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The COVID-19 Development Innovation Agenda:
An Economic and Financial Lens

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EXECUTIVE SUMMARY

A successful response to both the coronavirus's health and economic costs in less developed countries requires that we move quickly to accelerate innovation and learning. The innovation agenda comes from the uncertainty associated with any emergent crisis. To support the public health response, innovation is needed to make behavior change easier to adopt and sustain. To meet the needs of firms working to rebuild markets, impact investors should be seeking to create innovative financial products and vehicles to avoid a liquidity crunch that could wipe out decades of investing for social impact.

The following principles are presented to advance the conversation about the economics of response to, and recovery from, the pandemic, with an eye to a more resilient future.

The economic innovation agenda in pandemic response should be rooted in what we know about human behavior, and getting sustained scale in important mitigation solutions will require creativity. Behavior change initiatives such as handwashing, encouraging facemasks, and avoiding mass gatherings will be less costly for a stretched public service and a scared citizenry then other solutions effective in more developed economies.

Key global development innovations of the recent past can be repurposed to protect livelihoods during the mitigation phase of pandemic response. We can build on the innovations in fintech and mobile to reduce the economic costs of mitigation for vulnerable populations.

Innovation solutions for response to the pandemic, whether led by government or civil society, must be complemented by decisive action by private sector and development finance institutions. It is crucial that investors and creditors protect their portfolio firms and provide liquidity to see their partners through this period. This is not a period in which only low-productivity businesses will struggle. Development finance institutions (DFIs) in particular should take additional risk and exposure at this time, while existing investors build pipelines so that investing can begin again rapidly.

New concessional vehicles need to be created that accept higher risk during the recovery period, prioritizing development impact, especially in a period of potentially radically reduced market returns. Such vehicles will crowd in commercial and DFI funding alongside this more deeply concessional capital, and should rely on an impact framework that allows investors to understand the potential trade-offs between financial return and development impact. Value chains, markets, and regulatory frameworks are going to change based on ideas developed for pandemic response, and with that, new investment opportunities will arise.

Because of the current uncertainty, and the innovations we are all exploring, it is vital that we learn together rapidly about what works, and where and why. The health and economic solutions generated by this urgent learning collaboration will not only benefit those in the developing world, but also inform equally urgent solutions in richer countries.

THE COVID-19 DEVELOPMENT INNOVATION AGENDA

As the global development community continues to articulate its response to the novel coronavirus pandemic, we are learning that the strategies being used to address the virus in more developed economies may not be feasible or may be too costly (economically and possibly politically) for many developing countries.[1]

While some countries may be able to avoid the worst of the infection, there is little capacity for tracking and testing in developing countries, and health systems are already overwhelmed.[2,3] There are too many vulnerable people who rely on daily cash wages for survival for the costs implied by lockdown policies to be acceptable over a sustained period of time.[4] In these circumstances, people will violate stay-at-home orders because they feel they must.[5] But an unmitigated pandemic will come at a terrible cost in deaths and illness in the short run. In addition to costs today, there will also be considerable costs in the future due to the human capital losses associated with reduced nutrition and schooling disruptions.

The innovation agenda in this pandemic comes from the uncertainty associated with an emergent crisis. The public health and economic trajectory we are on is unlike any other in modern history. Of course, the greatest innovation imperative to meet the COVID-19 challenge is the development of a vaccine and therapeutics. The economics of accelerating vaccine discovery and supply have been explored previously, for other diseases, and many of the powerful tools for creating incentives for biotech and pharmaceutical companies, such as advance market commitments and volume guarantees, will be relevant for COVID-19, as well.[6]

There is an economic and financial innovation agenda that goes beyond the medical response to COVID-19, and which will be important even after a vaccine is developed, both because of the economic costs we are incurring now, and because of potential lag times in vaccine coverage in developing countries. This note contributes to the conversation about what that agenda should look like, as a complement to the medical innovation that is urgently underway.

We're writing to advance the conversation about both the economics of rapid response to the COVID-19 pandemic, and also in recovery, and with an eye to a more resilient future. We begin from the premise that mitigation behavior, livelihood impacts, economic recovery, financial resilience, and macroeconomic conditions are all interconnected. We need innovative solutions to enhance mitigation efforts and minimize costs to livelihoods now that will ensure a rapid and durable recovery. During the crisis, and in recovery, impact investors and other creditors should create the innovative financial products and vehicles that meet the real needs of firms rebuilding the markets they sell into. A liquidity crunch that wipes out decades of investing for social impact can be avoided by innovating to take smart risk and share it creatively. Both investors and firms will find recovery easier to manage in a favorable macro climate, which, in many developing countries, depends on the choices made by governments, the multilateral development organizations, and lenders of sovereign debt. We consider each of these elements of the economic and financial innovation agenda in turn and look forward to further conversation.

