



A GLOBAL DEAL FOR OUR PANDEMIC AGE



Financing the
Global Commons for
**PANDEMIC
PREPAREDNESS
AND RESPONSE**

**REPORT OF THE
G20 HIGH LEVEL
INDEPENDENT
PANEL**

C. FINANCING PRIORITIES

The Immediate Task: Funding ACT-A and COVAX

Financing Future Security from Pandemics

Adopt a systemic approach to ensure enhanced and predictable global financing for pandemic PPR

Establish a Global Health Threats Fund

Develop resilient domestic finances for prevention and preparedness

Strengthen financing for the WHO and One Health, and put it on more predictable footing

Make financing of global public goods part of the core mandate of World Bank and other MDBs

Enable fast-tracked surge financing by the IFIs in response to a pandemic

Ensure complementarity between multilateral and targeted bilateral funding

Leverage the capabilities and resources of the private and philanthropic sectors

Develop insurance solutions for adverse compensation events associated with use of medical countermeasures



C. Financing Priorities

The Immediate Task: Funding ACT-A and COVAX

54. The G20 HLIP's mandate concerns reforms and financing solutions to strengthen preparedness and response to future pandemics. **However, we must first end this pandemic. We need to take bold, concerted actions to lift the world out of the COVID-19 crisis.**
55. **The first priority for the international community is to agree on and implement an action plan to vaccinate the majority of the world's vulnerable population before the end of 2022.**
- a. Achieving this requires closing the gap in vaccine supply, scaling up delivery capacity across countries to make use of this supply and ensuring that lack of financing is not a binding constraint at any point of this process.
 - b. Despite welcome progress on all fronts, the world is not yet on an assured trajectory to achieve an end to this pandemic by the end of 2022.
 - c. The most immediate task is to close the urgent financing gaps for ACT-A and its COVAX Facility for 2021 and 2022.
 - d. The IMF has presented a cogent US\$50 billion proposal to vaccinate 40% of populations in all countries by end-2021 and 60% by mid-2022, and ensure adequate supply of diagnostics, therapeutics and personal protective equipment (PPE). This will require an urgent combination of grant financing, concessional and non-concessional loans coming from a variety of stakeholders³⁷.
56. There are now a number of promising proposals on how the required funds can be mobilized and deployed to achieve the goal of global immunization against COVID-19. Among them, the following merit urgent consideration:
- a. **Raising additional grant financing is the most appropriate way to support LIC access to vaccines and other medical countermeasures, as well as global public goods like surveillance and research³⁸.** However, relying on ad hoc bilateral contributions — as we have done for the last year and a half — has still left a large gap to be closed. Recent additional commitments from the G7 countries as well as the efforts of Norway and South Africa, Co-Chairs of the ACT-A Facilitation Council, to build support for equitable burden-sharing amongst countries, now need to be accelerated and followed through from commitment to disbursement.
 - b. In parallel to efforts to mobilize additional grants, **LICs and MICs should be able to acquire vaccines and other resources by drawing on concessional finance from the International Financial Institutions (IFIs).** Borrowing from existing or new IFI facilities should be seen as a second-best alternative to grant funding; however, rapid access to concessional loans is far better than delaying vaccine purchases and vaccination drives until sufficient grants have been mobilized.
 - i. Existing vaccine financing windows in the MDBs need to be expanded and streamlined to disburse funds more expeditiously and through upfront bridge finance, in coordination with ACT-A and the COVAX Facility.

³⁷ <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2021/05/19/A-Proposal-to-End-the-COVID-19-Pandemic-460263>

³⁸ Agarwal and Reed (2021) suggest that besides an upfront grant of US\$4b to the COVAX AMC, there are two additional options to address the funding gap that rely on the existing institutional framework:

- a. Reducing donors' upfront commitment by relying on the International Finance Facility for Immunisation (IFFIm) to issue Vaccine Bonds against a long-term donor commitment.
- b. Relying on in-kind donations to equalize the distribution of vaccine pre-purchases across countries.

- ii. The IMF should urgently consider introducing a time-bound vaccine financing window that would provide quick access to funds to help LICs and MICs to close remaining COVID-19 vaccine financing gaps, including through COVAX.
- iii. Donor grants could be used to help reduce the cost of this borrowing and to repay the associated principal when it comes due.
- c. In addition, **IDA could provide an additional US\$10 billion in grant support during IDA19, based on immediate reserve capacity.** The grant could be used for vaccine procurement and rollout through COVAX and other regional procurement arrangements for 2021 and 2022. It is important to design this support in a way that facilitates COVAX and other aggregated mechanisms to enter into advance purchase agreements as needed.
- d. **The proposed allocation of SDRs provides a one-off instrument to help meet urgent financing needs in response to this pandemic.** In addition to the direct allocation that LMICs will receive as their proportional share of the total US\$650 billion, a portion of the SDRs of countries not in need could be reallocated to meet urgent needs of LMICs **while preserving the unique character of the SDR as an international reserve asset.**
 - i. This could be done through providing additional general liquidity and balance of payments support, for example through rechanneling \$25 to \$35 billion SDRs under the Poverty Reduction and Growth Trust.
 - ii. The 'excess SDRs' could also be directed more specifically to support accelerated vaccination, for example by funding a newly created, time-bound vaccine window to provide concessional lending for this use.
 - iii. The Panel also supports expeditious exploration of the feasibility of other mechanisms, such as establishing new trust funds or channeling SDRs through MDBs, which aim to further increase the reallocation of resources to support COVAX or the financing needs of countries not covered by the PRGT.
- e. Critical too are efforts to help countries develop implementation plans for broad-based population access to vaccines.
 - i. The World Bank has made significant efforts through its Vaccine Readiness Assessment Program³⁹, including the development of cold chain capacity, information campaigns and training of human resources, but challenges remain, with only about 30% of total commitments out of the World Bank Multiphase Programmatic Approach financing going to delivery and country readiness.
 - ii. The World Bank and RDBs should continue to scale up such programs to help countries fill gaps in vaccine delivery, and the broader strengthening of the public health response.
 - iii. The IFIs should adjust their policies and work with country governments to **assure that fiscal space or lending envelopes do not represent a barrier to financing.**

Financing Future Security from Pandemics

- 57. The key focus of the Panel's proposals is on the governance enhancements and financing required to avoid future pandemics.
 - a. Effective pandemic PPR is the result of a continuum of investments at the **national, regional and global levels.**

³⁹ In October 2020, the World Bank's Board approved US\$12 billion of fast-track financing to IBRD/IDA-eligible countries for purchasing vaccines as well as strengthening primary health care systems to deliver the vaccines.

b. Critically, it requires that investments be **sustained**, and not just made in response to each new crisis.

