Capitalism After the Pandemic

Getting the Recovery Right

Mariana Mazzucato

After the 2008 financial crisis, governments across the world injected over $3 trillion into the financial system. The goal was to unfreeze credit markets and get the global economy working again. But instead of supporting the real economy—the part that involves the production of actual goods and services—the bulk of the aid ended up in the financial sector. Governments bailed out the big investment banks that had directly contributed to the crisis, and when the economy got going again, it was those companies that reaped the rewards of the recovery. Taxpayers, for their part, were left with a global economy that was just as broken, unequal, and carbon-intensive as before. "Never let a good crisis go to waste," goes a popular policymaking maxim. But that is exactly what happened.

Now, as countries are reeling from the COVID-19 pandemic and the resulting lockdowns, they must avoid making the same mistake. In the months after the virus first surfaced, governments stepped in to address the concomitant economic and health crises, rolling out stimulus packages to protect jobs, issuing rules to slow the spread of the disease, and investing in the research and development of treatments and vaccines. These rescue efforts are necessary. But it is not enough for governments to simply intervene as the spender of last resort when markets fail or crises occur. They should actively shape markets so that they deliver the kind of long-term outcomes that benefit everyone.

The world missed the opportunity to do that back in 2008, but fate has handed it another chance. As countries climb out of the current crisis, they can do more than spur economic growth; they can

MARIANA MAZZUCATO is a Professor at University College London and the author of ***The Value of Everything: Making and Taking in the Global Economy***.

steer the direction of that growth to build a better economy. Instead of handing out no-strings-attached assistance to corporations, they can condition their bailouts on policies that protect the public interest and tackle societal problems. They can require COVID-19 vaccines receiving public support to be made universally accessible. They can refuse to bail out companies that won't curb their carbon emissions or won't stop hiding their profits in tax havens.

For too long, governments have socialized risks but privatized rewards: the public has paid the price for cleaning up messes, but the benefits of those cleanups have accrued largely to companies and their investors. In times of need, many businesses are quick to ask for government help, yet in good times, they demand that the government step away. The COVID-19 crisis presents an opportunity to right this imbalance through a new style of dealmaking that forces bailed-out companies to act more in the public interest and allows taxpayers to share in the benefits of successes traditionally credited to the private sector alone. But if governments instead focus only on ending the immediate pain, without rewriting the rules of the game, then the economic growth that follows the crisis will be neither inclusive nor sustainable. Nor will it serve businesses interested in long-term growth opportunities. The intervention will have been a waste, and the missed opportunity will merely fuel a new crisis.

THE ROT IN THE SYSTEM

Advanced economies had been suffering from major structural flaws well before COVID-19 hit. For one thing, finance is financing itself, thus eroding the foundation of long-term growth. Most of the financial sector's profits are reinvested back into finance—banks, insurance companies, and real estate—rather than put toward productive uses such as infrastructure or innovation. Only ten percent of all British bank lending, for example, supports nonfinancial firms, with the rest going to real estate and financial assets. In advanced economies, real estate lending constituted about 35 percent of all bank lending in 1970; by 2007, it had risen to about 60 percent. The current structure of finance thus fuels a debt-driven system and speculative bubbles, which, when they burst, bring banks and others begging for government bailouts.

Another problem is that many large businesses neglect long-term investments in favor of short-term gains. Obsessed with quarterly returns and stock prices, CEOs and corporate boards have rewarded

shareholders by buying back stocks, increasing the value of the remaining shares and hence of the stock options that form part of most executive pay packages. In the last decade, Fortune 500 companies have repurchased more than $3 trillion worth of their own shares. These buybacks come at the expense of investment in wages, worker training, and research and development.

Then there is the hollowing out of government capacity. Only after an explicit market failure do governments usually step in, and the policies they put forward are too little, too late. When the state is viewed not as a partner in creating value but as just a fixer, publicly funded resources are starved. Social programs, education, and health care all go underfunded.

These failures have added up to mega-crises, both economic and planetary. The financial crisis was to a large extent caused by excessive credit flowing into the real estate and financial sectors, inflating asset bubbles and household debt rather than supporting the real economy and generating sustainable growth. Meanwhile, the lack of long-term investments in green energy has hastened global warming, to the point where the UN Intergovernmental Panel on Climate Change has warned that the world has just ten years left to avoid its irreversible effects. And yet the U.S. government subsidizes fossil fuel companies to the tune of some $20 billion a year, largely through preferential tax exemptions. The EU's subsidies total around $65 billion per year. At best, policymakers trying to deal with climate change are considering incentives, such as carbon taxes and official lists of which investments count as green. They have stopped short of issuing the type of mandatory regulations that are required to avert disaster by 2030.