INNOVATION IN PUBLIC HEALTH RAPID RESPONSE

The economic innovation agenda in pandemic response should be rooted in what we know about human behavior under uncertainty and imperfect information. This lens can be applied to support sustained adoption of mitigation behaviors. Based on our understanding of other virus outbreaks and the strategies adopted to contain them, we already know some solutions that are part of the public health response to COVID-19. These include large-scale use of masks, made freely available in non-health-care settings. Encouraging frequent handwashing with water and soap is also appealingly low tech and effective. Discouraging mass gatherings at funerals, weddings, and other social events, and using community leaders to enforce this social norm, may also be powerful.

Getting sustained scale in important mitigation solutions will require some creativity. These intermediate public heath interventions belie a more complicated behavior change effort. Take, for example, the case of face masks. The benefits of masking largely accrue to others, not the mask wearer. Just as in the case of other health technologies that have such “externalities” associated with them, this makes adoption difficult to sustain at optimal levels without supporting strategies. Certainly, there is a strong case for free distribution of masks because of externalities but thinking cleverly about other ways to support adoption will also be important. A zero price is not enough to generate a very rapid adoption curve when external effects are present and signal-to-noise ratios may be small. Notably, it is clearly visible to others whether someone is wearing a mask, as compared to, say, whether someone is vaccinated or otherwise immune. The mask is a “social signal” that can be normed around. We can learn from other experiences where social signals have been created to make the invisible more visible (such as vaccination or deworming treatment) about how to create positive halo effects for mask wearing.

We have a great deal of research and experience to draw from in thinking about encouraging frequent handwashing. However, a key takeaway from this research is that there are few surefire ways to increase compliance and sustain it in environments where water must be collected outside the home. Behavior change in this crisis setting may be qualitatively different, however. People are very motivated to wash hands now, so making it easier for them to do so could be right approach, rather than come up with heavy behavior change campaigns. Free provision of soap and hand sanitizer at central locations may be a part of this. We have noted with interest the innovation of introducing handwashing stations at markets and bus ranks by local authorities in the Indian state of Kerala, though it is unclear how this substitutes for handwashing before and after what have traditionally been thought of as critical behaviors.

If we suspect that handwashing before cooking is critical, an innovation might be to change who does that cooking, rather than the behavior of the traditional cook. In Kerala, women’s self-help groups have been running community kitchens since the early stages of the pandemic outbreak to deliver food to households for elderly or otherwise vulnerable people so that they do not eat from the common pot.[7] Innovations like this may be valuable with realistic compliance rates around handwashing behaviors in the typical home. In the same vein, it may be as valuable to clean fruits and vegetables with dilute bleach in market settings, where they are often refreshed with contaminated water and irrigated with wastewater, as opposed to urging safer food handling in the home. These examples serve a more general point: when we can relieve individual people from having to personally choose good behaviors and rather supply these behaviors in bulk, outcomes may be better and easier to sustain where top-down enforcement is unrealistic or difficult.

Efforts to end mass gatherings do depend in part simply on legal bans on the practice and enforcement. However, here enforcement costs may be reduced by innovation in how messages are conveyed and to whom. We know from other efforts to change communal norms around sanitation that it is often important to achieve compliance first from poor people, to effectively shame the better-off. This may not be appropriate in this instance, however, when the poor disproportionately suffer. How messages are couched, and who delivers them, may have greater or lower effects on stigma or disinformation. Technology that allows virtual gathering is another possibility, particularly those that are readily available across developing countries, such as WhatsApp.

We are not advocating for an extensive research agenda to proceed action to end mass gathering, encourage handwashing, or other mitigation policies. But pragmatic engagement of behavioral science, and rapid innovation grounded in what we know about technology and behavior adoption, may make these vital public health efforts less costly for a stretched public service and a scared citizenry.

Iteration and improvisation on the ground will also be critical. Think, for example, of the question of how to do contact tracing in difficult contexts (e.g., a crowded slum). This is a challenge filled with countless possibilities which cannot be gamed out in advance. Empowering those organisations with a strong field presence and experience of periodic epidemic fighting is the fastest way to identify urgent and effective solutions. We suspect that innovation will, very often, be in the micro-details of how a plan is executed.