58. We have made estimates of the scale of funding required — in total and for each function along the continuum of pandemic PPR.

a. Our work benefitted from the inputs of the GPMB on the scope of operations required for pandemic PPR (see **Annex G**). Our estimates also took detailed reference from two comprehensive exercises by the WHO and McKinsey, which we complemented with other sources⁴⁰. We have studied these various estimates carefully and adopted estimates that we feel best match the scope of pandemic PPR for the purpose of this report.

b. **We have grouped the estimates under three main categories of prevention and preparedness.**

- i. Robust Surveillance and detection networks
- ii. Building resilience in health systems
- iii. Supply capacity for medical countermeasures

The costs for each are presented at **Annex H**. For simplicity below, we have reduced the ranges to a set of central figures. These are current best estimates based on WHO, McKinsey and others to size the various requirements for future pandemic prevention and preparedness. The costings will have to evolve, and will have to be reviewed regularly to ensure adequate overall funding across the global health security system.

c. **We can only avoid future pandemics if we invest substantially more resources than we have been willing to spend in the past, and which the world is now paying many times over in dealing with COVID-19's damage.**

d. **Much of this has to comprise domestic investments by national authorities** in the key capacities needed to prevent and contain future pandemics. These investments, specifically for pandemic prevention and preparedness, must be part of broader national efforts for healthcare and public health system strengthening.

e. However, domestic actions alone will not prevent the next pandemic. **We must collectively commit to expanding international financing by US\$75 billion over the next five years — or US\$15 billion each year.** This will comprise funding for both global-level functions and the support needed for LICs and LMICs to invest in the country-level global public goods needed for pandemic PPR.

f. The scale of investments required reflects the need to catch up from a long period of underfunding. Investing upfront in the next five years will lower the otherwise growing risks of pandemic, and reduce the total costs of preventing and responding to major outbreaks in future years.

g. **The Panel believes that US\$15 billion per year is the absolute minimum in the new international investments required in global public goods that are at the core of effective pandemic prevention and preparedness.** This estimate excludes the cost of other complementary investments that will contribute to resilience against future pandemics, while providing benefits to countries in normal times.

i. **It excludes the costs of containing antimicrobial resistance (AMR)**, which is a growing threat to health security nationally and globally. AMR may worsen the impact of future epidemics and pandemics by rendering ineffective the treatment of such infections and associated co-infections, as evidenced in previous influenza pandemics. Countering AMR is estimated to cost US\$9 billion annually⁴¹. Since AMR containment measures have benefits well beyond pandemic PPR and operate through ongoing programs for more rational use of antimicrobials in health and agriculture, we have not included these costs in our estimates.

⁴⁰ Including estimates by the Center for Global Health Science and Security at Georgetown University and Talus Analytics; the Coalition for Epidemic Preparedness Innovations (CEPI); and the G-Finder survey *Landscape of Emerging Infectious Disease Research and Development*.

⁴¹ <https://documents1.worldbank.org/curated/en/323311493396993758/pdf/final-report.pdf>

- ii. The estimated costs would also be much higher if they included **upstream environmental investments** for prevention and a **more extensive scope for One Health** including upgrading of veterinary services; **basic and pre-clinical research**; and the **broader strengthening of healthcare systems and delivery infrastructure** beyond that directly related to pandemic PPR. These actions provide continuous benefits to countries, and have therefore been excluded from our strict estimates of costs specific to pandemic PPR.
 - iii. Further, the estimated minimum investments required are based on conservative assumptions on the scale of at-ready manufacturing capacity required for medical countermeasures⁴².
59. The Panel hence calls for a concerted international effort to provide larger-scale and more predictable resources to fill the major gaps in pandemic PPR. With contributions apportioned equitably, they are affordable to all nations. **They provide immense social returns, both nationally and globally:**
- a. They will materially reduce the risk of events whose costs to government budgets alone are 700 times as large as the additional international investments per year that we propose, and 300 times as large as the total additional investments if we also take into account the domestic spending necessary.
 - b. **The next major pandemic may come at any time. Even if it occurs only 10 or 20 years from now, the costs to governments will still be 10 to 25 times the cumulative additional investments in prevention and preparedness over the years until then, in present value terms⁴³.**
 - c. The full damage of another major pandemic, with its toll on lives and livelihoods, will be vastly larger. Based on estimates by Metabiota, there will be 4 million expected deaths in the next decade from the three pathogen groups — pandemic influenza, epidemic coronaviruses and viral hemorrhagic fever — which is roughly equivalent to the losses to date in today's pandemic.
60. **We highlight our key financing proposals:**
- (1) Adopt a systemic approach to ensure enhanced and predictable global financing for pandemic PPR**
 - (2) Establish a Global Health Threats Fund**
 - (3) Develop resilient domestic finances for prevention and preparedness**
 - (4) Strengthen financing for the WHO and One Health, and put it on more predictable footing**
 - (5) Make financing of global public goods part of the core mandate of World Bank and other MDBs**
 - (6) Enable fast-tracked surge financing by the IFIs in response to a pandemic**
 - (7) Ensure complementarity between multilateral and targeted bilateral funding**
 - (8) Leverage the capabilities and resources of the private and philanthropic sectors**
 - (9) Develop insurance solutions for adverse compensation events associated with use of medical countermeasures**

⁴² Our costings for incentivizing supply capacity for **all medical countermeasures** are about half of the costs estimated for vaccines alone by the Accelerating Health Technologies (AHT) group (comprising economists and statisticians, including G20 HLIP member Michael Kremer). The AHT group estimates that investments in needed production capacity and supply chain inputs for **vaccines alone require US\$60 billion in public funding** to enable the capacity to be installed over a period of years, and about US\$2 billion per year thereafter to maintain this capacity. Their estimates take into account that most vaccine candidates fail, and in order to repurpose capacity in parallel with clinical trials, any vaccine capacity would need to be split between many candidates. There is therefore a need for significantly larger vaccine capacity. However, the added investments generate far greater benefits in future and far higher returns than a small scale of investments would.