The COVID-19 crisis has only worsened all these problems. For the moment, the world's attention is focused on surviving the immediate health crisis, not on preventing the coming climate crisis or the next financial crisis. The lockdowns have devastated people who work in the perilous gig economy. Many of them lack both the savings and the employer benefits—namely, health care and sick leave—needed to ride out the storm. Corporate debt, a key cause of the previous financial crisis, is only climbing higher as companies take on hefty new loans to weather the collapse in demand. And many companies' obsession with pleasing the short-term interests of their shareholders has left them with no long-term strategy to see them through the crisis.

The pandemic has also revealed how imbalanced the relationship between the public and the private sector has become. In the United States, the National Institutes of Health (NIH) invests some $40 billion a year on medical research and has been a key funder of the research and development of COVID-19 treatments and vaccines. But pharmaceutical companies are under no obligation to make the final products affordable to Americans, whose tax money is subsidizing them in the first place. The California-based company Gilead developed its COVID-19 drug, remdesivir, with $70.5 million in support from the federal government. In June, the company announced the price it would charge Americans for a treatment course: $3,120.

The relationship between the public and the private sector is broken.

It was a typical move for Big Pharma. One study looked at the 210 drugs approved by the U.S. Food and Drug Administration from 2010 to 2016 and found that "NIH funding contributed to every one." Even so, U.S. drug prices are the highest in the world. Pharmaceutical companies also act against the public interest by abusing the patent process. To ward off competition, they file patents that are very broad and hard to license. Some of them are too upstream in the development process, allowing companies to privatize not only the fruits of research but also the very tools for conducting it.

Equally bad deals have been made with Big Tech. In many ways, Silicon Valley is a product of the U.S. government's investments in the development of high-risk technologies. The National Science Foundation funded the research behind the search algorithm that made Google famous. The U.S. Navy did the same for the GPS technology that Uber depends on. And the Defense Advanced Research Projects Agency, part of the Pentagon, backed the development of the Internet, touchscreen technology, Siri, and every other key component in the iPhone. Taxpayers took risks when they invested in these technologies, yet most of the technology companies that have benefited fail to pay their fair share of taxes. Then they have the audacity to fight against regulations that would protect the privacy rights of the public. And although many have pointed to the power of artificial intelligence and other technologies being developed in Silicon Valley, a closer look shows that in these cases, too, it was high-risk public investments that laid the foundations. Without govern-

ment action, the gains from those investments could once again flow largely to private hands. Publicly funded technology needs to be better governed by the state—and in some cases owned by the state—in order to ensure that the public benefits from its own investments. As the mass closure of schools during the pandemic has made clear, only some students have access to the technology needed for at-home schooling, a disparity that only furthers inequality. Access to the Internet should be a right, not a privilege.

RETHINKING VALUE

All of this suggests that the relationship between the public and the private sector is broken. Fixing it requires first addressing an underlying problem in economics: the field has gotten the concept of value wrong. Modern economists understand value as interchangeable with price. This view would be anathema to earlier theorists such as François Quesnay, Adam Smith, and Karl Marx, who saw products as having intrinsic value related to the dynamics of production, value that wasn't necessarily related to their price.

The contemporary concept of value has enormous implications for the way economies are structured. It affects how organizations are run, how activities are accounted for, how sectors are prioritized, how the government is viewed, and how national wealth is measured. The value of public education, for example, does not figure into a country's GDP because it is free—but the cost of teachers' salaries does. It is only natural, then, that so many people talk about public "spending" rather than public "investment." This logic also explains why Goldman Sachs's then CEO, Lloyd Blankfein, could claim in 2009, just a year after his company received a $10 billion bailout, that its workers were "among the most productive in the world." After all, if value is price, and if Goldman Sachs's income per employee is among the highest in the world, then of course its workers must be among the most productive in the world.

Changing the status quo requires coming up with a new answer to the question, What is value? Here, it is essential to recognize the investments and creativity provided by a vast array of actors across the economy—not only businesses but also workers and public institutions. For too long, people have acted as if the private sector were the primary driver of innovation and value creation and therefore were entitled to the resulting profits. But this is simply not true. Pharma-

ceutical drugs, the Internet, nanotechnology, nuclear power, renewable energy—all were developed with an enormous amount of government investment and risk taking, on the backs of countless workers, and thanks to public infrastructure and institutions. Appreciating the contribution of this collective effort would make it easier to ensure that all efforts were properly remunerated and that the economic rewards of innovation were distributed more equitably. The road to a more symbiotic partnership between public and private institutions begins with the recognition that value is created collectively.