INNOVATION TO PROTECT LIVELIHOODS

Key global development innovations of the recent past can be repurposed to protect livelihoods during the mitigation phase of pandemic response. We can build on the innovations in fintech and mobile, in particular, many of which are backed by rigorous evidence of impact, to reduce the economic costs of mitigation for vulnerable populations. Examples of innovation in this space include the following:

- **Expansion and protection of mobile money adoption**, which facilitates transfers between family members that may be separated. Governments or donors should work with mobile service providers to keep phones in service in the event of non-payment for the duration of the crisis and structure forgiveness for some portion of bills.[8]

- **Supporting remote expansion of cash transfers.** While cash transfer programs relying on mobile money are common, with 40 out of 48 sub-Saharan African countries having some form of unconditional cash transfers and 12 of those with conditional cash transfers,[9] they can miss vulnerable members of communities, especially young people. Innovative targeting to identify marginal groups that may be missed by social safety nets (e.g., homeless youth) may be high value. This is in addition to the best practice of ensuring that cash transfer programs take gender considerations into account (e.g., the potential impact on social norms that govern women's freedoms).

- **Taking advantage of high mobile phone penetration to push important messages** to communities, which may be vital in sustaining compliance and reducing stigma or hysteria. Rapid A/B testing can help craft these messages to be effective.

- **Leveraging self-help groups.** The example from Kerala discussed above is one way to use these groups, but likely not the only strategy. Self-help groups can be mobilized to make masks in large volumes, a market with certain demand for the foreseeable future, which besides serving the need can also be a valuable income generating opportunity for millions of women. Self-help groups frequently operate as rotating savings and credit associations, with the associated social capital and habits of sharing resources. Transfers to these groups may have amplified impacts as a complement to household-level transfers.

- **Compensation for firms keeping low-paid staff on payroll in the formal sector.** This may have limited applicability, e.g., in textiles, as is being implemented in Bangladesh, but there may be other use cases, perhaps in the construction sector in Gulf States.

- **Supporting the expansion of phone- and text-based mental health counseling.** There are important recent advances in low-cost cognitive behavioral therapy delivered by lightly trained community workers in recent years. Supporting the evolution of these models to mobile platforms could support stress management and mitigate impacts of intimate partner violence.

These ideas, and others, will be of differing relevance and use in different contexts. The best solutions will come from local innovators and frontline actors. We offer these examples to start a conversation about this innovation agenda and to share some of what the Global Innovation Fund (GIF) is considering supporting. There are more solutions that can and should be considered. Being open to different approaches is only the first step.

INNOVATION TO FINANCE RECOVERY AND RESILIENCE

Innovation solutions, whether led by government or civil society, in pandemic response must be complemented by decisive action by private sector actors and development finance institutions. Protecting livelihoods, particularly with a view to the medium and longer run, will depend on how investors, creditors, and international financial actors support firms and entrepreneurs.

First, during this crisis it is crucial that investors and creditors protect their portfolio firms and provide liquidity to see these partners through this period. Government support to create this liquidity is economically justified. This crisis is not going to generate the "creative destruction" that is a natural part of well-functioning markets. Its effects will be indiscriminate and should be mitigated accordingly.

Working capital facilities and concessional credit will be crucial for bridging firms through the economic downturn, especially if traditional fundraising (e.g., equity rounds) was anticipated and must be put on hold. Supporting vehicles that fund more than one investor's portfolio can also be valuable and cost effective. Shell Foundation, for example, has announced that it will contribute to the C19 Energy Access Relief Fund for low-cost five-year debt. This relief fund is working with multiple funders to set up a low-interest loan facility to cover in-country staff costs for off-grid energy companies contributing to Sustainable Development Goal 7. This is in addition to support for their own partners and reflects a commitment to a vibrant renewable energy sector more generally. Along these lines, GIF is committing up to $7 million in bridging financing for the portfolio of firms we already back.

No well of support is infinite, so investors will most likely need to prioritize the scarce resources they have to deploy in this effort. In this time of crisis, this screen should be done not only for financial considerations, but also for social value. Guidelines recently developed by Nancy Lee for DFIs point in other useful directions.[10] In particular, DFIs should be directed by governments to take additional risk and exposure now, as key sources of liquidity for firms in developing countries facing high costs of capital in the domestic market. Leaders can challenge the culture of risk aversion in an extraordinary time.

We must engage now to be prepared to encourage economic growth and development as the pandemic eases. Existing investors must build a pipeline now so that investing can begin again rapidly, but existing investment vehicles are not sufficient for the challenges that SMEs and entrepreneurs in LICs/LMICs will face. We must use this time to develop purpose-built financing vehicles that meet these entrepreneurs' needs.