⁴³ Even if we assume the investments in prevention and preparedness only reduce the probability of pandemic by 50%, and reduce the cost of any resulting pandemic by 50% — hence saving 75% of the costs of a COVID-19-scale pandemic — the cost savings to government budgets are 8 to 18 times the cumulative additional investments over the next 10 to 20 years, in present value terms.

61. The various proposals are individually necessary, but the **real potential is in operating them in totality** to develop a strong and sustainable financing system for pandemic PPR.

(1) Adopt a systemic approach to ensure enhanced and predictable global financing for pandemic PPR

62. Our key financing proposals, taken as a whole, seek to ensure enhanced and predictable funding of pandemic PPR across the system.
63. The Global Health Threats Board that we have proposed will have the responsibility of **systemic oversight of finance for pandemic PPR**, to ensure that funding gaps are addressed, and build support for each of the organizations' resource mobilization strategies. (See Section B.)
- a. There is some parallel in how the G20 has played a role in building consensus for recent IMF quota review exercises.

The Global Health Threats Board will also ensure coordination and joint accountability of the key organizations involved in pandemic PPR.

64. As set out above, the Panel has assessed that a minimum of US\$75 billion in international support over the next five years (US\$15 billion per year) will be needed for investments in global public goods for prevention and preparedness.
- a. The Panel proposes that two-thirds of this additional amount, i.e. US\$10 billion per year, should be pooled in a **Global Health Threats Fund** (Fund) to be deployed across the various organizations and global initiatives (**Proposal 2**). This new multilateral funding mechanism would enable effective and agile deployment across institutions and networks to meet the most critical priorities.
- b. The remaining US\$5 billion should go directly towards strengthening funding to existing institutions. This must include enhanced and predictable support for the WHO (**Proposal 4**), strengthening MDB resources for dedicated pandemic preparedness windows in IDA and other RDBs' concessional bodies alongside their making better use of grant resources from the global health intermediaries (**Proposal 5**); and a step-up of bilateral and philanthropic funding for global health (**Proposal 8**).
65. We believe this would be an **effective and sustainable approach to international financing for pandemic prevention and preparedness**. Importantly, the new Fund must perform a catalytic function, so that it adds resources rather than substitutes for the necessary and sustained funding of the various organizations.
66. The IMF and the MDBs should also introduce **pandemic response windows, building on their existing emergency lending instruments, to scale up funding quickly during a crisis (Proposal 5)**, with relaxed rules on country borrowing and automatic access for pre-qualified countries.
67. The strengthening of the international financing must be accompanied by an agenda of reform in many countries to **mobilize and sustain additional domestic resources** to enable investments in national capacities to prevent and contain pandemics as well as in the broader strengthening of public health systems. (**Proposal 3**).

(2) Establish a Global Health Threats Fund

68. The Panel proposes the establishment of a new, dedicated Global Health Threats Fund, aimed at mobilizing US\$10 billion per year, **to support and catalyze investments in global public goods for pandemic PPR.**
69. The Fund would serve as a needed multilateral financing mechanism to pool resources internationally, **based on pre-agreed contributions.** This new Fund, at two-thirds of the minimum of US\$15 billion in additional international resources required, brings three necessary features into the financing of global health security.
 - a. Together with an enhanced multilateral component of funding for the WHO, it would provide a **stronger and more predictable layer of financing.**
 - b. It would enable **effective and agile deployment of funds** across international and regional institutions and networks, to plug gaps swiftly and meet evolving priorities in pandemic prevention and preparedness.
 - c. It would also serve to **catalyze investments** by governments and the private and philanthropic sectors, for example through matching grants and co-investments.
70. **We must view this proposed mechanism against the weaknesses of the traditional system of international financing to address pandemic threats.** Bilateral contributions, while valuable, have been unpredictable and collectively inadequate, while encouraging free-riding on the part of others. Further, replenishment of resources for the international institutions has been slow. **The same system will not enable the world to avoid the next pandemic.**
71. The Fund would support the following major global actions to plug key gaps in **global public goods** for pandemic PPR:
 - a. Building a **transformed global network for surveillance** of infectious disease threats. This will require a major scale-up of the network, combining pre-existing and new nodes of expertise at the national, regional and global levels, with the WHO at the center.
 - b. Providing stronger **grant financing to complement MDBs'** and the global health intermediaries' **support** for country- and regional-level investments in global public goods.
 - c. Ensuring enhanced and reliable funding to **enable public-private partnerships for supply capacity:** the rapid development, manufacturing and delivery of medical countermeasures on a global scale, so we can preclude severe shortages anywhere and avoid prolonging a pandemic everywhere.
 - i. The Fund would provide a critical layer of multilateral support for a new, permanent, end-to-end supply ecosystem that will build on the lessons learned from the ACT-A coalition of health partners. (See Section B.)
 - ii. Public investment, through a combination of push and pull contracts⁴⁴, is needed to share risks and enable private investments in R&D and manufacturing capacity ahead of a pandemic, and ahead of product use authorization, so that medical countermeasures can be quickly scaled up in a pandemic.
 - iii. Sufficient capacity is needed to ensure rapid and equitable global access, including by the LICs and LMICs, which is critical to containing a pandemic everywhere. This will require global support. In order to fund these contracts, a pool of flexibly deployable funds will be needed.

⁴⁴ Public resources are necessary for a combination of:

- a. **Push financing — to co-fund R&D and supply capacity.** This includes risk-sharing for facility start-up/maintenance costs in the inter-pandemic period, and for scaling up manufacturing / production for a portfolio of candidates and platforms up to the regulatory endpoint.
- b. **Pull financing — to assure demand via advance or concurrent purchase of medical countermeasures** on behalf of countries via regional and global procurement bodies such as the Global Fund, Gavi, AMSP, and others. This is especially critical during the initial phases of an epidemic or pandemic.

