Technology is a boom-or-bust business, but it’s mostly busts. I’ve always assumed that 10% of my technology investments will succeed—and succeed wildly. The other 90% I expect to fail.

When I made the transition from my first career at Microsoft to my second career in philanthropy, I didn’t think that my success rate would change much. I was now putting money into new ways to reduce poverty and disease. Discovering a new vaccine, I figured, would be just as hard as discovering the next tech unicorn. (Vaccines are much harder, it turns out.)

After 20 years of investing in health, though, one type of investment has surprised me—because, unlike investing in a new vaccine or technology, the success rate is very high. It’s what people in the global-health business call “financing and delivery.” Decades ago, these investments weren’t sure bets, but today, they almost always pay off in a big way.

In the fight against disease, big breakthroughs, like the discovery of a new drug, receive a lot of attention, and rightly so. Innovations such as penicillin and the measles vaccine have saved hundreds of millions of lives.

But it isn’t enough just to develop powerful new medicines. They have to make their way from the lab to the hospitals, clinics and homes where people need them. That journey doesn’t happen automatically. Buying medical supplies and getting them where they’re needed may sound easy, even boring, but it isn’t. Saving lives in developing countries often means getting medicines to remote villages and war zones.
Over the past two decades, my wife Melinda and I have put a total of $10 billion into organizations that do this challenging work, including three big ones: Gavi, the Vaccine Alliance; the Global Fund; and the Global Polio Eradication Initiative. Each of them has been extremely successful, but most people don’t know their names or what they do.

Even fewer are watching out for them, making sure they have the money they need to do their work. Without more funding over the next 18 months, all three of these institutions will have to dramatically scale back their efforts to fight disease and keep people healthy. This shouldn’t be allowed to happen. These organizations are not trivial or expendable. In fact, they are probably the best investments our foundation has ever made.

Two decades ago, the international community began to recognize that, despite great progress in public health since World War II, people in developing countries were still dying at an alarming rate, mostly from illnesses that were easily treated with basic medicine. And so a wave of institution-building began.
It started in 2000 with Gavi (the Global Alliance for Vaccines and Immunization, as it was then known), whose mission was to buy vaccines and help developing countries administer them to children. Two years later came the Global Fund to Fight AIDS, Tuberculosis and Malaria. It had a similar goal: to deliver medicines to fight those three diseases, which were the biggest killers in low-income countries.

Then there was the Global Polio Eradication Initiative, or GPEI. It was originally founded in 1988, when health workers recorded more than 350,000 cases of polio around the world. In the 2000s, though, there were just a few thousand cases left, and the effort intensified to wipe the disease off the planet permanently.

The world has had the tools to fight the diseases that plague poor countries for a long time. Antiretrovirals to treat HIV have been around for 30 years, and Jonas Salk created the first polio vaccine before I was born. Up until 20 years ago, though, many of these treatments were expensive, and we didn’t have a good network to move them to—and around—poor countries.

Since Gavi was founded, the number of children under the age of 5 dying in low- and middle-income countries has dropped by about 40%.

The new institutions helped to fix those problems. By pooling the funding from donor countries like the U.S., the U.K. and others, they created economies of scale. Prices for many medicines plummeted. Working with almost 100 countries, the funds then built a massive supply chain to deliver the goods: Gavi immunized 100 million children last year; the Global Fund handed out 200 million bed nets treated with insecticide to keep away malaria-transmitting mosquitoes.

The impact on disease has been dramatic. Since Gavi was founded, the number of children under the age of 5 dying in low- and middle-income countries has dropped by about 40%.
Meanwhile, polio cases have almost disappeared. Last year, the number for the whole world was 31.

The progress on HIV is perhaps the most astonishing, especially if you remember the state of the epidemic around 2000. One of the new millennium's first issues of Newsweek featured a cover that read “10 Million Orphans” and said that in sub-Saharan Africa, “AIDS has been cutting through the population like a malevolent scythe.” Two years later, the Global Fund was created. Four years after that, deaths peaked. Since then, they have fallen by more than half.

When Melinda and I began investing in these funds back in 2000, our goal was to save lives and stop suffering, and by that measure these institutions have succeeded beyond our wildest dreams. But they’ve also been successful in the way that investments traditionally are: They’ve created a lot of wealth, because when people aren’t sick in bed, they can go to work or school.

The Copenhagen Consensus Center is a think tank that uses sophisticated algorithms and the best available data to compare alternate poverty-fighting strategies. Their tools have allowed us to test an interesting hypothesis: Suppose that our foundation hadn't invested in Gavi, the Global Fund and GPEI and had instead put that $10 billion into the S&P 500, promising to give the balance to developing countries 18 years later. As of last week, those countries would have received about $12 billion, adjusted for inflation, or $17 billion if we factor in reinvested dividends.

What if we had invested $10 billion in energy projects in the developing world? In that case, the return would have been $150 billion. What about infrastructure? $170 billion. By investing in global health institutions, however, we exceeded all of those returns: The $10 billion that we...
gave to help provide vaccines, drugs, bed nets and other supplies in developing countries created an estimated $200 billion in social and economic benefits.

