



FINANCE IN A PANDEMIC

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There are several major sources of money that would become available to help respond to a global catastrophic pandemic.

Pandemic Emergency Financing Facility

The World Bank Group's Pandemic Emergency Financing Facility (PEF) is a system designed to respond to specific types of pandemics. It consists of a cash window and an insurance window.¹ The cash window had about \$50 million, all of which has been used to support the response to the ongoing Ebola epidemic in the Democratic Republic of the Congo.

The insurance window is funded by 2 tranches of catastrophe bonds that pay out under specified conditions. A coronavirus pandemic would trigger a payout of the Class B notes after all of the following conditions were met: It kills at least 250 people, lasts at least 12 weeks, has at least 250 new cases in the past 12 weeks, has an increasing average number of new cases over the past 12 weeks, and kills at least 20 people in a second country. The payout is based on the number of deaths and the geographic spread of the disease. A coronavirus pandemic that killed more than 2,500 people would trigger a full payout of the Class B notes, raising \$95 million. It would also trigger a 16.67% payout of the Class A notes, raising an additional \$37.5 million. A full payout of the Class A notes is triggered only by an influenza pandemic.²

World Bank's IDA Crisis Response Window

IDA (International Development Association) is the part of the World Bank that gives loans (called "credits") to poor countries for development. They meet every 3 years to raise money and decide how it will be spent. These are called Replenishment meetings. The last one, the 18th Replenishment, or IDA18, finished in 2016. It raised \$75 billion to finance projects from July 1, 2017, to June 30, 2020. The next meeting in this cycle is October 21-22, 2019, in Washington, DC.³



Most IDA money is used for long-term development projects, but the Crisis Response Window (CRW) is a special pool of money devoted to helping countries respond to disasters. It spent \$420 million to fight the 2014-2016 West Africa Ebola epidemic. The IDA18 replenishment raised \$3 billion for crisis response and, as of October 2018, \$2.6 billion was still unspent and available for immediate use.⁴

International Monetary Fund

The IMF has about \$1 trillion available to lend.⁵ However, this is meant to address temporary issues with a country's balance of payments and is not intended to be a form of development aid or response to a health emergency. Lending is usually conditional on economic policy changes, made after a period of negotiation, and will be made only if the IMF is confident that it will be repaid.⁶ Without a significant change in policy, many countries would not be willing or able to borrow money from the IMF in order to finance a response to a major pandemic.

National Governments

Total international development aid from governments is about \$200 billion per year.⁷ Although much of this is allocated to specific uses and could not be redirected, some percentage of it could be made available in a catastrophic pandemic, and/or the total amount might be increased, if there was sufficient global coordination.

Private Charity

Total international giving by US foundations was about \$9 billion in 2015.⁸ In a severe pandemic, some of this could be redirected to help the pandemic response. The total endowment of the top 40 wealthiest charitable foundations is currently about \$500 billion.⁹ Many of these charities have not historically been involved in health, and there are institutional limits on how much of the endowment could be spent, but some percentage of these endowments might be made available to respond to a catastrophic pandemic if enough charities responded to a global call to action.



Numbers in the Scenario

Several financial events and estimates are depicted in the Event 201 exercise. These represent one possible scenario that could happen in a catastrophic pandemic.

Amount of Money Raised

In the scenario, there is a large and successful mobilization of funds. Donor countries are convinced to contribute roughly 40% of their annual aid budgets to CAPS response, for \$80 billion, and private charities spend down some of their endowments to contribute an additional \$20 billion, for a total of roughly \$100 billion in additional financing.

Cost of Supporting Health Systems

About \$6 billion was disbursed by donors in response to the 2014-2016 West Africa Ebola epidemic.¹⁰ At the point in the scenario where the \$400 billion estimate is made, it is assumed that CAPS would cause case counts and expenses in low- and middle-income countries about 2 orders of magnitude higher than the Ebola epidemic.

CAPS would, in many cases, cause emergency spending that would quickly consume all of countries' annual healthcare budgets. They would then need a bailout to continue normal functioning as well as providing minimal pandemic response. Low- and middle-income countries typically spend about 5% of GDP on health care, and in a crisis situation, everything gets more expensive. The total GDP of low- and middle-income countries (excluding China, India, and Russia) is about \$14 trillion. If these countries require a bailout of, on average, slightly more than half of their annual healthcare spending, this would be \$400 billion.

References

1. World Bank. Pandemic Emergency Financing Facility. Updated May 7, 2019. <https://www.worldbank.org/en/topic/pandemics/brief/pandemic-emergency-financing-facility>. Accessed October 14, 2019.



2. International Bank for Reconstruction and Development. Prospectus supplement dated June 28, 2017. <http://pubdocs.worldbank.org/en/882831509568634367/PEF-Final-Prospectus-PEF.pdf>. Accessed October 14, 2019.
3. World Bank. International Development Association. Crisis Response Window. 2019. <http://ida.worldbank.org/financing/crisis-response-window>. Accessed October 14, 2019.
4. International Development Association. *IDA18 Mid-Term Review—Crisis Response Window: Review of Implementation*. <http://documents.worldbank.org/curated/en/537601542812085820/pdf/ida18-mtr-crw-stocktake-10252018-636762749768484873.pdf>. Accessed October 14, 2019.
5. International Monetary Fund. Where the IMF gets its money. March 8, 2019. <https://www.imf.org/en/About/Factsheets/Where-the-IMF-Gets-Its-Money>. Accessed October 14, 2019.
6. International Monetary Fund. IMF lending. February 25, 2019. <https://www.imf.org/en/About/Factsheets/IMF-Lending>. Accessed October 14, 2019.
7. Wikipedia. List of development aid country donors. Updated August 12, 2019. https://en.wikipedia.org/wiki/List_of_development_aid_country_donors. Accessed October 14, 2019.
8. Council on Foundations. *The State of Global Giving by U.S. Foundations: 2011-2015*. 2018. <https://www.issuelab.org/resources/31306/31306.pdf>. Accessed October 14, 2019.
9. Wikipedia. List of wealthiest charitable foundations. Updated September 27, 2019. https://en.wikipedia.org/wiki/List_of_wealthiest_charitable_foundations. Accessed October 14, 2019.
10. Huber C, Finelli L, Stevens W. The economic and social burden of the 2014 Ebola outbreak in West Africa. *J Infect Dis* 2018; 218(suppl 5):S698-S704.