- d. Supporting **research and breakthrough innovations** that can achieve transformational change in efforts to prevent and contain future pandemics, complementing existing global R&D funding mechanisms like CEPI.
72. The new Fund would ensure that these gaps are addressed swiftly, and have the **flexibility to deploy funds across these functions based on emerging priorities**. It would aim to augment the existing international organizations, as well as regional and non-state actors that are performing important roles. **The Fund should complement, and not substitute for, the other sources of financing noted in this report**, in particular the concessional windows of MDBs and funding for the existing global health organizations. The functions of the Fund should be defined to ensure complementarity and additionality in relation to financing for the various other institutions.
73. The Fund will also seek to incentivize joined-up actions by the different organizations to enable forceful and coherent preparedness and response plans. **Funding must also drive progress on accountability for global health outcomes, while not creating duplicative or onerous structures for reporting.**
- a. The Global Environment Facility (GEF), which is a financial mechanism for five conventions including the UNFCCC and Convention on Biological Diversity, is a useful reference in how countries have come together to finance the global commons, in an institutional landscape with many actors⁴⁵.
74. **The Panel proposes the Fund be structured as a Financial Intermediary Fund (FIF)⁴⁶ at the World Bank.** The Bank would perform the treasury functions, and could also leverage contributions on the market, as it does for other FIFs that it hosts — for example, Global Environment Facility and key global health intermediaries like the Global Fund, Gavi and CEPI.
75. Governance of the Fund will operate independently of the World Bank, as with other FIFs, and under an **Investment Board** of its own.
- a. This is necessary as the World Bank may be among the organizations that will receive funds.
- b. **The Investment Board could be constituted as a committee of the Global Health Threats Board, to ensure that its operations are consistent with the Global Health Threats Board's identification of priorities and gaps.**
- c. The Investment Board should also tap on specialist and expert advice on detailed financing.
- d. The Investment Board should ensure transparency on the allocation and usage of funds and their outcomes, and provide updates to the Global Health Threats Board.
76. As it may take time to reach a formal system of binding international commitments to the Fund, **resources should be kickstarted by direct contributions by G20 and other governments**, ideally in amounts equivalent to an assessed contribution scheme, as well as philanthropic and corporate contributions.
77. The Panel considered carefully the scope for the Fund to contribute to the surge financing that will be required for response to a pandemic, in particular by borrowing resources from financial markets. This option could entail borrowing against guarantees of repayment from future national contributions. **The Panel's assessment is that the surge financing role, and the associated market borrowing to support this, would be more effectively placed at the World Bank.** The World Bank has the balance sheet and market presence to raise funds more quickly, and the institutional muscles to disburse funds to countries more flexibly in a crisis. (See **Proposal 6.**) The Global Health Threats Board's role in systemic financial oversight will be essential in coordinating actions with the World Bank to raise funds swiftly when a pandemic strikes.

⁴⁵ There are useful lessons in the GEF's experience: providing a comprehensive strategy for managing the global environmental commons; loose burden-sharing; provision of funding to leverage funding from MDBs, foundations, the private sector and other non-state actors, as well as countries; its relationship with the World Bank as Trustee of the facility.

⁴⁶ A FIF is a type of trust fund for which the World Bank provides tailored administrative, operational, legal and financial services, but in which the Bank's role is limited to providing these services unless otherwise specified. (See <https://fiftrustee.worldbank.org/en/about/unit/dfi/fiftrustee>) In this case, the Panel recommends that the Global Health Threats Fund operate in a functionally independent and effective manner, reporting only to its Board, following on the example of the Global Environment Facility and the Adaptation Fund. This independence is necessary as the World Bank will be among the organizations that will receive funds, and there would be a conflict of interest otherwise. It is for this same reason that the Fund cannot be a part of an existing arrangement such as the Global Fund to Fight AIDS, Tuberculosis and Malaria.

(3) Develop resilient domestic finances for prevention and preparedness

78. National actions remain the foundation of global efforts to prevent and prepare for future pandemics. The Panel calls on governments everywhere to significantly scale up national capabilities for surveillance, detection and containment of any new outbreaks. These should ensure that they meet existing and new WHO, OIE, FAO and other international standards for preparedness and global health security.
79. Besides investing in the public goods directly related to pandemics, governments should also work towards more resilient health systems, as they provide **foundational supports in avoiding future pandemics and minimize excess mortality in pandemic conditions**. These include broader investments in national healthcare and public health systems to address ongoing endemic diseases and improve basic sanitation. Governments should also design safety nets able to expand in response to pandemic shocks.
80. **To achieve this, we need a long-term strategy to enhance domestic resource mobilization for national and global public goods, complemented by international financial support for the LICs and LMICs especially.**
81. The mix of domestic and international financing reflects the different levels of global public goods needed to reduce pandemic risk:
 - a. A system of **globally networked surveillance and research** requires both international- and country-level capacities, but the benefits are mainly not internalized by individual countries. In the case of LICs and LMICs in particular, these should be largely financed by collective mechanisms.
 - b. **Strengthened national capacities** to stop the spread of infectious diseases have clear benefits for individual countries, but nonetheless have positive externalities for the global community. Domestic financing by national authorities must remain the primary source, augmented by external financing support for the LICs and LMICs.
82. The challenges today are considerably larger than they already were before the current pandemic. Poorer countries have very limited capacity to buffer their populations and economies through fiscal and monetary policies, apart from their scarce access to diagnostic tools and vaccines resulting in a much more prolonged crisis. Further, many entered the crisis with elevated debt levels, and are vulnerable to increased debt servicing costs in the years to come.
83. **There is now also a significant risk of lasting health and economic damage in poorer nations over the medium term, more so than they experienced after the Global Financial Crisis. This will make it harder for them to cope with an endemic COVID-19 pandemic, as well as future outbreaks.** Further, the consequences of increased poverty, conflict and displacement will not be purely economic, nor contained within individual nations.
84. **Governments working with the IFIs must embark on a major agenda of reform to mobilize and sustain additional domestic resources** to invest in the key capacities needed to prevent and contain future pandemic risks, integrated with efforts to strengthen national health systems and achieve Universal Health Coverage⁴⁷, while enabling their economies to return to durable growth. **Low- and middle-income countries will need to add about 1% of GDP to public spending on health over the next five years.**
 - a. The IFIs should work with national governments to develop a plan for more resilient tax revenues over the medium term. Efforts to improve tax collection capacity, plug tax loopholes, and strengthen enforcement against illicit financial flows and other leakages must remain critical priorities. Taxing tobacco products and other 'health bads' to reflect their full health and economic costs remains a promising option in many countries.