Every three to five years, each of these three organizations needs to raise new money. Most of the time, these “replenishments,” as they’re called, are spaced out, but that isn’t the case now. By a fluke of the calendar, Gavi, the Global Fund and the GPEI will all need more money over the next 18 months. The years 2019 and 2020 are the most important in recent memory for funding the fight against disease, and the urgent question for donors is: Will you continue to invest? My answer is: Yes, absolutely.

But not just because of past success. None of these institutions has posted a spotless track record. What gives me confidence is their capacity to learn, often from each other.

For example, as polio cases fell from the hundreds of thousands in the 1980s to just thousands in the early 2000s, GPEI had to change the way it fought the disease. Targeting the last few cases of polio is complicated because the disease is only still endemic in some of the most difficult-to-reach places on Earth, like remote corners of Afghanistan and Pakistan. Still, GPEI managed to set up a surveillance system that allowed labs around the world to obtain samples (polio is spread through fecal matter) and test for traces of the disease.

Now the Global Fund is trying to apply what the polio team learned to the fight against malaria. The fund is putting in place surveillance systems that track which species of mosquitoes are spreading the disease and where, so they can deliver bed nets with the right type of insecticide.

Over the next two generations, the fight against disease is expected to narrow but also to intensify. The developing world, as a whole, is becoming much healthier, but more children are being born in the corners of the globe that have seen the least improvement. With new diseases emerging, old ones evolving and these populations growing, the world is lucky to have such adaptable institutions.

In September 2017, when my wife Melinda and I last wrote in The Journal, we were worried about President Donald Trump’s proposal to cut the U.S. foreign-aid budget by 30%. Fortunately, that didn’t happen, thanks to the efforts of lawmakers on Capitol Hill. But we’re still worried. During his first cabinet meeting of 2019, the president took aim at foreign aid
again, saying that its supporters “don’t even know who they’re giving it to” and saying that he’d cut funding.

And it’s not just President Trump. The world may now need institutions like Gavi, the Global Fund and GPEI more than ever, but it’s also less committed to them than at any point in their history.

The $10 billion that we have contributed to these institutions only amounts to about one-tenth of what the wider world has put into them. The vast majority of their money doesn’t come from philanthropies; it comes from governments.

Over the past 20 years, convincing legislators and leaders to invest in these institutions has been a hard but manageable job. Even during the financial crisis of 2008 and the subsequent recession, the U.S. increased its contributions to the Global Fund. The world, however, has changed a lot since then.

A wave of isolationism continues to sweep through many Western democracies. Elections for the European Parliament—the legislative branch of the European Union—are coming up in May, and there are likely to be more far-right politicians heading to Brussels. As for the U.K.’s foreign-aid budget, no one knows how it will fare amid the turmoil of Brexit. Even leaders inclined to support foreign aid, like German Chancellor Angela Merkel and French President Emmanuel Macron, are being pressured to spend on other priorities closer to home.

Under these circumstances, maintaining even flat funding for these crucial global-health institutions would be a difficult battle. But with rapid population growth in the most challenging areas, we need more than flat funding. Last week, in fact, the Global Fund formally asked its donors for $14 billion over the next three years, $1 billion more than what the world pledged for the past three years.
There are bright spots, of course. The U.S. Congress has remained a strong supporter of foreign aid, even as the president has criticized it, and rapidly growing nations like India and China are making the transition from receiving support from global health institutions to giving it. But the funding situation is precarious.

With an annual budget of around $4 billion, the Global Fund is the largest of the three institutions, and over the past two decades, just five countries—Germany, France, Japan, the U.K. and the U.S.—have accounted for more than 65% of its funding. The numbers differ slightly for Gavi and the GPEI, but their history is much the same: Just a handful of world capitals have taken the lead in backing them.

Decades of data and experience suggest that money is the most important thing in the fight against disease.

In the late 1950s and early ’60s, the World Health Organization had a project called the Global Malaria Eradication Program, which succeeded in wiping out the disease across swaths of Europe, South America and Southeast Asia. But the program was almost entirely funded by the U.S., which in 1963 decided to pull its money. Without other backers, the project folded, and the disease made a comeback: Malaria epidemics hit everywhere from Brazil to Turkey. We are likely to see similar results today if even a few wealthy countries cut their aid budgets.

Decades of data and experience suggest that money is the most important thing in the fight against disease. The correlation is extremely strong between levels of foreign aid for health and decreasing death rates for some of the deadliest diseases. As contributions go up, deaths retreat. The world now has to decide if it wants to continue that remarkable trend.

There are areas of global health where the data is spotty and we don’t know if an investment will pay off, or what would happen if we don’t invest at all. This isn’t one of them. Institutions such as Gavi, the Global Fund and GPEI are the closest things that we have to surefire bets to alleviate suffering and save lives. They are the best investments that Melinda and I have made in the past 20 years, and they are some of the best investments the world can make in the years ahead.

Mr. Gates is the co-chair of the Bill & Melinda Gates Foundation.

Appeared in the January 19, 2019, print edition as ’The Best Investment I’ve Ever Made Wavering Support for Life-Saving Medicines.’