. CGP members have their own website to float new ideas, debate underlying issues, and publicize their policy work in progress. The resulting Policy Briefs are disseminated through the G20 Insights Platform: www.g20-insights.org and the CGP Platform: www.cgp-council.org

CGP Member Institutions

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