⁴⁷ Sustained investments in global health towards achieving UHC with primary healthcare at its center was included in the recent Rome Declaration of the Global Health Summit. Promoting and strengthening partnerships to achieving UHC for all continues to be a focus of the G20 Health Working Group.

- b. Governments should clearly define and track budgetary expenditures on outbreak prevention and preparedness, building on newly established expenditure categories for preparedness as part of national health accounts at the OECD and WHO, and how these enable them to meet the WHO's IHR, with consistency across different levels of government.
- c. Building on the findings of the proposed Health Security Assessment Program (HSAP) to be conducted by the WHO and the World Bank, and other metrics such as the JEEs, State Party Self-Assessment Annual Reporting (SPAR), and GHS Index, every country should prioritize the development, costing and implementation of a national action plan for health security to identify gaps and financing requirements. Finance and Health Ministries should be full partners in this effort.
 - i. This must include a concerted plan to **develop the skilled human resources needed for both surveillance of emerging infectious diseases and resilience in healthcare and public health systems.**
 - ii. **Performance-based budget policies and matching fund schemes between national and sub-national governments are promising strategies.** They can incentivize more accurate, timely, complete, and open reporting of pathogens, diseases and deaths in human and animal populations, if accompanied by independent verification or audit of sub-nationally reported figures.
 - iii. **Increased resources to prevent and contain infectious disease outbreaks are necessary, to avoid crowding out other critical healthcare needs.** Evidence from COVID-19 shows a sharp rise in deaths from non-communicable diseases equal in some cases to COVID-19 deaths, due to delays or a lack of care for persons with other illnesses.
 - iv. These expenditures must however be regularly assessed for value for money — for example, defining the minimum samples needed to representatively conduct genomic surveillance.
- d. **The IFIs, together with the WHO, bilateral development partners, and global health intermediaries like the Global Fund,** should work with governments to develop these strategies, provide technical assistance and ensure the necessary external financial assistance to complement governments' efforts to enhance national domestic financing.
- e. Multilateral and bilateral development partners can also **incentivize investments in pandemic prevention and preparedness at the country level,** via various financial instruments. (See also **Proposal 5.**) These include:
 - i. Making lending for pandemic preparedness more concessional
 - ii. Complementing grants and greater concessionality in financing (e.g. IBRD rate buydowns) with existing instruments such as results-based and programmatic lending to support progress towards standards
 - iii. Incentivizing governments by requiring that grants are co-matched by national fiscal commitments

(4) Strengthen financing for the WHO and One Health, and put it on more predictable footing

- 85. **We need enhanced, reliable and sustainable financing for WHO and its One Health partners to perform their critical functions.**
 - a. The WHO plays a key role in each of the three major gaps we have identified in this report.

- i. **Surveillance.** The WHO must be at the center of a global network of expertise for genomic and epidemiological surveillance. The One Health approach must be supported, with the WHO ensuring that there are no gaps in the surveillance-to-action loop.
 - ii. **Resilient national systems.** The WHO, through its IHR, provides guidance to countries to develop whole-of-government health security plans, with the IHR serving as a benchmark against which to track progress.
 - iii. **Supply of medical countermeasures.** WHO has a leading role within the ACT-A coalition of health partners.
- b. The WHO is heavily dependent on voluntary funding. It is also under-resourced and lacks predictable funding to meet its key functions in global health⁴⁸. The Panel agrees with the IPPPR's assessment on the weaknesses of the funding for WHO, and its proposal to **enhance the share of multilateral funding for the WHO through increased assessment-based contributions** — with Member States' fees to be increased from the current one-quarter to two-thirds of the budget for the WHO base program, and an organized replenishment process for the remainder of the budget.
- i. The latest two-year budget for the WHO is about US\$4.8 billion⁴⁹, of which its base program comprises about US\$3.8 billion.
 - ii. Increasing assessed contributions to two-thirds of the WHO's base program will represent more than a US\$1.5 billion increase, or an additional US\$0.8 billion per year.
 - iii. This increase can be funded in part by a reallocation of existing voluntary contributions from countries, but will also require modest increased contributions from most countries⁵⁰.
- c. Our proposed overall financing framework for global health security calls for strengthened funding to be channeled towards the WHO and other existing institutions, as well as the effective and agile deployment of funds by the Global Health Threats Fund across international and regional institutions and networks to ensure that gaps are plugged on a timely basis and to meet evolving priorities in pandemic PPR.

(5) Make financing of global public goods part of the core mandate of World Bank and other MDBs

86. G20 leaders should work with other shareholders to make global public goods part of the core mandate of the MDBs.
87. **The MDBs are uniquely placed to do so**, by their ability to:
- a. Mobilize international resources
 - b. Leverage capital or guarantees
 - c. Incentivize countries to invest in global public goods, as part of their broader country operations
 - d. Support country and regional investments with direct development impact as well as global health security benefits

⁴⁸ The IPPPR highlighted that: "The way that WHO is financed today has serious impacts on the quality of the organization's performance. Its precarious financing is a major risk to the integrity and independence of its work. Incremental attempts in recent decades to improve the present funding model have not been successful."

⁴⁹ This excludes US\$1 billion for "emergency operations and appeals", which is a one-off, extraordinary item catered for COVID-19 pandemic response.

⁵⁰ The largest share of voluntary contributions comes from the Bill & Melinda Gates Foundation and the US Government.

- e. Provide multi-sectoral coverage and activate robust crisis response mechanisms
- f. Catalyze private investments

They are also moving towards working with other development partners in country and regional platforms.