The innovation agenda in financing for recovery and resilience is most pronounced when considering whether existing financing vehicles are fit for purpose. A significant financing gap already exists in the early-stage space for innovators in developing countries.[11] This gap is most pronounced between the post-proof-of-concept and pre-scale stage of innovative companies' development, as other commentators have noted,[12] and without intentional focus, the financial crisis caused by the pandemic will cause the gap to widen. This financing stage is critical to allowing companies to reach scale, yet it presents risks that are too high for return-driven capital. Existing DFIs traditionally have found it difficult to provide appropriate and sufficient financing to fill this critical cap, due to risk tolerance and return requirements. This must change.

To meet firms' and entrepreneurs' needs in pandemic recovery, new concessional vehicles need to be created that accept this higher risk, prioritizing development impact, especially in a period of potentially radically reduced market returns. Such vehicles will crowd in commercial and DFI funding alongside more deeply concessional capital to facilitate more risk tolerance and greater development impact on average for all capital deployed. Any successful vehicle should rely on rigorous evidence of impact and have an impact framework that allows the investor to understand the potential trade-offs between financial return and development impact.

Key design features for COVID-19 recovery investment vehicles will include:

- Flexible and customized instruments
  - Smaller investment tickets than DFI and private equity fund investments with terms that meet the specific needs of innovators in developing countries and provide monetary and non-monetary support, building the pipeline for commercial investors downstream
  - Long-term, patient capital through a permanent capital vehicle
  - Local currency financing to match investment capital to business capital needs
- An investment strategy focused on benefiting the world's poorest
- A model designed to establish a track record to enable more participation by non-concessional investors over time as recovery strengthens

THE MACROECONOMIC ENABLING ENVIRONMENT

Of course, just as governments need financial actors to rise to the challenge presented by pandemic response and recovery, firms and their investors operate in a macroeconomic environment determined by government decisions and international buyers of sovereign debt.

To meet the COVID-19 challenge, richer countries have the option of extraordinary fiscal and monetary stimulus measures, even to print money. But the middle- and low-income countries have a more limited toolkit. In fact, many of these governments, especially, but not just, in Africa, go into the pandemic with large debt burdens and high fiscal deficits. Its strains are already being felt with demands for debt restructuring.[13] Any significant stimulus spending, which would further worsen fiscal deficits, will in all likelihood leave their currencies in freefall.

The situation calls for large scale measures to restructure debts and stepped-up aid spending by the global community. Multilateral institutions like the International Monetary Fund[14] and the World Bank[15] have initiated programs to support low- and lower-middle income countries.[16] However, given the extent of damage and suffering, much more needs to be done. Decisive action by governments and multilaterals ensures the forward leaning, “open for business” stance we believe is called for from DFIs, impact investors, and actors like GIF will be most effective, amplified by supporting macro-economic policies.

EXPANDING THE CONVERSATION AND TAKING ACTION

GIF is building a pipeline of innovations which build on some of the ideas outlined in this note, as well as supporting our existing partnerships to weather the crisis. GIF has committed up to $20 million to innovations that contribute to pandemic response and recovery. We are making sure that, at GIF, we structure our commitments to include practical and feasible monitoring, data collection, and lesson learning and sharing. While early indications are that we can make cost effective investments, the $20 million in GIF’s budget is, of course, a very tiny fraction of the resources needed to meet the innovation agenda that COVID-19 demands. As a community, sharing what we learn as we innovate to respond to the pandemic is critical for ensuring the millions spent on this agenda complement the billions spent on pandemic response more generally.

At the same time GIF is building a pipeline of potential investments so that, when we can deploy capital at scale again, we can do so quickly, with the kind of terms that entrepreneurs will require to (re) build markets, as well as sell into them. Value chains, markets, and regulatory frameworks are going to change based on ideas that have been developed in the fight against a rapidly spreading pandemic, with new investment opportunities accordingly. GIF doing the groundwork to create a permanent capital vehicle that can use concessional financial returns to meet entrepreneurs where they are with the kind of capital they will need during the recovery and reliance phase of the pandemic crisis. We see this vehicle as patient, not driven by the imperative of finding a path to exit as closed-end funds often are, and committed to measuring social value so that the case for financial concessionality can be transparently assessed.

We hope to be part of a vital and urgent process to drive innovation in response to the health, economic, and societal crises at hand. As a community of practice, we need fast-cycle creation and sharing of locally developed, behaviorally sophisticated health interventions. We need to accelerate economic, livelihood, and community innovations. We need financial institutions to adapt and evolve quickly and at scale; we may need new instruments and funding streams.

Because of the uncertainty of the moment, and the innovations we are all exploring, rapidly learning together about what works, and where and why, will be vital. Let us, as a community, make the time and space for this. The health and economic solutions generated by this urgent learning collaboration will not only benefit those in the developing world, but also inform equally urgent solutions in richer countries.

ENDNOTES

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