BAD BAILOUTS

Beyond rethinking value, societies need to prioritize the long-term interests of stakeholders rather than the short-term interests of shareholders. In the current crisis, that should mean developing a "people's vaccine" for COVID-19, one that is accessible to everyone on the planet. The drug-innovation process should be governed in a way that fosters collaboration and solidarity among countries, both during the research-and-development phase and when it comes time to distribute the vaccine. Patents should be pooled among universities, government labs, and private companies, allowing knowledge, data, and technology to flow freely around the world. Without these steps, a COVID-19 vaccine risks becoming an expensive product sold by a monopoly, a luxury good that only the richest countries and citizens can afford.

More generally, countries must also structure public investments less like handouts and more like attempts to shape the market to the public's benefit, which means attaching strings to government assistance. During the pandemic, those conditions should promote three particular objectives: First, maintain employment to protect the productivity of businesses and the income security of households. Second, improve working conditions by providing adequate safety, decent wages, sufficient levels of sick pay, and a greater say in decision-making. Third, advance long-term missions such as reducing carbon emissions and applying the benefits of digitization to public services, from transport to health.

The United States' main response to COVID-19—the CARES (Coronavirus Aid, Relief, and Economic Security) Act, passed by Congress in March—illustrates these points in reverse. Rather than put in place effective payroll supports, as most other advanced countries did, the United States offered enhanced temporary unemployment benefits.

This choice led to over 30 million workers being laid off, causing the United States to have one of the highest rates of pandemic-related unemployment in the developed world. Because the government offered trillions of dollars in both direct and indirect support to large corporations without meaningful conditions, many companies were free to take actions that could spread the virus, such as denying paid sick days to their employees and operating unsafe workplaces.

The CARES Act also established the Paycheck Protection Program, under which businesses received loans that would be forgiven if employees were kept on the payroll. But the PPP ended up serving more as a massive cash grant to corporate treasuries than as an effective method of saving jobs. Any small business, not just those in need, could receive a loan, and Congress quickly loosened the rules regarding how much a firm needed to spend on payroll to have the loan forgiven. As a result, the program put a pitifully small dent in unemployment. An MIT team concluded that the PPP handed out $500 billion in loans yet saved only 2.3 million jobs over roughly six months. Assuming that most of the loans are ultimately forgiven, the annualized cost of the program comes out to roughly $500,000 per job. Over the summer, both the PPP and the expanded unemployment benefits ran out, and the U.S. unemployment rate still exceeded ten percent.

When rescuing businesses, the government should impose conditions.

Congress has so far authorized over $3 trillion in spending in response to the pandemic, and the Federal Reserve injected an additional $4 trillion or so into the economy—together totaling more than 30 percent of U.S. GDP. Yet these vast expenditures have achieved nothing in terms of addressing urgent, long-term issues, from climate change to inequality. When Senator Elizabeth Warren, Democrat of Massachusetts, proposed attaching conditions to the bailouts—to ensure higher wages and greater decision-making power for workers and to restrict dividends, stock buybacks, and executive bonuses—she could not get the votes.

The point of the government's intervention was to prevent the collapse of the labor market and to maintain firms as productive organizations—essentially, to act as a catastrophic risk insurer. But this approach cannot be allowed to impoverish government, nor should the funds be permitted to bankroll destructive business strategies. In the case of in-

solvencies, the government might consider demanding equity positions in the companies it is rescuing, as happened in 2008 when the U.S. Treasury took ownership stakes in General Motors and other troubled firms. And when rescuing businesses, the government should impose conditions that prohibit all sorts of bad behavior: handing out untimely CEO bonuses, issuing excessive dividends, conducting share buybacks, taking on unnecessary debt, diverting profits to tax havens, engaging in problematic political lobbying. They should also stop firms from price gouging, especially in the case of COVID-19 treatments and vaccines.

Other countries show what a proper response to the crisis looks like. When Denmark offered to pay 75 percent of firms' payroll costs at the start of the pandemic, it did so on the condition that firms could not make layoffs for economic reasons. The Danish government also refused to bail out companies that were registered in tax havens and barred the use of relief funds for dividends and share buybacks. In Austria and France, airlines were saved on the condition that they reduce their carbon footprint.

The British government, by contrast, gave easyJet access to more than $750 million in liquidity in April, even though the airline had paid out nearly $230 million in dividends to shareholders a month earlier. The United Kingdom declined to attach conditions to its bailout of easyJet and other troubled firms in the name of market neutrality, the idea that it is not the government's job to tell private companies how to spend their money. But a bailout can never be neutral: by definition, a bailout involves the government choosing to spare one company, and not another, from disaster. Without conditions, government assistance runs the risk of subsidizing bad business practices, from environmentally unsustainable business models to the use of tax havens. The United Kingdom's furlough scheme, whereby the government paid up to 80 percent of furloughed employees' wages, should have in the very least been conditioned on workers not being fired as soon as the program ended. But it wasn't.