88. Pandemic PPR should be incorporated as a core activity of the WBG, akin to climate.
- a. The World Bank Board should **set IBRD lending and performance targets** for pandemic prevention and preparedness that are then assessed and tracked as a matter of routine.
 - b. IDA donors should establish a **dedicated pandemic prevention and preparedness window in an expanded IDA**, as part of a successful IDA20 replenishment and leading to a more permanent mechanism. This would ensure that lending for pandemic prevention and preparedness programs is not constrained by country-specific IDA allocations. To ensure that the funds for this are both additional to regular IDA contributions and on sufficiently concessional terms, **funding of this window should rely more heavily on new grant contributions from IDA donors.**
 - c. RDB Boards should ask for each institution's strategy to support pandemic preparedness and reduce risks, including through dedicated strategies and lending targets/windows as appropriate.
89. In **deploying funds**, World Bank and other MDBs have a suite of financial instruments that can **incentivize investments in pandemic prevention and preparedness at the country level.**
- a. **Make lending for pandemic preparedness more concessional.** IBRD lending for these projects could be made more concessional through accompanying grants which could be provided through the proposed Global Health Threats Fund. IDA lending for this purpose could rely more heavily on grants provided under the new IDA pandemic preparedness window.
 - b. **Grants and greater concessionality in financing** (e.g. IBRD rate buydowns) can be **complemented with existing instruments such as results-based and programmatic lending** to support progress towards agreed global standards on preparedness. The World Bank should develop a strategy to effect this through its lending and technical assistance. This would facilitate tracking of progress towards agreed global standards on preparedness.
 - c. **IDA support for pandemic prevention and preparedness should also be made more concessional and should seek to incentivize domestic investments through matching grants to LIC governments.**
 - d. **The MDBs must also work in concert with other grant-making mechanisms** including the global health intermediaries like Global Fund and Gavi, bilateral aid agencies, and the new, multilateral Global Health Threats Fund, to leverage each other's funding for investments that will strengthen health system resilience. This would build on existing co-financing framework agreements, e.g. between World Bank and Global Fund.
90. **Shareholders should be prepared to provide MDBs with additional capital and concessional resources to enhance their role in pandemic PPR:**
- a. **An immediate priority is to ensure the successful completion of the upcoming replenishment of IDA**, and other concessional financing windows, at a level that is able to respond to the heightened needs of LICs in the post-COVID recovery.
 - b. **The MDBs should explore greater leveraging of their shareholder capital. The Panel calls on the G20 to commission an independent review of the scope for doing so.** This will determine the needed scale of future capital increases which should then be forthcoming as required.

- c. **MDB capital requirements can also be met by more innovative mechanisms along the lines of IFFEd⁵¹, which uses donor guarantees to enable MDBs to raise resources on the capital markets**, and go above their lending limits. This will enable donors to leverage their grant contributions by an estimated 27 times, much higher than the IBRD loan to paid-in capital ratio of at most five times. (See **Annex I.**)
- d. Existing trust funds at the MDB for preparedness should also be increased and used to leverage and complement greater IDA and IBRD lending for this purpose.

(6) Enable fast-tracked surge financing by the IFIs in response to a pandemic

91. **We need at-ready surge financing mechanisms to respond effectively to a pandemic.**

- a. Unlike the resourcing needs for pandemic prevention and preparedness (discussed above), we do not know in advance the scale of financing required in a pandemic.
 - i. The size of the resource needs depends on the nature and spread of the pandemic.
- b. Funding for pandemic response must include both health-related funding needs as well as the more traditional fiscal and balance of payments support.
 - i. The latter is fundamentally important as countries lacking access to funding cannot provide an adequate health response.
 - ii. It would be short-sighted to force countries to meet these pandemic costs by cutting other vital expenditures in education, social protection, etc.
- c. **The MDBs have a major role in supporting countries to respond to a pandemic.**
 - i. In the Panel's view, the World Bank and other MDBs should substantially scale up net financial flows to borrowing countries during a pandemic. They should do so with the assurance of shareholders that the resulting requirements for replenishments of concessional funding or for capital increases will be addressed in a timely way. **To this end, single borrower and other country lending limits and IDA country allocation ceilings need to be relaxed during a pandemic period.**
 - ii. **The World Bank should support countries to participate in pooled global procurement mechanisms for medical countermeasures**, through its grants and lending programs. Ensuring guaranteed access to such financing would enable countries without adequate fiscal resources to still enter into advance purchase contracts in the early phase of a pandemic.
 - iii. **Access to MDB crisis response windows should be simplified and made more automatic.** The World Bank and many RDBs have existing financing instruments or mechanisms to provide rapid support in response to natural disasters or other catastrophes.
 - iv. **The World Bank should use its resources to support countries' safety net surge responses** — to enable lockdowns and other pandemic response measures — as it has done in the current crisis. Supporting the establishment of scalable cash transfer and other safety net mechanisms in at least 50 countries within five years should be a feasible target for the institution.

⁵¹ IFFEd provides additional capacity to MDBs, underpinned by paid-in capital and contingent commitments from donors (15% in cash and 85% in donor commitments). In turn, the MDBs would leverage this quasi-equity to mobilize additional financing in capital markets. The vehicle would also provide grants to buy down MDB loans as required to more concessional terms.

- v. **The World Bank and RDBs should work to complement each other's efforts in financing pandemic response.** The RDBs have stepped up their roles in the current crisis and are preparing to do more in a future pandemic.
 - vi. **MDBs should be enabled to raise funds immediately on the market should their resources need augmenting during a pandemic.** They should do so with the assurance that any borrowing over and above their regular market operations would result in associated capital increases or be taken off their balance sheets through shareholder guarantees⁵². The World Bank and other MDBs are well-placed to undertake borrowing from the market during a pandemic, leveraging their triple-A ratings.
- d. **The IMF has a primary role in ensuring a rapid and adequately sized financial response to help countries deal with a pandemic.**
- i. The IMF should establish a pandemic response window **that provides rapid, automatic and sizeable financing to members in good standing**. This window could be established as part of its rapid financing facilities — Rapid Credit Facility (RCF)/Rapid Financing Instrument (RFI) — and would be automatically triggered, for example, upon the WHO's declaration of a PHEIC.
 1. The IMF can use this window to **make available up to 100% of quota for all members in good standing**
 2. Financing would be made upon demand on presentation of the health situation. It would be concessional and low on conditionality other than health conditionality. The financial conditions would be comparable to existing RCF and RFI lending. In some cases, additional measures might be needed to limit the impact on countries' debt sustainability.
 3. Loans disbursed through this window would not be subject to surcharges based on other outstanding IMF loans to the borrowing country, nor would the amount accessed under this emergency financing count towards the calculation of surcharges on other loans.
 - ii. **Access limits for regular IMF facilities should also be relaxed during a pandemic.** The IMF Board should also consider whether the policies on surcharges linked to the duration and size of outstanding IMF loans need to be relaxed during a pandemic.
 - iii. While the best use has to be made of the currently proposed IMF SDR allocation, its utility in future crises should be principally to respond to a global need for liquidity. As currently constituted, SDRs are a blunt instrument for supporting the liquidity needs of developing countries because of their small share in total SDR allocations.
- e. **Appropriately designed debt service relief by other creditors should complement surge lending by the IFIs in responding to future pandemics.** The G20 sponsored Debt Service Suspension Initiative (DSSI) made a significant contribution from bilateral official creditors to helping (mostly) low-income countries during this pandemic. However, delays in reaching agreement on its scope and application slowed down the flow of relief and limited its impact because of the non-participation of some hybrid and most private creditors. Learning from this experience, the G20 should ask the IMF, working with the relevant stakeholders, to propose a framework to involve the participation of all creditors — official, hybrid and private — in restructurings to be instituted in future pandemics.

⁵² This market borrowing would have to be above and beyond the MDBs' existing borrowing operations to leverage their equity to borrow from the market for ongoing lending operations.

(7) Ensure complementarity between multilateral and targeted bilateral funding

92. Multilateral efforts should leverage and tighten coordination with targeted bilateral funding.

- a. Bilateral funding has historically been a source of support to pandemic PPR, and finances technical assistance and know-how exchange in field epidemiology, lab safety, disease surveillance, and general preparedness.
- b. Further, much of the capacity that exists today in preparedness is the result of several decades of bilateral investments in cross-cutting functions under the auspices of HIV/AIDS and Ebola focused programs of funding.
- c. Bilateral funding should continue to play an important catalytic role, such as providing seed money as incentive for LICs and LMICs to make the necessary investments, providing a grant element to complement multilateral funding, and mitigating risks to attract private sector participation.
- d. However, bilateral funding must be better coordinated, so each bilateral development partner's efforts are situated within a broader international framework, with a proper division of responsibilities, to avoid gaps and overlaps.
- e. This will mean tighter coordination within country and regional platforms — led by the relevant authorities — and mobilizing multilateral and bilateral development partners, the private sector and philanthropies.
- f. This will continue to recognize the contributions of each development partner, but generate greater development impact.

93. We have to ensure too that other critical development needs are still met, and targeted bilateral funding is not diverted away from them to fund better pandemic preparedness, prevention and response, which is a global public good.

- a. It would be short-sighted to bolster our efforts for pandemic prevention and preparedness by reallocating resources from other critical development priorities in poverty alleviation and human capital development.
- b. This is particularly as the crisis has escalated the challenges facing the developing world.
- c. Doing so will roll back the gains we have made on the Sustainable Development Goals, and impose larger costs on the international community eventually.
- d. Scarce ODA should only be used for investments that primarily benefit LICs and LMICs, while investments that benefit the world as a whole or primarily HICs or UMICs **should be funded from non-ODA budgets** and the private sector.

(8) Leverage the capabilities and resources of the private and philanthropic sectors

94. The scale of financing for pandemic PPR requires significant and sustained increases in resources from every source — public, private and philanthropic.

95. However, we need a different construct for partnerships as well as policy, with the **official sector engaging the private and philanthropic sectors continuously, not only once a pandemic strikes.**

96. The private sector has a key role to play in several dimensions of pandemic PPR.
- a. First, in working with governments and international organizations, through public-private-philanthropic partnerships, to **scale up global manufacturing capacity and end-to-end supply chains** for vaccines and other medical countermeasures, and other critical supplies.
 - i. **We set out the need for a major scale-up of at-ready manufacturing capacity through partnerships with the private sector in Section B (Item 3) of the report.** These partnerships are critically required in order to make adequate capacity in the non-pandemic years viable, and will give extremely high social returns. In particular, the payoffs to having sufficient at-ready capacity for multiple vaccine candidates are very large.
 - ii. Six months into the current pandemic, global demand for ventilators and face masks was ten times higher than supply. Even 18 months on, PPE and oxygen cylinders and concentrators remain in grossly short supply.
 - iii. The IFC and the private sector arms of other MDBs have the tools to catalyze **private sector investments in capacity for medical supplies**, and should scale this up.
 1. A good example during the current pandemic has been the IFC's US\$4 billion **Global Health Platform** (US\$2 billion from its own account and an additional US\$2 billion from its private sector partners), aimed at increasing access to critical healthcare supplies required to fight the pandemic, including masks, ventilators, test kits, and vaccines⁵³.
 - iv. Countries should work with the MDBs and other organizations like UNICEF to mobilize private sector resources to **develop the whole delivery system** needed within countries to receive and transport medical supplies, including cold chain infrastructure, and provide the necessary technical training.
 - b. Second, in **broadening access to care**. Pandemic PPR plans must consider all health providers in the sector, and the ways in which people can most readily access care. In most LICs and LMICs, private sector providers are important sources of care. They have to be **mobilized and properly regulated in support of public policy objectives**, even as governments working with external partners seek to build up more resilient national healthcare systems over the longer term.
 - c. Third, there is scope to develop private contingency financing tools to help governments to pool and manage pandemic risks (**Proposal 9**).
97. Beyond the private sector role in pandemic PPR itself, there is need for a very significant increase in private sector investments in broader development financing, especially for infrastructure. There is **significant scope for expanding the use of risk mitigation tools, including appropriately designed blended finance instruments, to crowd in and augment private investment and optimize official balance sheets for investments in both global public goods and economic development (Proposal 5)**.
- a. The private sector has had very limited involvement in investing in infrastructure in Africa in particular, where the scale of future infrastructure needs will overwhelm the capacity of the public sector.
 - b. **If we do not make bold changes in strategies of governments and MDBs to mobilize private financing for infrastructure, we face a permanent reduction in economic growth, a slowdown in poverty alleviation, and a neglect of critical public investments for pandemic PPR and other public goods in a large part of the developing world.** With well-designed and transparent risk-sharing features and strengthened regulatory capacity, governments can maximize the efficiency and impact of public incentives.