THE VENTURE CAPITALIST MENTALITY

The state cannot just invest; it must strike the right deal. To do so, it needs to start thinking like what I have called an "entrepreneurial state"—making sure that as it invests, it is not just derisking the downside but also getting a share of the upside. One way to do that is to take an equity stake in the deals it makes.

Consider the solar company Solyndra, which received a $535 million guaranteed loan from the U.S. Department of Energy before going bust in 2011 and becoming a conservative byword for the government's inability to pick winners. Around the same time, the Department of Energy gave a $465 million guaranteed loan to Tesla, which went on to experience explosive growth. Taxpayers paid for the failure of Solyndra, but they were never rewarded for the success of Tesla. No self-respecting venture capitalist would structure investments like that. Worse, the Department of Energy structured Tesla's loan so that it would get three million shares in the company if Tesla was unable to repay the loan, an arrangement designed to not leave taxpayers empty-handed. But why would the government want a stake in a failing company? A smarter strategy would have been to do the opposite and ask Tesla to pay three million shares if it was able to repay the loan. Had the government done that, it would have earned tens of billions of dollars as Tesla's share price grew over the course of the loan—money that could have covered the cost of the Solyndra failure with plenty left over for the next round of investments.

But the point is to worry not just about the monetary reward of public investments. The government should also attach strong conditions to its deals to ensure they serve the public interest. Medicines developed with government help should be priced to take that investment into account. The patents that the government issues should be narrow and easily licensable, so as to foster innovation, promote entrepreneurship, and discourage rent seeking.

Governments also need to consider how to use the returns on their investments to promote a more equitable distribution of income. This is not about socialism; it is about understanding the source of capitalistic profits. The current crisis has led to renewed discussions about a universal basic income, whereby all citizens receive an equal regular payment from the government, regardless of whether they work. The idea behind this policy is a good one, but the narrative would be problematic. Since a universal basic income is seen as a handout, it perpetuates the false notion that the private sector is the sole creator, not a co-creator, of wealth in the economy and that the public sector is merely a toll collector, siphoning off profits and distributing them as charity.

A better alternative is a citizen's dividend. Under this policy, the government takes a percentage of the wealth created with government investments, puts that money in a fund, and then shares the

proceeds with the people. The idea is to directly reward citizens with a share of the wealth they have created. Alaska, for example, has distributed oil revenues to residents through an annual dividend from its Permanent Fund since 1982. Norway does something similar with its Government Pension Fund. California, which hosts some of the richest companies in the world, might consider doing something similar. When Apple, headquartered in Cupertino, California, set up a subsidiary in Reno, Nevada, to take advantage of that state's zero percent corporate tax rate, California lost an enormous amount of tax revenue. Not only should such tax gimmicks be blocked, but California should also fight back by creating a state wealth fund, which would offer a way besides taxation to directly capture a share of the value created by the technology and companies it fostered.

A citizen's dividend allows the proceeds of co-created wealth to be shared with the larger community—whether that wealth comes from natural resources that are part of the common good or from a process, such as public investments in medicines or digital technologies, that has involved a collective effort. Such a policy should not serve as a substitute for getting the tax system to work right. Nor should the state use the lack of such funds as an excuse to not finance key public goods. But a public fund can change the narrative by explicitly recognizing the public contribution to wealth creation—key in the political power play between forces.

THE PURPOSE-DRIVEN ECONOMY

When the public and private sectors come together in pursuit of a common mission, they can do extraordinary things. This is how the United States got to the moon and back in 1969. For eight years, NASA and private companies in sectors as varied as aerospace, textiles, and electronics collaborated on the Apollo program, investing and innovating together. Through boldness and experimentation, they achieved what President John F. Kennedy called "the most hazardous and dangerous and greatest adventure on which man has ever embarked." The point was not to commercialize certain technologies or even to boost economic growth; it was to get something done together.

More than 50 years later, in the midst of a global pandemic, the world has a chance to attempt an even more ambitious moonshot: the creation of a better economy. This economy would be more inclusive and sustainable. It would emit less carbon, generate less inequality,

build modern public transport, provide digital access for all, and offer universal health care. More immediately, it would make a COVID-19 vaccine available to everyone. Creating this type of economy will require a type of public-private collaboration that hasn't been seen in decades.

Some who talk about recovering from the pandemic cite an appealing goal: a return to normalcy. But that is the wrong target; normal is broken. Rather, the goal should be, as many have put it, to "build back better." Twelve years ago, the financial crisis offered a rare opportunity to change capitalism, but it was squandered. Now, another crisis has presented another chance for renewal. This time, the world cannot afford to let it go to waste.