⁵³ Projects include partnerships with health technology company Philips and the Co-operative Bank of Kenya to help smaller businesses in Africa's health sector purchase essential medical equipment; and with global standards organization ASTM International to raise standards and compliance requirements for PPE and promote its use globally.

98. **The major philanthropic foundations have been playing a critical role in supporting investments with high-risk and/or low-commercial incentives.** However, the major scale-up of research on infectious diseases and countermeasures needed will have to involve stronger partnerships between the public, private and philanthropic sectors, nationally and globally.
- a. These include **early-stage investments, e.g. the search for vaccines and therapeutics that can provide broad protection against a range of pathogens**; and interventions that can address the rising threat of drug resistance.
 - b. They could also be strong partners in supporting research for interventions where commercial interest is low, including many ongoing regional epidemics for which global demand is weak.
99. Governments and international organizations must seek to broaden the base, incentivize and leverage philanthropic foundations that are engaged in supporting discovery science and R&D that contribute to national health resilience and pandemic PPR.
- a. CEPI is an example of a philanthropy inspired, public-private partnership working at the interface between science, R&D, and manufacturing for global public goods.
100. **De-risking by philanthropic and official funders can potentially mobilize significant resources from patient capital, including pension funds and sovereign wealth funds, for R&D and other longer-term investments.**
- a. These investments may have high social returns but will often be beyond the risk appetite of institutional investors. Public and philanthropic participation can bridge this risk gap.
 - b. For instance, a project to develop a new tuberculosis vaccine could be organized with commercial discipline, while partly financed by philanthropy, and with official entities contributing to de-risk the project.

(9) Develop insurance solutions for adverse compensation events associated with use of medical countermeasures

101. **The best insurance for the world against pandemic risks is to invest in global public goods for pandemic prevention and preparedness, as we have laid out in this report.** The investments required to avoid a pandemic amount to a miniscule proportion of the financial costs to governments in a pandemic, not counting the costs of human lives lost, long-term health impairment and broader economic and social costs.
102. **Insurance solutions should also be developed to cover adverse effects associated with medical countermeasures.**
- a. Where vaccines and treatments are developed and regulated using emergency authorization, manufacturers are not generally able to obtain insurance in the usual way that would happen if a product has been licensed under non-emergency arrangements.
 - b. To address this constraint during the COVID-19 pandemic, COVAX used donor funds to enable a **vaccine injury compensation program through a contract with private insurers** — the first of its nature on an international scale. The COVAX No-Fault Compensation Program offers eligible people in 92 LICs and LMICs compensation for rare but serious adverse effects associated with COVID-19 vaccines distributed through COVAX, thereby protecting participating governments and providers as well as vaccine manufacturers from liability. However, this scheme only applies to vaccines acquired through COVAX. A more comprehensive scheme does not exist today.

- c. While high-income countries have been able to waive manufacturer liability by law and regulation, and cover the costs of compensation of adverse events directly, other country governments do not have the arrangements or financing in place. Indeed, for various bilateral procurement deals in COVID-19, **vaccine manufacturers have asked governments to grant them immunity from civil liability arising from adverse events that could result from the use of the vaccines.**

- i. A number of jurisdictions had given vaccine manufacturers indemnity from covering adverse events, placing national assets as collateral.

103. **The MDBs should work with countries and private insurers to develop risk financing solutions to cover adverse compensation events, particularly in the form of no-fault compensation schemes or an explicit compensation fund with pre-determined compensation awards.**

- a. These schemes can be **pooled internationally**, including amongst G20 governments, and could be put in place in the inter-pandemic period, supported by international financing.

104. We have also considered the broader application of insurance solutions to better manage pandemic risks.

- a. The experience with the World Bank Pandemic Emergency Facility (PEF)⁵⁴ points to the significant difficulties in deploying insurance solutions, including the need for transparency, better design of risk triggers, and a rigorous assessment of whether the benefits of protection outweigh the costs.

b. **Any viable insurance solution will require that we first do much better at improving the data, science, surveillance and analytics needed to forecast, assess, and price pandemic risks.**

- i. The data to model risks in most countries is not available. There is potential for innovative methods for capturing this data, for example via social media.
- ii. More work is needed to develop better data and models over time, to quantify pandemic risks and the potential impact of future pandemics.

c. There may be **risk pooling solutions** between countries⁵⁵ that can enable better management of pandemic risk:

- i. **Risk Diversification.** Risk pools can achieve some degree of diversification, as there may be more localized/regional outbreaks requiring a quick fiscal response, especially in the earlier stages of a pandemic.
- ii. **Risk Reduction and Tranching.** In a risk pooling agreement, governments need to be ready to manage the impact of such residual risks through pre-agreed post-disaster plans, backed by pre-planned financing. The process of developing such post-disaster actions plans and identifying related costs can also generate risk information and create incentives to step up investments in prevention and adaptation to reduce risks in the first place⁵⁶. The incentive to reduce the cost of insurance premiums by voluntarily reducing exposure to risk is particularly compelling and insurance can therefore contribute to a positive risk-reducing feedback loop⁵⁷.
- iii. **Cost Efficiencies.** The pooling of risk also has the advantage of improving the affordability of coverage through lowering costs of reinsurance, and sharing of fixed costs (e.g. cost of capital, operating costs and cost of risk information)⁵⁸.

⁵⁴ The PEF has drawn criticism for failing to provide coverage during the Ebola outbreak, and for being too slow in pay-out to poor nations suffering from the COVID-19 outbreak.

⁵⁵ The Africa Risk Capacity is adding coronavirus protection to its planned outbreaks and epidemics parametric insurance product, expected to be launched in 2021. Prior to the inclusion of coronavirus protection, the product was covering Ebola, Marburg, meningitis, and Lassa fever. The product aims to provide countries with early intervention financing to allow more proactive response to an outbreak or epidemic — be it public health or economic recovery response.

⁵⁶ Disaster Risk Financing & Insurance Program, World Bank Group. *10 Lessons for Policy Makers to Bring Catastrophe Risk Pools to Scale*.

⁵⁷ Poole, L. (July 2014). *A Calculated Risk: How Donors Should Engage with Risk Financing and Transfer Mechanisms*.

⁵⁸ Such risk pools can also gradually accumulate capital, allowing insurance premiums paid by countries to gradually decrease over time.